



**Breakaway  
Research**

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### Company Information

ASX Code	ATV
Share Price	A\$0.022
Ord Shares	818m
Options	17.5m
<b>Market Cap</b>	<b>A\$19.06m</b>
Cash (Dec '13)	A\$2.49m
Total Debt	A\$0m
<b>Enterprise Value</b>	<b>A\$16.57m</b>

### Board and Management

Non-Exec Chairman	Ronald Hawkes
Managing Director	Wally Bucknell
Non-Exec. Director	Robert Symons
Non-Exec. Director	Rodney Hanson
Chief Geologist	John Utley
CFO	Graeme Hogan
Company Secretary	Julie Fidler,

### Substantial Share Holders

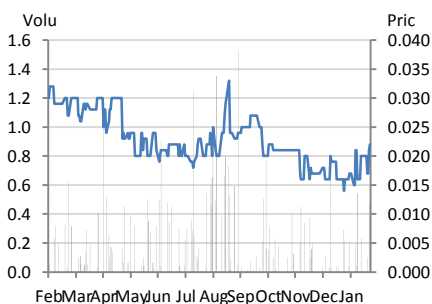
Au Mining Ltd	16.3%
Avalon Ventures	9.0%
Rosemoor Development	8.9%
Cairnglen Investments	4.9%
Wapimala Pty Ltd	4.8%

Top 20 hold 69%

### Company Details

Address	Suite 506 815 Pacific Highway Chatswood NSW 2067 Australia
Phone	+612 9410 0993
Web	www.atlanticgold.com.au

### 1 Year Price Chart



# Atlantic Gold (ATV)

*Gold Development Pipeline  
Nova Scotia*

**Recommendation: Speculative BUY**

### Key Points

- **Pipeline of advanced gold projects in Nova Scotia, a mining friendly jurisdiction**
- **Current JORC compliant resources of 1.21Moz Au, including reserves of 454Koz Au at Touquoy**
- **Disseminated mineralisation – amenable to open pit mining**
- **Atypical of other Nova Scotian deposits, which are generally similar to vein controlled deposits in Victoria**
- **Permitting close to completion, financing underway**
- **Feasibility results point to a viable, relatively low cost project**
- **Excellent infrastructure**
- **Potential for additional gold resources, both near mine and regionally**

*Atlantic Gold is an ASX-listed gold developer operating in the Meguma Terrane of Nova Scotia, with a +1Moz gold resource. A key positive is the mineralisation style – unlike most occurrences in the Meguma Terrane which are nuggetty “Bendigo” style mineralisation, ATV’s projects, while still containing relatively coarse gold, are disseminated in nature, allowing for more efficient (and low strip ratio) open cut mining whilst still achieving high gravity recoveries. The key Touquoy project is close to being fully permitted, with funding now being negotiated.*

### Company Overview

Atlantic Gold continues to work towards development on its Nova Scotian gold projects.

The Company has established a resource base of 1.2Moz over two deposits – Touquoy and Cochrane Hill. Atlantic’s strategy is to initially develop Touquoy, which is close to being fully permitted, and then move 80km to Cochrane Hill once Touquoy is exhausted. Both proposed operations have a 5 year mine life, with a combined planned production of 900,000oz and should be viable at current gold prices. Near mine and regional exploration is also planned to expand the resource base, and results to date indicate excellent exploration potential.

Atlantic is currently suffering due to the need to raise capital to fund development of Touquoy in a time of depressed market conditions and a relatively low gold price. However, given Atlantic’s personnel and the potential of the project, we believe this is a good opportunity at bottom of market valuations for a speculative medium term investment, with the added possibility of short term value increases with the completion of permitting and putting development funding in place.



## Investment Thesis

### Plus Million Ounce Gold Pipeline in Canada

*Plus million ounce gold pipeline*

Atlantic Gold Ltd (“Atlantic” or “the Company”) has a pipeline of exploration to development properties in the Cambro-Ordovician Meguma Terrane, Nova Scotia, Canada. To date the Company has defined mineral resources of 1.21Moz @ 1.6g/t of gold at the Touquoy and Cochrane Hill properties, with these including 454Koz @ 1.48g/t of reserves at Touquoy.

Atlantic plans a two stage operation – an initial 5 year, 84,000ozpa operation at Touquoy, after which the plant will be relocated 80km to Cochrane Hill, where another 5 years of operation will extract a further 480,000oz of gold.

### Project Locations

*Located in the Meguma Belt of eastern Nova Scotia*



Source: Atlantic Gold

### Mining Friendly Jurisdiction

*Mining friendly jurisdiction*

*Reasonable tax rates*

Nova Scotia is a mining friendly jurisdiction, with a history of gold mining, however with current activities largely confined to quarrying and industrial minerals. The provincial government has been strongly supportive of Atlantic’s activities, and well developed permitting procedures are in place. Tax rates are reasonable, with corporate taxes (federal and state) totalling 31%, and a 1% NSR royalty on gold.

### Permitting Largely Completed, Timeline To Production

*Permitting is largely complete*

Following completion of a positive Definitive Feasibility Study (“DFS”), Atlantic is now close to completing permitting for the Touquoy Gold Project, with the following milestones being achieved to date:

- Environmental Assessment Approval granted
- Mining Licence Granted
- Industrial Approval application lodged 2012, approval expected in March 2014
- Private surface rights obtained, Crown land leases on offer
- Sourcing funding, based on a standalone Touquoy project

*Potential production by early 2016*

Once permitting is finalised and funding in place, the Company will be able to commence the 21 month development period, with the possibility of production commencing in late 2015/early 2016.



The three key requirements for mine permitting in Nova Scotia are the Environmental Assessment Approval (similar to an EIS), Mining Licence and Industrial Approval, and as listed above two of these are now granted.

Atlantic has completed the acquisition of all requisite 63 private surface titles. In 2012 the Government of Nova Scotia granted Atlantic a Vesting Order, whereby fourteen private properties in the mine footprint were compulsorily acquired (with appropriate compensation to the landholders).

### Disseminated Gold Mineralisation - Amenable to Open Pit Mining

*Disseminated mineralisation – amenable to open cut mining*

The Touquoy and Cochrane Hill properties are atypical of Meguma Belt mineralisation, in that gold mineralisation is largely disseminated, rather than being restricted to quartz veins as is the case of other Nova Scotian deposits. Historically mineralisation in the Meguma Belt has been compared to Victorian style orogenic gold, which is generally only amenable to narrow vein underground mining techniques.

As well exploration at a number of exploration properties has intersected this style of mineralisation.

### Excellent Infrastructure

*Excellent infrastructure*

The project is well served by excellent infrastructure, with Touquoy being 110km by sealed road from Halifax, the Capital of Nova Scotia, and with available power (5km to the grid) and water. The region has a ready local workforce, with no on-site accommodation being required.

### Positive Numbers - Low Cost Operation

*Potential two stage operation, producing 900,000koz of gold over 10 years*

At Touquoy, the DFS carried out by Atlantic has outlined a viable project, which once completed would be followed up by mining at Cochrane Hill (figures to scoping study levels).

#### Project Financials – 2012 (100% basis)

	Touquoy - DFS	Touquoy & Cochrane Hill - Conceptual
<b>Ore Reserves</b>	9.59Mt @ 1.48g/t	19.0Mt @ 1.6g/t
<b>Total Production</b>	422,000oz	900,000
<b>Mine Life</b>	5.0 years	9.7 years
<b>Av Annual Production</b>	84,000ozpa	93,000ozpa
<b>Throughput</b>	2.0Mtpa	2.0Mtpa
<b>Initial Capex</b>	C\$140m	C\$140m
<b>LOM Capex (inc sustaining)</b>		C\$254m
<b>Cash Operating Costs</b>	US\$560/oz	C\$610/oz
<b>Government Royalty @ 1% NSR</b>	~\$13/oz	~\$13/oz
<b>Private Royalty @ 1% NSR</b>	~\$13/oz	~\$13/oz
<b>Gold Price</b>	US\$1,300/oz	US\$1,300/oz
<b>Net Cash Surplus (pre-tax)</b>	C\$172m (C\$407/oz)	C\$368m (C\$409/oz)
<b>Payback Period</b>	27 months	27 months
<b>Project NPV (8%, pre-tax)</b>	C\$91m	C\$170m
<b>Project IRR</b>	30%	31%

Source: Atlantic Gold/Breakaway analysis

*Feasibility and scoping numbers indicate a viable operation*

The disseminated nature of the mineralisation at Touquoy, allied with a low strip ratio (2.5:1), high recoveries (93.5%, including 70% gravity), relatively coarse 150µm grind and a low Bond Work Index (“BWI”) point to a relatively low cost operation.

The original DFS was completed in 2010, with this updated in 2012 to reflect exchange

*High recoveries, soft ore and low strip ratio*



rate and gold price changes. Atlantic is now updating the Touquoy DFS figures to reflect current capital and operating costs.

The previously published capital and operating expenditure figures may be on the low side compared to current industry costs. Weighted average cash costs for ASX-listed miners (including underground operations) for the December Quarter, 2013 are in the order of \$750/ounce, with total costs coming in 50% higher, at around \$1125/ounce.

However, given the factors mentioned above we may expect to see the revised operating costs now being prepared to come in between previously released estimates and the ASX averages.

### Excellent Exploration Potential

*Excellent exploration potential*

There is excellent potential for additional resources, largely in Atlantic's regional exploration tenements. Exploration work to date has returned positive results, with large areas remaining unexplored or underexplored by modern methods.

There is potential for additional near deposit resources, particularly at Cochrane Hill, where there is the potential for down plunge extensions to the defined deposit.

### Peer Comparison

We have concentrated largely on TSX-listed North American developers in our comparison, but have also included a few ASX listed developers to comparative values on the ASX. We have listed the companies in decreasing order of EV/company share of contained ounces of gold. This measure can be used as a proxy for relative value, but needs to be used with care – this figure can be influenced by any number of factors.

All companies listed have relatively advanced projects, with the majority in the DFS stage or later.

#### Peer Comparison

Company	State, Region	EV Diluted (\$m)	Mt	Au Grade (g/t)	C <sup>oy</sup> Equity Share	Au C <sup>oy</sup> Share (Moz)	EV/oz Au (company share)
Papillon Resources	ASX South Mali	\$419.9	41	2.42	100%	3.15	\$133.44
Midway Gold	TSX Nevada	\$205.1	115	0.49	100%	1.82	\$112.44
Romarco Minerals	TSX South Carolina	\$463.4	91	1.65	100%	4.84	\$95.73
Premier Gold	TSX Ontario, Nevada	\$356.0	78	1.87	94%	4.42	\$80.47
Golden Queen	TSX California	\$163.7	159	0.50	100%	2.58	\$63.50
Probe Minerals	TSX Ontario	\$250.9	131	1.03	100%	4.33	\$58.00
Unity Mining	ASX Tas, NSW	\$25.6	3	5.70	100%	0.62	\$41.08
Chesser Resources	ASX Western Turkey	\$26.3	25	1.28	85%	0.86	\$30.51
Sabina Gold & Silver	TSX Yukon	\$139.9	31	6.50	100%	6.46	\$21.65
Atlantic Gold	ASX Nova Scotia	\$16.6	23	1.62	81%	0.98	\$16.62
Victoria Gold	TSX Yukon	\$30.8	300	0.65	98%	6.16	\$5.00
Chalice Gold	ASX Ontario	-\$4.6	32	1.76	100%	1.82	-\$2.53

*Atlantic is valued at the lower end of the EV/Oz metric*

1: "EV" is diluted market capitalization less net cash

Source: IRESS, company reports, data as of COB, February 21, 2014

As can be seen from the above table, Atlantic is near the lower end of the table. The Company's closest analogies in resources may be Chesser Resources and Chalice Gold.

Chesser is concentrating activities on its 100% owned epithermal Kestanelik deposit in



western Turkey, which includes 10.19Mt @ 2.15g/t gold for 700,000oz of contained open pit gold. Chesser is currently undertaking a PFS on this deposit.

Chalice Gold has recently acquired the Cameron Project in Ontario from Coventry Resources via an all scrip transaction. The reason behind the negative EV is Chalice's cash position of A\$55m as of December 31 2013, relative to a diluted market capitalisation of A\$49m. In the current market we have seen a number of examples of companies with large cash reserves being valued on cash, with no value ascribed to projects, even if the projects have merit.

*Key risks are funding and project implementation*

## **Risks**

The key risk for Atlantic now is funding and execution risk. Current gold prices and market conditions may make it difficult to source an appropriate funding package for the project and investors. The Company is confident of obtaining an appropriate debt package, and has been in discussions with a number of parties; however appropriate mezzanine and equity financing may prove more challenging.

Gold prices and operating costs are another source of risk. Given the relatively low grade of the project, it will be very sensitive to changes in these parameters. These factors will manifest themselves in two ways – adverse results from the current review of costs may affect funding negotiations, and any changes during operations will affect the financial performance.

Permitting are other risk factors; however these have largely been overcome in the case of Touquoy, with just the Industrial Approval to be granted.

Given the Government's support to date for the project we can see no reason that grant of Industrial Approval will be withheld – to the Company's knowledge there has not been a case where Industrial Approval has not been granted with Environmental Assessment Approval in place.

However, positive feasibility outcomes, permitting and funding still remain a risk for Cochrane Hill, although these are mitigated to some extent given the successful results and progress at Touquoy.



## Project Review

### Introduction

*ATV has a pipeline of projects in Nova Scotia, with combined resources of 1.2Moz of gold.*

Atlantic has a pipeline of gold projects in Nova Scotia, Canada, with a current resource base of 1.2Moz of gold, at a grade of 1.63g/t Au. This includes reserves of 454Koz at a grade of 1.48g/t Au at Touquoy.

The three key projects comprise:

- Touquoy – development – 656Koz in resource, 454Koz in reserve
- Cochrane Hill – scoping completed – 549Koz in resource
- Exploration areas – grassroots and brownfields tenements

All properties are held by DDV Gold Ltd (“DDV”), a wholly owned subsidiary of Atlantic.

### Resources and Reserves

Project	Tonnage (Mt)	Grade (g/t)	Contained Au (Oz)
<b>Mineral Resources</b>			
<b>Touquoy</b>			
Measured	2.8	1.5	130,000
Indicated	7.3	1.5	350,000
Inferred	1.6	1.5	77,000
<b>Total</b>	<b>11.7</b>	<b>1.5</b>	<b>557,000</b>
<b>Touquoy West</b>			
Indicated	0.9	1.9	54,000
Inferred	0.6	2.2	45,000
<b>Total Touquoy</b>	<b>13.2</b>	<b>1.5</b>	<b>656,000</b>
<b>Cochrane Hill</b>			
Indicated	4.5	1.8	251,000
Inferred	5.6	1.6	298,000
<b>Total</b>	<b>10.1</b>	<b>1.7</b>	<b>549,000</b>
<b>Total Nova Scotia</b>			
Measured and Indicated	15.5	1.6	785,000
Inferred	7.8	1.7	420,000
<b>Total Nova Scotia</b>	<b>23.2</b>	<b>1.6</b>	<b>1,215,000</b>
<b>Reserves</b>			
<b>Touquoy</b>			
Proved	2.49	1.48	118,000
Probable	7.10	1.47	336,000
<b>Total</b>	<b>9.59</b>	<b>1.48</b>	<b>454,000</b>

Source: Atlantic Gold

### Regional Geology and Mineralisation

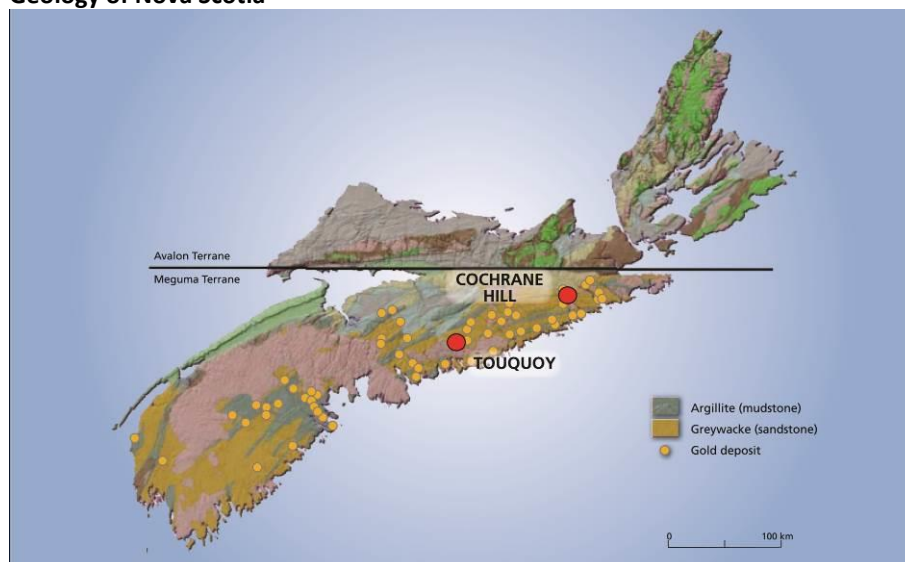
*The projects are located in the Meguma Terrane, a historical gold producer.*

All project areas are hosted within the Meguma Terrane, the southernmost of two distinct geological terranes in Nova Scotia. The Meguma Terrane consists of two main subdivisions – the Cambrian to Ordovician Meguma Group turbidites, which are unconformably overlain by Late Ordovician to Early Devonian sediments and volcanics.

The Meguma Group can be further divided into two stratigraphic units – the basal greywacke dominated Goldenville Formation, and the upper, argillite dominated Halifax Formation.



## Geology of Nova Scotia



Source: Atlantic Gold

The Meguma Group rocks have been metamorphosed to greenschist and amphibolite facies, and have been folded into a series of tight northeast trending anticlines and synclines during the Devonian Acadian Orogeny. The Meguma Group has been intruded by Devonian granites and minor mafics.

The Meguma Group, and particularly the Goldenville Formation, have hosted the majority of the approximately 1.4Moz of gold mined in Nova Scotia since the 1860's.

Mineralisation is concentrated near anticlines in the Goldenville Formation, with historical production from quartz veins in the hinges and limbs of these structures. The style has been referred to as Meguma Style, however some writers have drawn parallels between this and similar styles of mineralisation in the Victorian goldfields.

*The potential for bulk tonnage disseminated mineralisation in the terrane was first recognised at Touquoy*

The potential for bulk tonnage disseminated mineralisation was first recognised at Touquoy in 1986-1987, and since then a number of other systems of this type have been identified in the Meguma Terrane. This is positive for the exploration and production potential of the region.

## Touquoy Gold Project (ATV 60%)

### Introduction

Atlantic's key and most advanced project is the 60% owned Touquoy Gold Project, located in central Nova Scotia, which has resources of 656,000oz of gold at 1.5g/t, including reserves of 454,000oz of gold @ 1.48g/t gold.

*ATV has resources of 656Koz, including reserves of 454Koz at Touquoy*

The Project is at the development stage, with final approvals and funding now being required before development.

*Five year, 84,000Ozpa operation is planned at Touquoy*

A five year, 2Mtpa open cut operation is planned for Touquoy, producing an average of 84,000oz of gold per year from a conventional gravity/CIL plant. The results of the DFS for the project indicate a low strip ratio operation (2.5:1), with a capital expenditure of C\$140 million and operating costs (before royalties and tax) of US\$560/oz.



*Atlantic's subsidiary, DDV Gold, has a 60% interest in Touquoy*

## Ownership and Encumbrances

Atlantic has acquired a 60% interest in the mineral rights of the project from Moose River Resources Inc. ("MRRRI"), with Atlantic initially becoming involved in 2003. The property comprises 113 graticular claim blocks, with each covering an area of 1/16 minute<sup>2</sup> (15.2ha) for a total area of approximately 1720ha. Twelve claim blocks have been designated as "development blocks" under the agreement. The Mineral Lease was granted in August 2011.

MRRRI retains a 40% carried interest in the project:

- Atlantic earned its 60% interest from MRRRI by the expenditure of \$2.2 million and provision of cash payments totalling \$200,000 by December 31, 2005
- Atlantic as operator and manager sole funds all exploration, pre-production and capital expenditure
- Once production commences, Atlantic will retain 100% of the cashflow until the above expenses, plus interest have been recouped
- Thereafter net profits over the development block claims will be allocated 60% to DDV and 40% to MRRRI
- DDV holds an 8.7% interest in MRRRI
- Once financing is complete, Atlantic's interest in those blocks not comprising the 12 Development Block claims increases to 75%.
- A \$10,000 annual pre-production royalty is paid to former owner, Corner Bay Minerals Inc., with this being offset against a 3% NSR (two thirds of which is available for purchase for \$2.5 million) once production commences

*Atlantic has acquired all surface rights at Touquoy*

Atlantic completed acquisition of the private surface rights to the development area. The surface rights include 63 properties, fourteen of which were obtained through compulsory acquisition when the Government issued a Vesting Order in favour of Atlantic on June 12, 2012.

The acquisition was finalised on February 27, 2014, when an application for leave to appeal to the Supreme Court of Canada against the Vesting Order issued by the Nova Scotia Minister of Natural Resources was dismissed.

This application was brought by one remaining landholder, following two unsuccessful previous appeals to the Nova Scotia Court of Appeal, and establishes without doubt Atlantic's legal right of access to this last property.

## Deposit History, Geology and Mineralisation

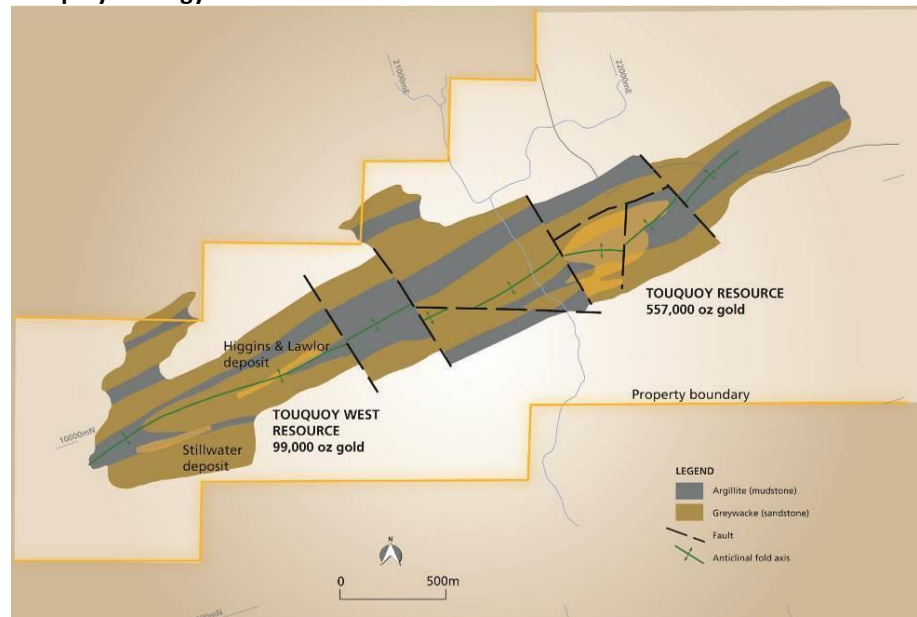
Approximately 26,000oz of gold was produced from the Moose River Mines from 1877, with intermittent production up until the First World War. The first modern exploration over the area was carried out by Seabright Explorations Inc. from 1983 until 1987, with a number of parties then working on the area until Atlantic entered into the project in 2003.

The Touquoy Gold Project is located within interbedded argillites and greywackes of the Goldenville Formation that have been metamorphosed to greenschist facies. The mineralisation is largely hosted in the Touquoy Argillite, the thickest argillite in the sequence, and is localised in the hinge and limbs of the NE striking Moose River-Fifteen Mile Stream Anticline. The area is cut by a series of NW trending faults.





### Touquoy Geology



Source: Atlantic Gold

*The bulk of mineralisation at Touquoy is disseminated, with some very thick intersections*

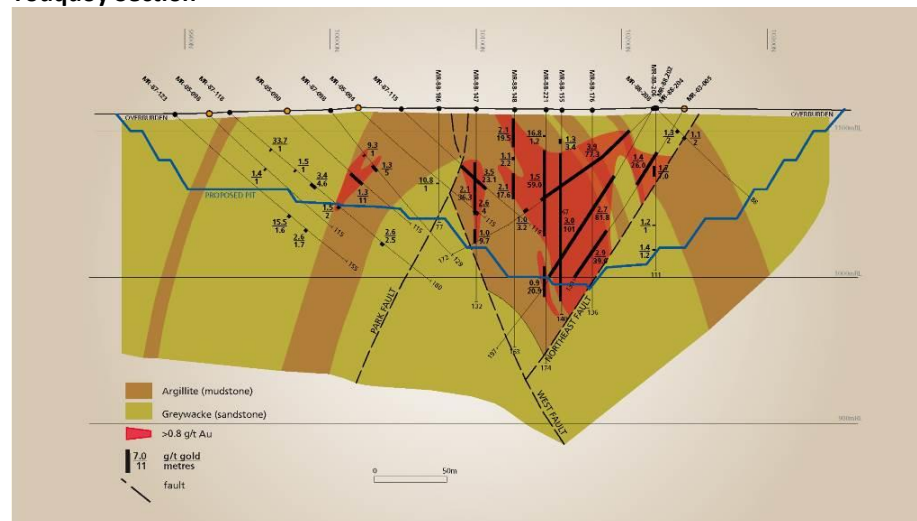
The bulk of the mineralisation in the Touquoy deposit is the “Touquoy Style” disseminated gold mineralisation, however there is also subsidiary “Meguma Style” bedding parallel quartz vein mineralisation throughout. Both styles are superimposed over the 600m strike length of Touquoy, however thick (~100m) intersections of disseminated mineralisation predominate at the western end (where the bulk of the gold is located), whereas narrow widths (10-20m) of higher grade mineralisation are found to the east.

The Higgins & Lawlor and Stillwater deposits at the western end of the property are Meguma style mineralisation.

Gold occurs as native gold, with grain sizes ranging between one micron and 1.5 millimetres in size. Minor sulphides include pyrrhotite (1-2%), arsenopyrite (1%) and pyrite (<1%).

The mineralogy and character of the gold results in high recoveries through a simple gravity/CIL plant, with overall recoveries of 93.5%, including 75% to gravity.

### Touquoy Section



Source: Atlantic Gold



*Overall recoveries of 93.5% have been achieved, including 70% gravity recoveries from a relatively coarse 150µm grind*

## Metallurgy

Atlantic has undertaken a comprehensive metallurgical programme at Touquoy, which has indicated very positive results, with an overall recovery of 93.5% being achieved, including 70% to a gravity concentrate.

The work has indicated relatively coarse grinding (to 150 microns), and low power and reagent consumption in a standard gravity/CIL plant.

*Costs currently being revised*

## 2012/2013 DFS Update

In February 2012 Atlantic released an update to the original 2010 DFS, with figures further updated in late 2013. Operational parameters and unit costs have remained unchanged over the period – updates have largely been related to changes in the gold price and exchange rates. Atlantic is currently updating capital and operating costs.

*Positive numbers from the original and upgraded DFS studies*

Key metrics from the completed studies include:

- 2Mtpa, 5 year operation, producing 84,000ozpa gold
- 2.5:1 strip ratio
- Gravity/CIL plant
- Capital cost of C\$140 million
- Cash operating costs of US\$560/Oz before royalties
- NPV<sub>8</sub> of C\$91M, IRR of 30% pre tax
- Pre-tax cash surplus of C\$172 million
- Gold price of US\$1,300/oz.

The production scenario is for owner operated open-pit mining, a standard gravity and CIL plant to produce fine dore on site. Tailings will be discharged to a tailings disposal facility.

The nature of the ore leads to relatively low operating costs. Relevant factors include:

- High recoveries, with a large portion recoverable through the gravity circuit,
- Relatively soft ore, with a BWI of 10 or less
- Low strip ratio of 2.5:1

The ready access to infrastructure will help check capital expenditure costs.

The mining plan does not include 26,000oz of in-pit Inferred Resources or Indicated and Inferred Resources of 99,000oz of gold in the Touquoy West deposit. These may provide potential upside to the proposed operation, although the Company's view is that these would only be incremental.

*Permitting is largely complete*

## Strategy and Work Programme

Atlantic has developed Touquoy to the point where it is ready for development. Milestones achieved include:

- Resources and reserves delineated
- Environment Assessment Approval granted in 2008
- Definitive Feasibility Study completed July 2010, updated February 2012
- Mineral Lease granted in 2011
- Industrial Approval being reviewed, with grant expected in March, 2014.



*Ongoing activities include finalising permitting and sourcing funding*

Current activities include:

- Review of EPCM bids
- Review of draft updates of operating and capital cost estimates applicable to the original DFS
- Discussions with potential project funding parties.

Atlantic is working on the premise that all approvals and funding will be in place during Q2, 2014, which will then allow for the commencement of the expected 21 month construction period.

*Potential for the first pour in early 2016*

Barring delays, this could lead to gold being poured in late 2015/early 2016.

## **Cochrane Hill Gold Project (ATV 100%)**

### **Introduction**

Atlantic's second project is the Cochrane Hill Project, located approximately 80km ENE of Touquoy.

*Cochrane Hill is at the feasibility study stage, and provides the proposed second phase to mining activities*

The Project is at the feasibility study stage, and the Company plans to develop Cochrane Hill to be ready for mining once production at Touquoy is completed. The plan is to move the Touquoy plant to Cochrane Hill on the cessation of mining at Touquoy.

Cochrane Hill which contains indicated and inferred resources of 549,000oz, on conceptual figures, would provide an additional 480,000oz of gold over 4.7 years, increasing the project NPV to C\$170 million.

### **Ownership and Encumbrances**

Cochrane Hill is 100% owned by Atlantic, with a 3% NSR payable to a local prospector. Two thirds of this royalty can be purchased for C\$1.5 million, with annual pre-productions payments of \$5,000 advanced against the royalty.

*Cochrane Hill is owned 100% by Atlantic*

The property consists of one exploration licence of 53 claim blocks for a total area of 801 hectares. Final acquisition of Cochrane Hill was completed in August 2012. The property was acquired from Scorpio Mining Corporation ("SMC") for C\$1.6 million, with this being achieved under a pre-emptive rights clause of an option agreement originally entered into in 2007.

The Cochrane Hill property is situated on Crown land.

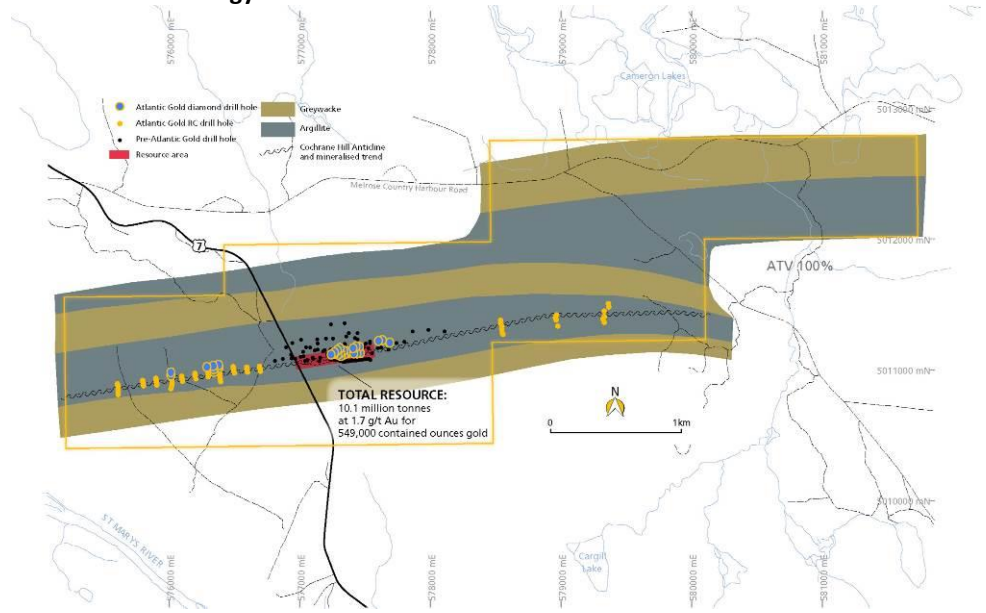
### **Deposit History, Geology and Mineralisation**

Gold mining in the Cochrane Hill area commenced in 1869, operating intermittently until 1928 with several thousand ounces recovered. Various parties have held the property since, with modern exploration apparently starting in the 1960's.

Mineralisation at Cochrane Hill is located within amphibolite grade metamorphosed argillites and greywackes of either the Moose River Member or the Tangier Member of the Goldenville Formation, and are concentrated in a shear zone approximately 100m south of the axis of the EW trending, isoclinal Cochrane Hill Anticline.



### Cochrane Hill Geology



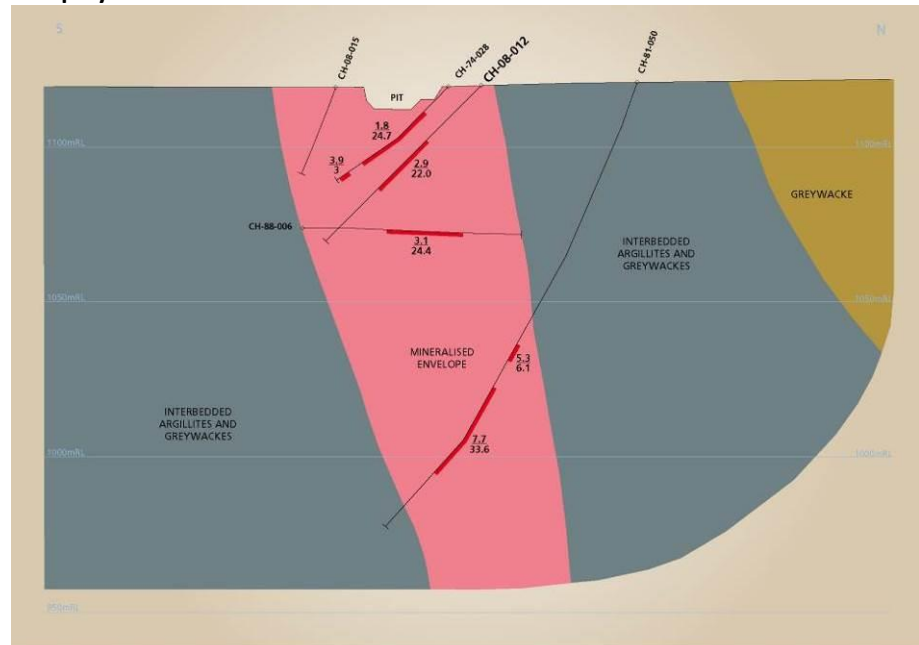
Source: Atlantic Gold

*Cochrane Hill has appreciable gold in wall rocks, making it an open cut bulk mining target*

Highest gold grades are typically associated with bedding parallel quartz veins; however there is significant gold in the wall rock material, which lends Cochrane Hill to an open cut bulk mining target. The mineralised envelope, which dips at around 70° to the north, has been defined over a strike length of 1500m and to a depth of 250m.

The overall mineralised envelope has a true width of up to 60-70m, with better grade material occurring over widths of 5-30m. Mineralisation is open down dip, as well as down plunge to the west. Published resources were constrained to an economic pit depth at a \$900/oz optimisation.

### Touquoy Section 3200E



Source: Atlantic Gold



## Metallurgy

Atlantic is yet to carry out metallurgical testwork at Cochrane Hill, however for the purposes of the indicative operations study the Company has used the parameters as used for Touquoy.

## Strategy and Work Programme

*Atlantic will take Cochrane Hill through feasibility and permitting in parallel with mining at Touquoy*

Atlantic's strategy is to take Cochrane Hill through to feasibility and then through the permitting process in parallel with production at Touquoy.

Feasibility work will include approximately 18,000m of further drilling to increase the confidence of the resources base, and other work required for feasibility.

## Indicative Production Scenario

As detailed earlier in this report, Atlantic has developed an indicative production scenario for a combined Touquoy/Cochrane Hill operation, producing 900,000oz of gold over a 10 year mine life.

The conceptual combined operation has used the unit costs developed for Touquoy, however overall operating costs are expected to be higher at Cochrane Hill due to a higher strip ratio.

## Exploration Potential

Our view is that there is excellent exploration potential in Atlantic's Nova Scotian properties. This potential encompasses two main facets:

- Extensions to the known deposits
- Further gold discoveries on Atlantic's exploration tenements

## Extensions to known deposits

Atlantic and previous operators have carried out drilling along strike from the currently defined resources.

At Touquoy, Atlantic has carried out percussion (open hole and RC) interface drilling, testing the bedrock geology and geochemistry below surficial till. Anomalous areas from this work, and mineralisation intersected in historic drilling, has been followed up by diamond drilling.

*Excellent exploration potential to expand the current resource base*

This work has intersected some anomalous and weak mineralisation, both disseminated (Touquoy Style) and vein controlled (Meguma Style). In addition areas of prospective argillites have been intersected, which are still only sparsely tested, and provide potential exploration targets.

Exploration at Cochrane Hill has included fences of RC holes along the shear zone hosting the mineralisation, both to the east and west of the deposit. This has been followed up by deeper diamond drilling testing percussion drill intersections.

The results of this work have been encouraging, and point to the potential for additional disseminated mineralisation, including westerly down plunge extensions to the defined resources as mentioned earlier.



## Regional Exploration

The Meguma Terrane is about 400km long and 80km wide. Within the Meguma Terrane Atlantic currently holds around 250km<sup>2</sup> of exploration ground in its own right, as well as options held with third parties, and is actively targeting the areas for additional Touquoy Style mineralisation. The targets are mineralised belts associated with ENE trending anticlines, and which host the majority of gold mineralisation in Nova Scotia.

Historic occurrences were generally found by prospectors working up creeks where bedrock was exposed through the overlying glacial till. Consequently there are extensive till covered areas between drainages that have never yet been explored, with these being the areas of Atlantic's focus.

Atlantic's approach is to carry out "interface" drilling, where a small purpose built RC rig is used to drill through the till and a few metres into bedrock. This work has resulted in encouraging results on a number of properties.

## Breakaway's View

Atlantic has an attractive gold project in a mining friendly jurisdiction. It is the leader in modern exploration in Nova Scotia, and there is the potential to add significant resources to its current 1.21Moz resource base.

*Key difficulty will be providing an attractive funding package*

The key difficulty facing the Company is obtaining a funding package in the current market that will be attractive to shareholders. This funding will be based on the 5 year, 420,000oz Touquoy deposit only – the lack of reserves and a feasibility study at Cochrane Hill preclude it being included in any funding considerations. However given the success thus far at Touquoy we would think that there is an excellent chance of Cochrane Hill progressing.

We await the outcomes of the review of capital and operating costs with interest – any changes here will have a significant effect on project economics, and may affect funding opportunities. Changes here can operate both ways.

Also, should Touquoy be developed, given the grade/tonnage combination, the project will be sensitive to changes in costs and gold price during production, again this can be positive or negative.

*We rate Atlantic as a Speculative Buy*

Based on our comments above, the Company's cheapness relative to its peers, and the quality and experience of Atlantic's personnel we rate Atlantic Gold as a **Speculative Buy**. We see potential short term upside upon completion of permitting and project funding, and medium term upside upon successful project implementation.



## **Board and Management**

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### *Non-Executive Chairman*

#### **Ronald Hawkes**

**Mr Hawkes** has 48 years' experience in the mining industry and was formerly the Managing Director and founding CEO of Plutonic Resources Limited.

Board member since 18 January 1999.

### *Managing Director*

#### **Wally Bucknell**

**Mr Bucknell** has 44 years' experience in the mining industry and was formerly the General Manager – Exploration of Plutonic Resources Limited. Mr Bucknell was awarded AMEC's prestigious "Prospector of the Year" principally for his role in the discovery of the 2moz Centenary Gold Deposit in the Eastern Goldfields of WA.

Board member since 18 January 1999

### *Non-Executive Director*

#### **Robert Symons**

**Robert Symons** is a Melbourne-based senior partner of the law firm Deacons. He has extensive experience in many aspects of corporate and commercial legal practice with particular expertise in resources, energy and infrastructure.

Board member since 31 December 2005

### *Non-Executive Director*

#### **Rodney Hanson**

**Rod Hanson** has over 40 years' experience in mine development, operations, project evaluation and corporate management roles, principally in gold, but also in base metals and coal. He has managed mines and projects in Australia, the Pacific Islands and China. He is currently a non-executive Chairman of ASX listed Dampier Gold Limited.

Appointed 1 January 2013

### *Chief Geologist*

#### **John Utley**

**John Utley** (MSc. University of Waikato) has over 25 years' experience in the exploration for and development of gold deposits in Australia, the Solomon Islands, Papua New Guinea and Canada., with close involvement in discoveries at Mt McClure and Darlot-Centenary in Western Australia. John has been directly and continuously engaged in Atlantic's work in Nova Scotia from its initial entry in 2003.

### *Company Secretary*

#### **Julie Fidler**

**Julie Fidler** has been with the Company since 1999 and Company Secretary since 2003, and undertakes key administrative roles in the Company's activities.

### *CFO*

#### **Graeme Hogan**

**Graeme Hogan** is a FCPA with over 20 years related experience for numerous resource companies, both listed and unlisted. He has been CFO February 2010



### **Analyst Verification**

We, Grant Craighead and Mark Gordon, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

### **Disclosure**

Breakaway Investment Group (AFSL 290093) may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of Atlantic Gold NL and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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