



Purdy's Wharf Tower II
Suite 2001
1969 Upper Water St.
Halifax, Nova Scotia
B3J 3R7 Canada

T 902.444.7779
F 902.444.3296
www.acadianmining.com

Trading Symbol: ADA:TSX; C2Z-Frankfurt
Shares Outstanding: 324,958,360

News Release No. 18-09
September 17, 2009

ACADIAN MINING GOLD EXPLORATION - DRILLING COMMENCES AT BEAVER DAM

RESOURCE UPDATE PROVIDED

Acadian Mining Corporation (TSX: ADA) ("Acadian" or the "Company") is pleased to announce that a diamond drilling program has commenced at Beaver Dam with the goal of expanding the Main Zone along strike and at depth, and increasing the confidence level of the current resource through in-fill drilling with the ultimate objective of moving the project to the feasibility stage. The Beaver Dam Main Zone as presently defined has a strike length of 725 meters and averages approximately 30 meters in width. Drilling to date has generally been to shallow depths to support a potential bulk tonnage – open pit development plan. However, limited deep drilling to date demonstrates the continuity of the gold zones to depth, and supports the potential for a gold deposit amenable to underground mining methods below the open pit target.

The drill results of the final six holes of the last drill program reported on October 22, 2007 yielded the following assay results below at depth. Intercept widths are approximately 85% of true widths.

Drill Holes	From (m)	Interval (m)	Grade (uncut g/t)
BD07-134	192.0	15.0	6.06
including	201.0	6.0	13.87
including	201.0	2.0	33.28
BD07-137	206.0	4.0	10.54
Including	206.0	1.0	36.30
BD07-139	240.0	5.0	3.47
Including	244.0	1.0	10.20

Historic drill holes BD86-53C and BD86-53B intercepted 18.77 g/t gold over 2.30 meters at an approximate vertical depth of 450 meters and 31.30 g/t gold over 1.22 meters at an approximate vertical depth of 650 meters respectively. Intercept widths are approximate true widths.

The current resource at Beaver Dam is comprised of cut indicated resources of 446,000 oz. gold (9.08 million tonnes grading 1.53 g/t gold) and cut inferred resources of 504,000 oz. gold (10.40 million tonnes grading 1.50 g/t gold). Details of the Beaver Dam resources are described in the "Technical Report on

the Updated Mineral Resource Estimate”, effective date July 16, 2007 and filed on SEDAR September 17, 2007.

The Beaver Dam property is one of five advanced gold projects, all of which host National Instrument 43-101 compliant resources, that collectively host indicated resources of 626,000 oz. gold and inferred resources of 1,111,000 oz. gold. Details are provided in the table below which has been updated to reflect the increase in inferred resources by 100,000 oz. gold to 1,111,000 oz. through the acquisition of the remaining 50% interest in the Fifteen Mile Stream property reported in the news release of July 9, 2009.

Summary of Gold Resources

Property	Lower Cut-off	Category	Cut**			Uncut		
			Tonnes*	Grade	Ounces*	Tonnes*	Grade	Ounces*
Beaver Dam	0.30 g/t	Indicated	9,080,000	1.53	446,000	9,090,000	2.01	589,000
		Inferred	10,400,000	1.51	504,000	10,370,000	2.16	720,000
Fifteen Mile Stream	0.7 g/t	Inferred	3,800,000	1.66	202,000	3,800,000	1.66	202,000
Forest Hill	3.50 g/t/1.20m	Indicated	225,000	14.91	108,000	225,000	24.02	174,000
		Inferred	383,000	11.93	147,000	383,000	12.42	153,000
Tangier	3.50 g/t/1.20m	Indicated	134,000	9.67	42,000	134,000	9.67	42,000
		Inferred	271,000	12.08	105,000	271,000	15.09	130,000
Goldenville	3.50 g/t/1.20m	Indicated	63,000	14.72	30,000	63,000	16.62	33,000
		Inferred	385,000	12.38	153,000	385,000	18.78	232,000
TOTAL - 5 Properties		Indicated			626,000	Indicated		838,000
		Inferred			1,111,000	Inferred		1,437,000

* Rounded

** See “Technical Reports” below for reports filed on SEDAR by Acadian Mining Corporation.

It is the Company’s intention, subsequent to the current drill program and subject to funding, to significantly ramp up its gold exploration efforts, concentrating on an aggressive drill campaign on its five 100% controlled advanced gold projects; Beaver Dam, Fifteen Mile Stream, Tangier, Goldenville and Forest Hill. The emphasis and objective will be to significantly increase current indicated and inferred gold resources.

A strong exploration focus is expected to be placed on the FMS Trend, a geological corridor and district scale feature which is believed to have high discovery potential for bulk tonnage style gold deposits. There are presently three known bulk tonnage gold deposits on the FMS Trend, two of which, Beaver Dam and Fifteen Mile Stream, are 100% controlled by Acadian. The Company controls approximately 33,000 hectares over a distance of approximately 100 kilometers on the FMS Trend.

Management's Opinion

Will Felderhof, President and CEO, stated, "We are very excited to resume exploration on our extensive gold holdings and are confident that our advanced projects and the discovery potential of the FMS Trend should enable us to achieve growth in resources with each successive drill campaign".

Other

Negotiations are continuing for surface access to the west and central portion of the Fifteen Mile Stream gold property, which is anticipated to result in further delays for drilling planned in this area.

Finalization of the metallurgical report on testwork conducted by SGS Lakefield Limited on a 1,403 kg sample from the Beaver Dam deposit is anticipated prior to September 30, 2009. The results of this testwork will be released upon receipt of the final report.

Terence F. Coughlan, P. Geo., is a qualified person as defined by National Instrument 43-101 and has reviewed the technical information reported in this news release for accuracy.

Technical Reports

"Technical Report on the Mineral Resource Estimate for the Tangier Property, Halifax County, Nova Scotia, Canada", dated September 29, 2004, and filed on SEDAR November 5, 2004.

"Technical Report on the Mineral Resource Estimate for the Goldenville Property, Guysborough County, Nova Scotia, Canada", dated March 1, 2005 and filed on SEDAR March 3, 2005.

"Technical Report on the Updated Mineral Resource Estimate for the Forest Hill Property, Guysborough County, Nova Scotia, Canada", dated September 28, 2005 and filed on SEDAR November 3, 2005.

"Technical Report on the Updated Mineral Resource Estimate for the Beaver Dam Property, Halifax County, Nova Scotia, Canada", dated September 14, 2007 and filed on SEDAR September 17, 2007.

"Technical Report on the Resource Estimate on the Fifteen Mile Stream Property, Halifax County, Nova Scotia, Canada", dated May 27, 2008 and filed on SEDAR July 4, 2008.

About Acadian

Acadian is a Halifax, Nova Scotia, Canada based mining company with five advanced gold projects, all of which host National Instrument 43-101 compliant resources. The Company also owns a zinc-lead mine (Scotia Mine) at Gays River, Nova Scotia, which is currently on care and maintenance. Acadian is actively exploring and developing its gold, zinc-lead, and barite properties in Atlantic Canada. Acadian holds a 29.18% interest in Royal Roads Corp. (RRO-TSX-V), which is actively exploring in Newfoundland and Labrador with a current focus on the historic Buchans Camp.

Forward Looking Statement

Certain information regarding Acadian contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Acadian believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Acadian

cautions that actual performance will be affected by a number of factors, many of which are beyond Acadian's control, and that future events and results may vary substantially from what Acadian currently foresees. Discussion of the various factors that may affect future results is contained in Acadian's Annual Information Form dated March 31, 2009, which is available at www.sedar.com. Acadian's forward-looking statements are expressly qualified in their entirety by this cautionary statement.

Additional Information

For additional information on Acadian's properties and activities, please visit our web site at www.acadianmining.com.

FOR FURTHER INFORMATION, PLEASE CONTACT:

G. William Felderhof, President & CEO

or Terry F. Coughlan, Vice President

(902) 444-7779 Toll Free: 877-444-7774

mail@acadianmining.com

Halifax, Nova Scotia

No regulatory authority has approved or disapproved the contents of this release.