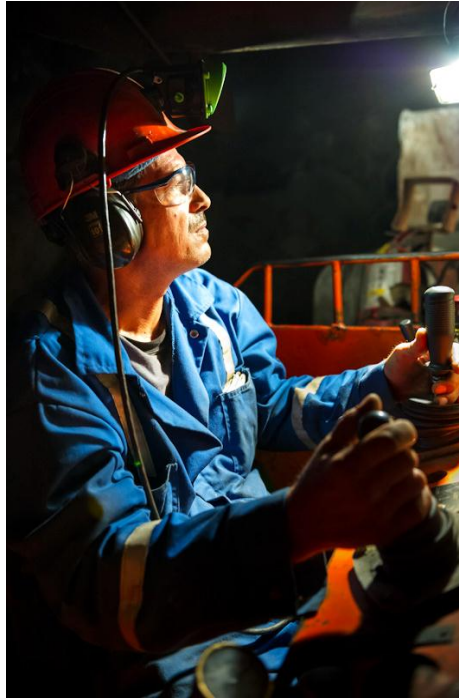


Claude Resources Inc.

Discovering. Developing. Delivering.

TSX: CRJ NYSE MKT: CGR



Corporate Presentation

September 2013



Cautionary Statement

Cautionary Note Regarding Forward-Looking Information

This document contains certain forward-looking statements relating but not limited to the Company's expectations, intentions, plans and beliefs. Forward-looking information can often be identified by forward-looking words such as "anticipate", "believe", "expect", "goal", "plan", "intent", "estimate", "may" and "will" or similar words suggesting future outcomes or other expectations, beliefs, plans, objectives, assumptions, intentions or statements about future events or performance. Forward-looking information may include reserve and resource estimates, estimates of future production, unit costs, costs of capital projects and timing of commencement of operations, and is based on current expectations that involve a number of business risks and uncertainties. Factors that could cause actual results to differ materially from any forward-looking statement include, but are not limited to, failure to establish estimated resources and reserves, the grade and recovery of mined ore varying from estimates, capital and operating costs varying significantly from estimates, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, inflation, changes in exchange rates, fluctuations in commodity prices, delays in the development of projects and other factors. Forward-looking statements are subject to risks, uncertainties and other factors that could cause actual results to differ materially from expected results.

Potential shareholders and prospective investors should be aware that these statements are subject to known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from those suggested by the forward-looking statements. Shareholders are cautioned not to place undue reliance on forward-looking information. By its nature, forward-looking information involves numerous assumptions, inherent risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and various future events will not occur. Claude Resources undertakes no obligation to update publicly or otherwise revise any forward-looking information whether as a result of new information, future events or other such factors which affect this information, except as required by law.

Cautionary note to U.S. investors concerning resource estimate

The resource estimates in this document were prepared in accordance with National Instrument 43-101, adopted by the Canadian Securities Administrators. The requirements of National Instrument 43-101 differ significantly from the requirements of the United States Securities and Exchange Commission (the "SEC"). In this document, we use the terms "measured", "indicated" and "inferred" resources. Although these terms are recognized and required in Canada, the SEC does not recognize them. The SEC permits U.S. mining companies, in their filings with the SEC, to disclose only those mineral deposits that constitute "reserves". Under United States standards, mineralization may not be classified as a reserve unless the determination has been made that the mineralization could be economically and legally extracted at the time the determination is made. United States investors should not assume that all or any portion of a measured or indicated resource will ever be converted into "reserves". Further, "inferred resources" have a great amount of uncertainty as to their existence and whether they can be mined economically or legally, and United States investors should not assume that "inferred resources" exist or can be legally or economically mined, or that they will ever be upgraded to a higher category.



Claude Resources Today

- 3 Canadian gold assets:
 - Low risk jurisdictions
 - Located in proven mining regions
 - Each hosting over 1 million ounces of gold
- 20+ years of operating experience
- Excellent growth potential at Seabee Gold Operation
- Aggressive focus on cost reduction initiatives
- Excellent reserve and resource growth potential near current mining infrastructure





In a difficult gold price environment, our strategy is based on:

- **Financial discipline by:**
 - ✓ Continue to focus on reducing corporate expenditures
 - ✓ Over 20% decrease year over year on overall corporate expenditures
 - ✓ Over 30% decrease year over year in capital expenditures
 - ✓ Reductions in cash costs to \$875/oz CDN in Q2 2013 from \$1,082/oz Q2 2012
- **Adding lower cost ounces to production profile by:**
 - ✓ Focusing on projects that provide near and long term value
 - ✓ Priority on developing the Santoy Gap deposit
 - ✓ Continue to develop Santoy Gap exploration ramp from the Santoy 8 Mine
- **Maintain balance sheet by:**
 - ✓ Deferral of a number of capital projects
 - ✓ Reduced exploration budget
 - ✓ Investigating strategic opportunities for development and exploration assets

Claude Resources Inc.

TSX: CRJ | NYSE MKT: CGR



Operations and Projects





Seabee Gold Operation

Project Overview

Ownership: 100%

Property Size: 17,200 hectares

Property Location: Saskatchewan, Canada

History: (1991 – Present) +1,000,000 oz of gold production

Resources: 1.30 million ounces of gold (NI 43-101)

Status: Production from Seabee and Santoy 8 Mines

Production: 50,000 to 54,000 ozs of gold (2013)

Infrastructure:

Mill: 1,050 tonne per day

Shaft: 1,000 metres

Tailings Facility: Permitted

Exploration: \$1.6 million mainly focused on the Seabee and Santoy regions

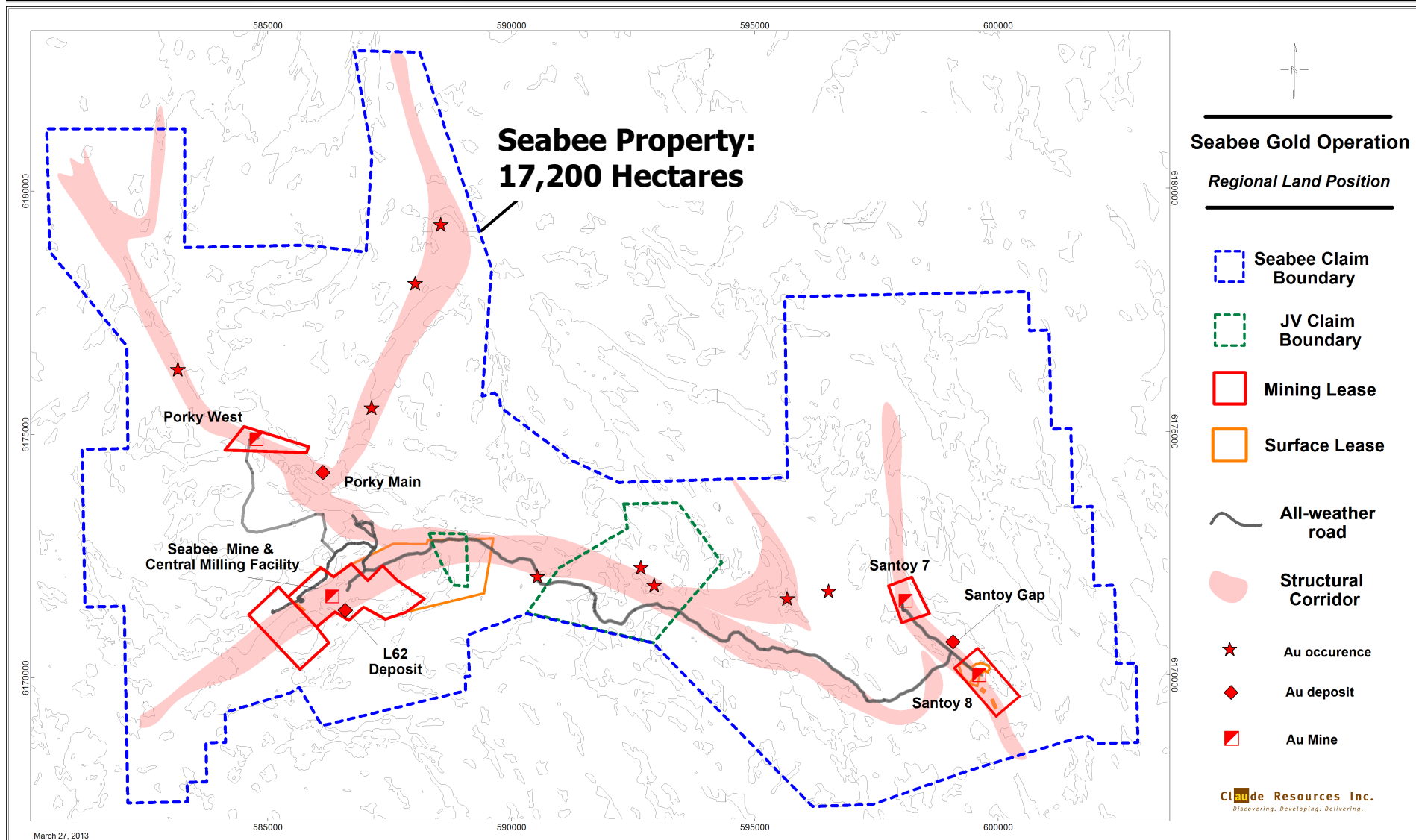
Key Notes:

- Santoy Gap resource to be updated and mine plan completed in Q3 2013
- Approximately 25,000 metres of underground drilling was completed during the first half of 2013
- Q2 cash costs \$875 CDN





Seabee Property

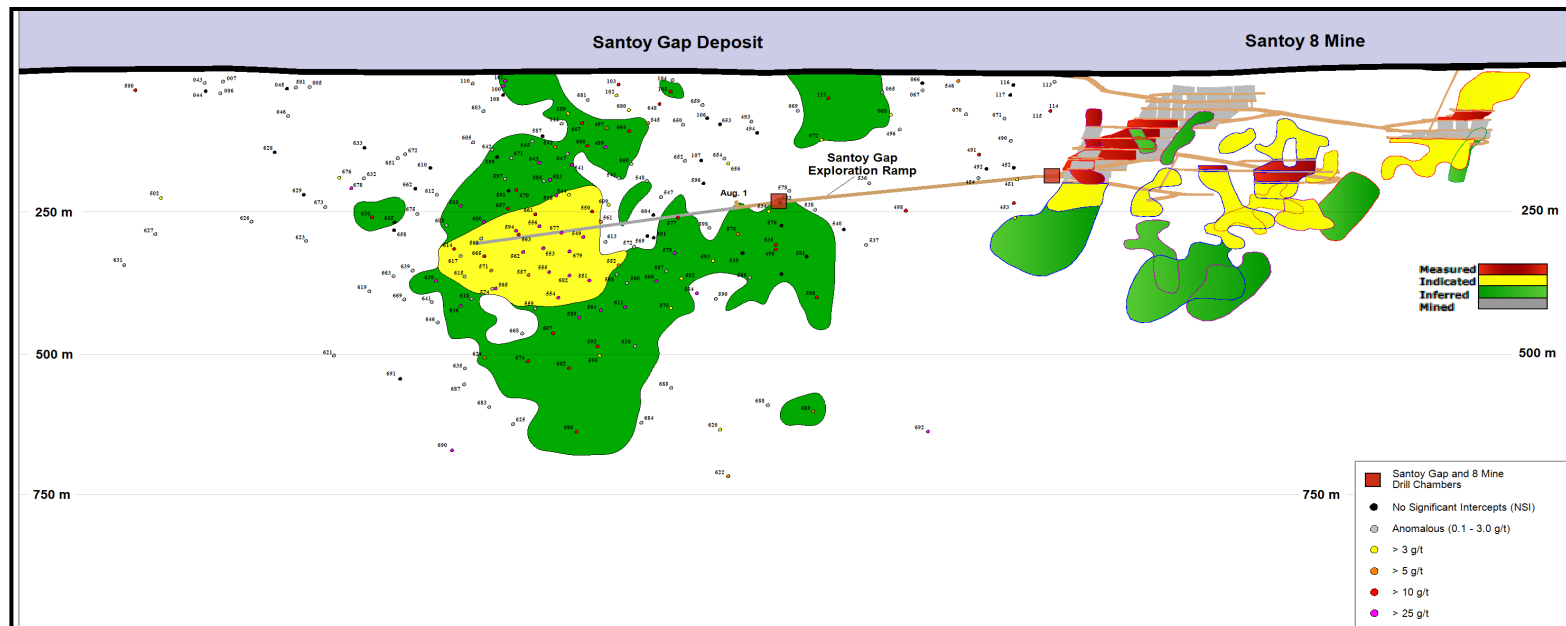




Adding Higher Margin Ounces

Moving the Santoy Gap deposit forward.....

- Mineral Resources:
 - Indicated - 281,000 ounces at 8.80 g/t
 - Inferred - 357,000 ounces at 5.92 g/t
 - Mineral resources to be updated in 2H 2013
- Preliminary results demonstrate:
 - Development ore in 1H 2014
 - Start of commercial production in Q4 2014 ramping up to 600 - 700 tonnes per day





Continued Resource Growth

Seabee 2012 resource update:

Reserves:

- Grade ↑14% to 6.14 g/t from 5.37 g/t
- Ounces ↓13% or 44,500 after mining 49,570 ounces in 2012
- Anticipate significant reserve growth in 2013 from Santoy Gap

Indicated and Measured:

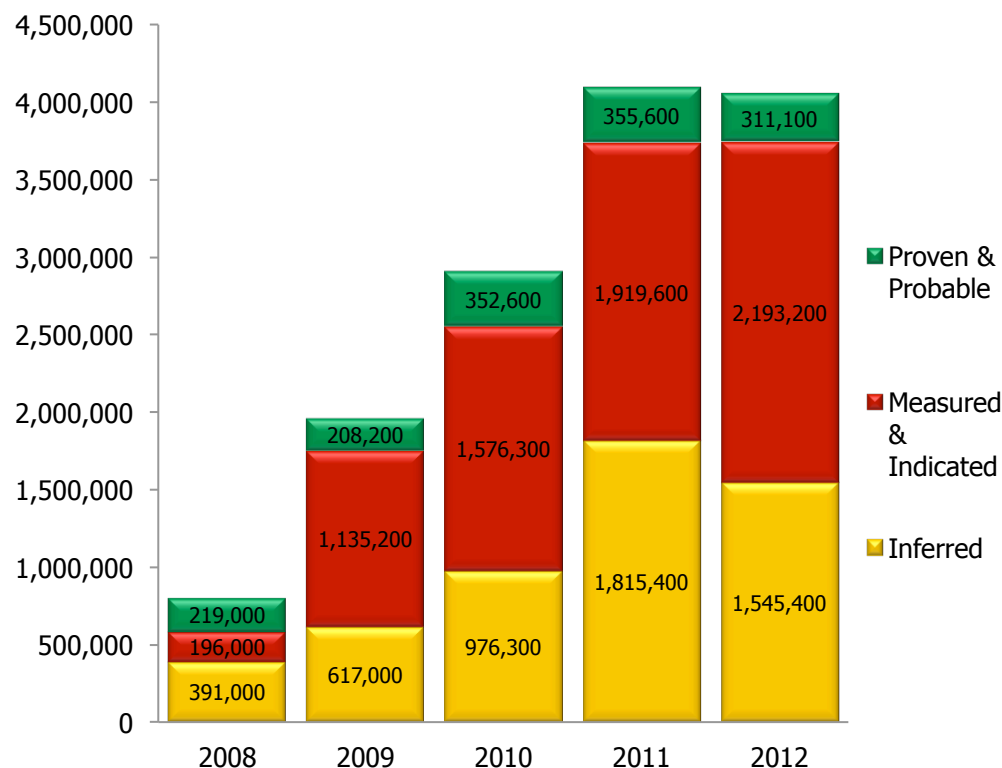
- Grade ↑46% to 7.82 g/t from 5.35 g/t
- Ounces ↑344,200 ozs from 70,700 ozs

Inferred:

- Ounces ↓31% as 270,000 ounces from Santoy Gap was upgraded into the Measured and Indicated category

Global Resource Base*

December 31, 2012

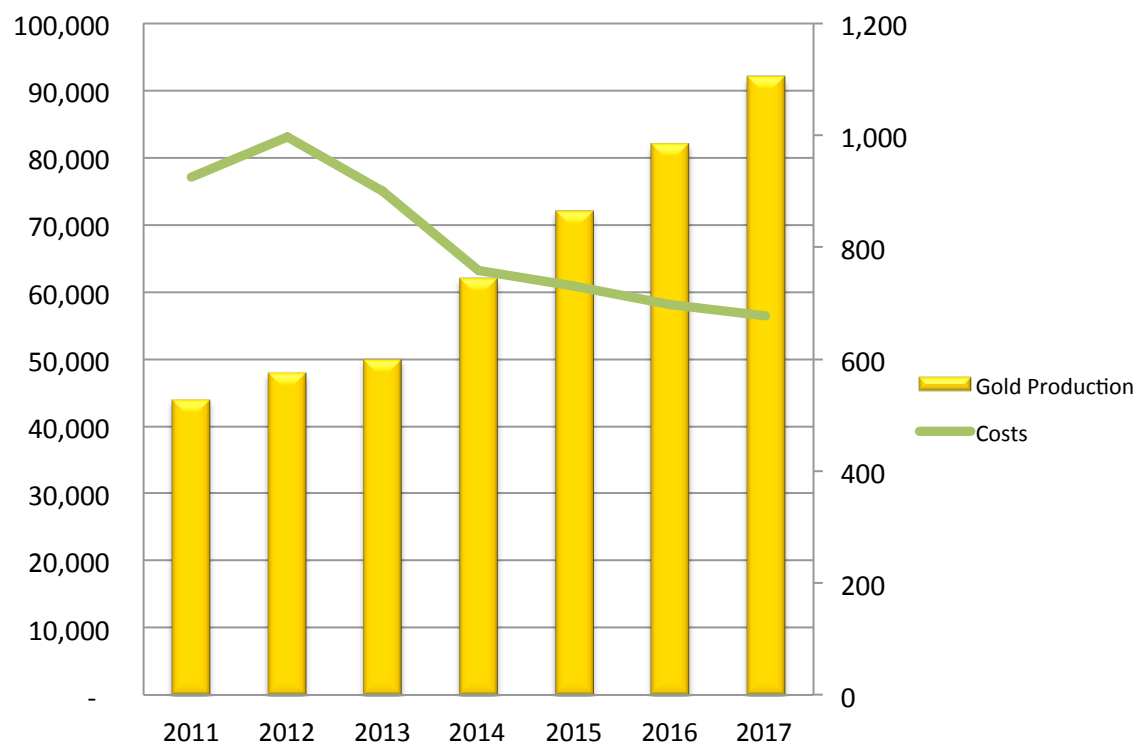


* See Appendices D, E and F for Seabee, Madsen and Amisk Mineral Reserves and Mineral Resources calculations



Low Risk and Near Term Production Growth

80% production increase in 5 years



- 80% production increase by 2017
- Santoy Gap development ore in 1H 2014
- Mining new high grade deposit – L62
- Improved management systems, costs controls and productivity initiatives
- Shaft extension to increase tonnage reliability with less maintenance and labour
- Testing new mining methods to decrease costs and dilution
- Recent underground exploration results support further growth at depth



Amisk Gold Project

Project Overview

Ownership: 100%

Property Size: 40,373 hectares

Property Location: Saskatchewan, Canada

Resource: 1.6 million ozs gold equivalent (NI 43-101)

Status: Greenfield exploration

Infrastructure: Exploration camp

Key Notes:

- NI 43-101 resource update and PEA to be released in Q3 2013
- Large bulk mineable potential
- Mineralization begins at surface and has been tested to approximately 600 metres below surface
- Close to provincial infrastructure and in proven mining district and "mining friendly" community





Madsen Gold Project

Project Overview

Ownership: 100%

Property size: 10,000 acres

Property location: Red Lake, Ontario

History: (1938 to 1976) 2.4 million ozs of gold

Resource: 1.23 million ozs at 9.0 grams per ton (NI 43-101)

Status: Advanced exploration

Infrastructure:

Mill: 500 tons per day

Shaft: 4,125 feet

Tailings Facility: Permitted

Key Notes:

- Similar type of geology to that of Goldcorp's Red Lake Assets
- Internal scoping study completed in 2013
- Minimal capital is expected to bring Madsen into production
- Evaluating strategic options

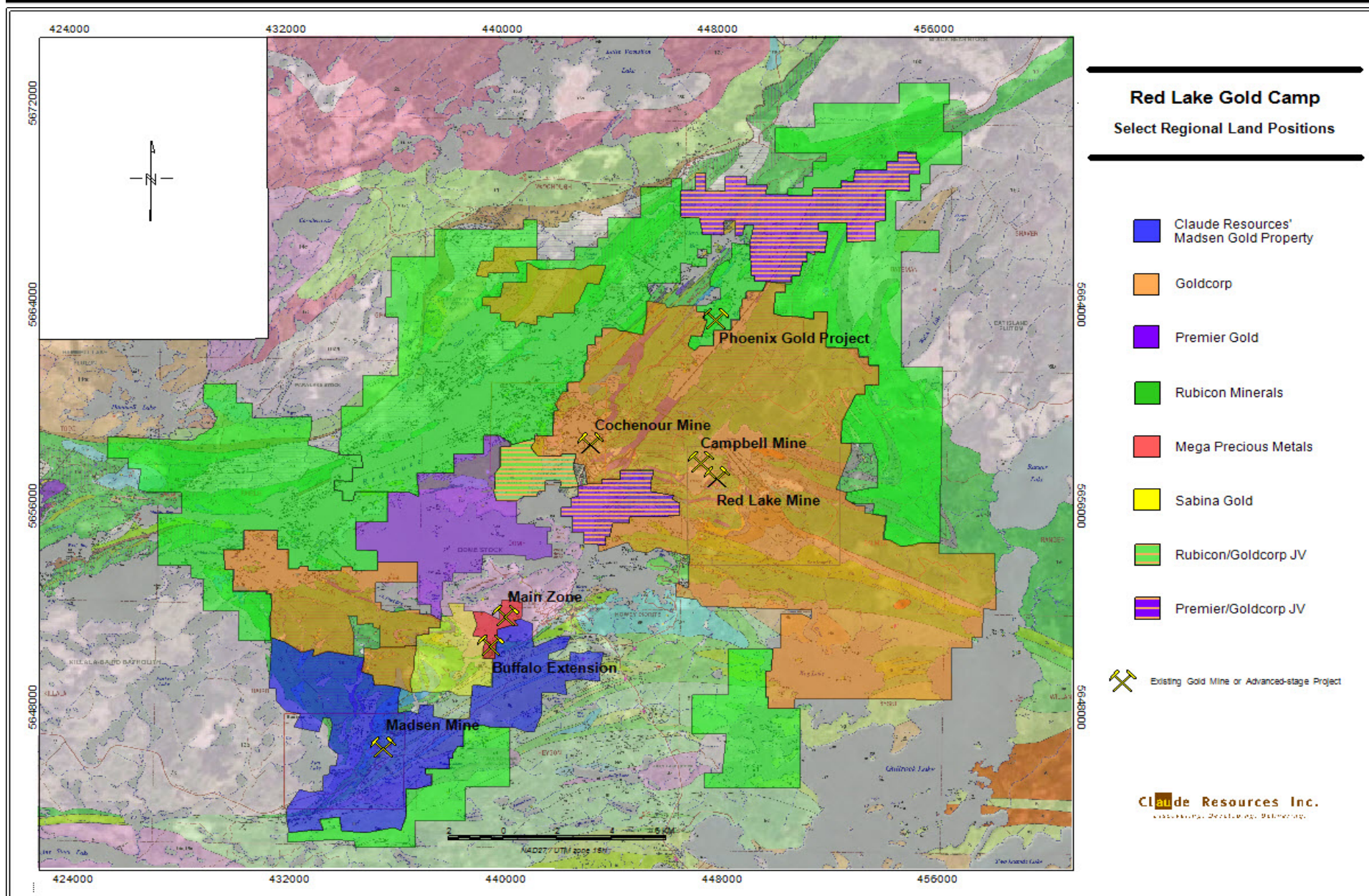


Claude Resources Inc.

TSX: CRJ | NYSE MKT: CGR



Madsen Property





- ✓ Continue to practice financial discipline
- ✓ Focus on advancing the Santoy Gap deposit towards production
- ✓ Forecast gold production of 50,000 to 54,0000 ounces
- ✓ Unit costs are estimated to improve modestly from 2012 cash costs of CDN \$997
- ✓ Budgeted capital expenditures forecasted to decrease approximately 30% year over year from \$42.9 million to approximately \$31.9 million
- ✓ Forecasted 20% decrease on overall corporate expenditures year over year
- ✓ Evaluate strategic opportunities for the Madsen Gold Project



Claude Resources Inc.

Experience. Stability. Potential.

Creating the Capacity to
Discover. Develop. Deliver.

TSX: CRJ NYSE MKT: CGR

200, 224 - 4th Avenue South
Saskatoon, Saskatchewan, S7K 5M5
Canada

P. 306.668.7505

F. 306.668.7500

E: ir@clauderesources.com





Appendix A: Management Team

Neil McMillan

President
Chief Executive Officer
Board Director

17 years as President & CEO of Claude. 16 years managing the RBC Dominion Securities operation in Saskatoon. Director on Boards of Shore Gold Inc. and Cameco Corporation.

Rick Johnson, C.A.

Chief Financial Officer
Vice President Finance

16 years with Claude including 8 years as CFO and VP Finance.

Brian Skanderbeg, P.Geo.

Chief Operating Officer
Senior Vice President

5 years with Claude leading the exploration team. Appointed Sr. VP and COO in September 2012. Previously worked for Goldcorp, INCO and Helio Resources.

Peter Longo, P.Eng., MBA, PMP

Vice President Operations

Joined Claude in 2011 as Manager of Capital Projects and appointed VP Operations in 2012. Previously worked for Areva Resources, Cameco Corporation and INCO.



Appendix B: Board of Directors

Ted J. Nieman, Q.C.	Chairman	Senior Vice-President, General Counsel and Corporate Secretary of Canpotex. A Board member of all of Canpotex's subsidiaries and affiliates. Joined the Board of Directors in 2007.
Ronald J. Hicks, C.A.	Director	Spent 41 years with Deloitte where he was a partner. Has served as a Director with Dickenson Mines Ltd., Kam Kotia Mines Ltd., Saskatchewan Government Insurance and Prairie Malt Ltd. Joined the Board of Directors in 2007.
Ray A. McKay	Director	Held numerous senior positions within the aboriginal business community, provincial government and in the education sector. Most recently retired as the CEO of Kitsaki Management, a business arm of the Lac La Ronge Indian Band. Joined the Board of Directors in 2007.
J. Robert Kowalishin, P.Eng.	Director	Held a number of senior positions with the Trane Company over the course of his 42 year career with the company. Joined the Board of Directors in 2007.
Rita Mirwald, C.M.	Director	Held a number of senior positions with Cameco Corporation, including that of Senior Vice President Corporate Services. Joined the Board of Directors in 2011.
Mike Sylvestre, P.Eng.	Director	Currently the President and Chief Executive Officer for Castle Resources Inc. Holds a MSc and BSc in Mining Engineering from McGill University and Queen's University. Previous experience with Inco Ltd. Over 35 years of mining experience. Joined the Board of Directors in 2011.
Brian Booth, P.Geo.	Director	Currently serves as the President and Chief Executive Officer of Pembroke Mining Corp. Previous work experience includes Inco Ltd. and Lake Shore Gold Corp. Over 30 years of experience in mineral exploration. Joined the Board of Directors in 2012.
Neil McMillan	President & CEO Director	17 years as President & CEO of Claude. 16 years managing the RBC Dominion Securities operation in Saskatoon. Serves on the Board of Shore Gold Inc. and Cameco Corporation.



Appendix C: Seabee Reserves & Resources

Mineral Reserve & Mineral Resource estimates as of December 31, 2012

Resource Class	Zone	Tonnes	Grade (g/t)	Contained Gold (oz)
Proven & Probable	Seabee	947,100	7.26	221,100
	Santoy 8	628,100	4.45	89,900
	Total	1,575,200	6.14	311,100
Indicated	Seabee	45,400	4.86	7,100
	Santoy 8	59,300	3.28	6,200
	Santoy Gap	994,000	8.80	281,200
	Porky Main	160,000	7.50	38,600
	Porky West	111,000	3.10	11,000
	Total	1,369,000	7.82	344,200
Inferred	Seabee	355,600	8.55	97,700
	Santoy 8	518,700	5.91	98,600
	Santoy Gap	1,875,000	5.92	356,900
	Porky Main	70,000	10.43	23,500
	Porky West	138,300	6.03	26,800
	Total	2,957,600	6.35	603,400



Appendix D: Amisk Reserves & Resources

Resource Class	Tonnes (000's)	Grade (g/t)			Contained Ounces (000's)		
		<i>Au</i>	<i>Ag</i>	<i>Au Eq</i>	<i>Au</i>	<i>Ag</i>	<i>Au Eq</i>
Indicated	30,150	0.85	6.17	0.95	827	5,978	921
Inferred	27,653	0.64	4.01	0.70	589	3,692	645



Appendix E: Madsen Reserves & Resources

Resource Class	Zone	Tonnes	Grade (g/t)	Grade (oz/t)	Contained Ounces (oz)
Indicated	Austin	1,677,000	7.92	0.23	427,000
	South Austin	850,000	9.32	0.27	254,000
	McVeigh	374,000	9.59	0.28	115,000
	Zone 8	335,000	12.21	0.36	132,000
	Total	3,236,000	8.93	0.26	928,000
Inferred	Austin	108,000	6.30	0.18	22,000
	South Austin	259,000	8.45	0.25	70,000
	McVeigh	104,000	6.11	0.18	20,000
	Zone 8	317,000	18.14	0.53	185,000
	Total	788,000	11.74	0.34	297,000



Claude Resources Inc.

Experience. Stability. Potential.

Creating the Capacity to
Discover. Develop. Deliver.

TSX: CRJ NYSE MKT: CGR

200, 224 - 4th Avenue South
Saskatoon, Saskatchewan, S7K 5M5
Canada

P. 306.668.7505

F. 306.668.7500

E: ir@clauderesources.com

