

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN ISSUER PURSUANT TO RULE 13a-16 AND 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the Month of: _____ **May 2011**

Date of Filing, May 12, 2011
Commission File Number: 000-52509

ARGONAUT GOLD, INC.

(Name of Registrant)

9604 Prototype Court
Reno, NV 89521
(Address of principal executive offices)

1. Exhibit 99.1 – Press Release, May 9, 2011

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

Indicate by check mark if the Registrant is submitting this Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): Yes ☐ No ☒

Indicate by check mark if the Registrant is submitting this Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): Yes ☐ No ☒

Indicate by check mark whether the registrant by furnishing the information contained in this Form 6-K is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934: Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Form 6-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Argonaut Gold, Inc. -- SEC File No. 000-52509
(Registrant)

Date: May 12, 2011

By \s\ Barry Dahl
Barry Dahl, Chief Financial Officer



Argonaut Gold Updates Resource for San Antonio
Gold Resource Increases by 33% to 1.6 million ounces

Toronto, Ontario - (May 9, 2011) **Argonaut Gold Inc. (TSX: AR)** ("Argonaut" or the "Company") is pleased to report that the overall Measured & Indicated gold resource at its 100% owned San Antonio Project in Baja California Sur, Mexico has increased from 1,216,000 to 1,615,000 ounces. Additionally, the company continues a 10,000 meter drill program designed to further understand the total resource at the San Antonio project.

2011 Accomplishments to Date:

- **San Antonio**
 - Q2, 2011 updated resource with 2010 Drill Program (36,000 meters)
 - 1,615,000 oz. Au in Measured and Indicated Resources, 33% increase in resource over prior N.I. 43-101 compliant technical report (1,216,000 as of August, 2010)
 - Metallurgical work on San Antonio samples; recovery ranges from 50-85% depending on mineralization type at 3/8" crush size
 - 2011 Drill Program of 10,000 meters, 1,920 meters completed
- **La Colorada**
 - 2011 Drill Program of 19,000 RC meters and 6,000 Core meters, 13,600 meters completed
 - Drill results for March 2011 included 20 holes for 385 meters
 - Drill results for May 2011 included 11 holes and more pending results
- **El Castillo**
 - Q1, 2011 annualized production run rate of 72,000 gold ounces for the 2nd consecutive quarter
 - 2011 Guidance of 70-75,000 ounces @ \$575 - \$600 cash cost
 - 1,500 meter Core Drill Program completed on April 25, 2011 and Metallurgical test work is underway

SAN ANTONIO

Updated Resource Estimate

Argonaut is pleased to announce that it has received an updated National Instrument 43-101 compliant mineral resource from AMEC E& C Services in Reno, NV ("AMEC") for its 100% owned San Antonio gold deposit in Baja California Sur.

The updated mineral resource for San Antonio follows a 36,000 meter drill program completed in the Fall of 2010, immediately prior to the acquisition by Argonaut Gold. The resource has been estimated at 1,615,000 ounces of gold, represented by more than 51 million tonnes at 0.98 g/t. This is a 33% increase over the previous technical reports' Measured and Indicated resources of 1,216,000 ounces.

Table 1- Updated Mineral Resource Summary of the San Antonio property as of April, 2011

Class	Tonnes	AU (g/t) Grade	Contained Au Metal
Measured & Indicated	51,192,000	0.978	1,615,000
Inferred	2,765,000	0.62	55,000
*Please see footnote 1 for the full resource table			

The stated Mineral Resources have been prepared in accordance with Canada's National Instrument 43-101 Standards of Disclosure for Mineral Projects. The Qualified Person for the mineral resource update, is Principal Geologist, Edward Orbock, M.AusIMM,, of AMEC E & C Services.

The updated resource estimate represents a material change to the Company and an updated technical report will be filed on SEDAR within 45 days.

Tom Burkhart, Vice President of Exploration for Argonaut stated. "The prior technical report indicated a 8 year mine life at San Antonio with a projected production rate of 82,500 ounces a year at a \$513 per ounce cash cost. An increase in resources at San Antonio could lead to an increased production profile at the property. Unlocking the potential of the property is an important part of our exploration program, a 10,000 meter drill program has been initiated for 2011. " Mr. Burkhart added "We are very pleased with the value created to date at San Antonio and will continue an extensive drill program focused on expanding the intermediate zone between the Los Planes and Las Colinas pits, as well as exploring additional areas of interest at the property, such as La Colpa."

Preliminary Metallurgical results for San Antonio samples

Preliminary test results for various material samples from the San Antonio project have been received. Metallurgical recoveries indicate an overall recovery ranging between 50-85% depending on ore type at a 3/8" crush size.

Highlights of the study are included below:

- Total test leach cycle of 100 days, indicates overall average leach cycle of 90 days
- 1,206 samples were selected from unsplit, PQ-size core collected during the 2010 drill program performed at San Antonio. The samples were tested by Metcon Research of Tucson, Arizona.
- Reagent consumption was slightly below that assumed in the earlier technical report (AMEC August 10, 2010)
- Leach recoveries as a whole exceeded those used in the prior earlier technical report (AMEC August 10, 2010)

Zone	Recovery Range
Los Planes Oxide	80-85%
Los Planes Sulphides	55-60%
Las Colinas	45-50%
Intermediate	50-55%

Argonaut Gold's President and CEO Peter Dougherty stated, "The preliminary results continue to support the economics of San Antonio as an open pit heap leach operation. The project continues to advance as the company works on the engineering, permitting, water acquisition and land purchases necessary to move the project into production."

San Antonio 2011 Drill Program

- La Colpa is slated for 1,968 meters in 2011, 1,200 meters completed as of this release
- Mineralization between a 100 to 500 meter zone east of the Las Colinas Pit
(Please see the website for the San Antonio 2011 Drill results.)

Table 1 Gold assays from RC drilling at the La Colpa Zone. San Antonio Project; 2011 Drill Program. Gold intervals calculated using a 0.2gpt Au cutoff grade and no high grade capping. No more than three consecutive barren or low-grade samples were considered.

Drill hole	Section	Azimuth / Dip (Degrees)	From (m)	To (m)	Length (m)	Au gpt
11LCRC-317	38,600	90/-60	26.8	39.0	12.2	0.61
and			43.6	52.7	9.1	0.78
11LCRC-318	38,600	90/-60	64.9	84.7	19.8	0.28
11LCRC-319	38,600	90/-60	13.1	26.8	13.7	0.42
and			36.0	46.6	10.7	0.25
and			63.4	68.0	4.6	0.53
11LCRC-320	38,600	90/-60	5.2	9.8	4.6	0.42
and			44.8	53.9	9.1	0.75
and			58.5	66.1	7.6	0.17
11LCRC-322	38,550	90/-60	18.9	25.0	6.1	0.51
and			29.6	58.5	29.0	0.41
and			64.6	69.2	4.6	0.44

Note: Drill holes are designed to cross cut known structures at 90 degrees and reported thicknesses are approximately true widths, thicknesses on vertical holes are estimated thicknesses.

Tom Burkhart noted "The preliminary focus of the 2011 drill program at San Antonio included new targets east of the Las Colinas Pit. Exploration potential still exists at the San Antonio project, providing potential upside for resource growth at the property. La Colpa was one of the targets previously identified, and slated for further exploration within our mineral concessions. We are pleased with the early drill results indicating near surface mineralization that remains open. We are looking at La Colpa as part of a parallel zone of mineralization. "

LA COLORADA

La Colorado 2011 Drill Results to Date

Argonaut is pleased to report additional drill results from the aggressive 2011 drill program at the La Colorado property, continuing a focus on converting mineralized material from an inferred resource to a Measured & Indicated resource. La Colorado is a gold-silver project located 50 kilometers southeast of Hermosillo, Mexico.

Zone	RC Drilling (meters)	Core Drilling (meters)	Hammer Drilling (meters)
La Colorado	5,545	1,408	-
Gran Central	4,284	1,279	-
Veta Madre	-	-	-
ROM	-	-	385
Stockpile	-	-	402
TOTAL 2011 Drilling to Date	9,829	2,687	787

Highlights from the 2011 La Colorado Drill Program

- Gold intercepts have been fairly consistent with the current block model (by Giroux, 2009), especially in the main Gran Central and La Colorado zones

(Please see drill results as well as a select cross section of La Colorado on the website).

Drill hole	Section (Northing)	Azimuth/ Dip (Degrees)	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
11-LCRC-132	3185838	0/-90	73.15	79.25	6.10	0.55	23.65
and			89.92	112.78	22.86	0.30	11.22
11-LCRC-133	3185836	180/-45	0.00	3.05	3.05	0.48	3.95
and			56.39	65.53	9.14	0.86	14.08
11-LCRC-134	3185839	180/-85	88.39	96.01	7.62	0.48	1.02
and			109.73	118.87	9.14	0.56	6.89
11-LCRC-135	3185819	180/-75	21.34	22.86	1.52	2.72	113.90
and			62.48	79.25	16.76	3.05	119.69
and			166.12	170.69	4.57	0.64	0.38
11-LCRC-136	3185864	180/-45	0.00	1.52	1.52	0.75	61.30
and			50.29	62.48	12.19	0.39	8.39
and			67.06	96.01	28.96	0.76	32.91
11-LCRC-137	3185865	180/-70	64.01	65.53	1.52	0.59	7.70
and			71.63	88.39	16.76	1.10	8.90
11-LCRC-138	3185866	0/-90	88.39	92.96	4.57	0.64	3.55
and			100.58	121.92	21.34	0.67	18.83
11-LCRC-141	3185478	180/-58	59.44	65.53	6.10	0.88	19.60
and			71.63	92.96	21.34	1.30	70.65
11-LCRC-142	3185500	180/-65	70.10	71.63	1.52	0.31	20.20
11-LCRC-143	3185499	180/-79	94.49	102.11	7.62	0.72	72.82
11-LCRC-146	3185662	180/-45	1.52	9.14	7.62	0.41	0.29
and			82.30	85.34	3.05	7.36	17.40
and			91.44	92.96	1.52	0.26	12.30
and			158.50	170.69	12.19	1.42	11.31

Note: Drill holes are designed to cross cut known structures at 90 degrees and reported thicknesses are approximately true widths, thicknesses on vertical holes are estimated thicknesses.

Tom Burkhart noted “Our drill program in 2011 at La Colorada is designed to convert the inferred resource to a Measured and Indicated resource. The initial drill results are encouraging and proving up our theory of the deposits untapped potential. We anticipate Phase I drilling of 19,000 meters to be finished in the 3rd quarter. Once the drilling is completed the results will be incorporated into a new NI 43-101 compliant technical report which will be completed by year end.”

Footnotes

Table1-1: Mineral Resource Statement, San Antonio Project, Effective Date April 29th 2011, Edward J.C. Orbock III, M.AusIMM

Deposit	Class	Au Cut-off	Tonnes (x 1,000)	(Au g/t)	Total Au grams (x 1,000)	Au ounces (x 1,000)
Las Colinas	Oxide/Transition					
	Measured	0.23	331	0.73	242	8
	Indicated	0.23	887	0.71	633	20
	Sulphide					
	Measured	0.26	710	0.76	542	17
	Indicated	0.26	5,097	0.84	4,287	138
Los Planes	Oxide/Transition					
	Inferred	0.23	25	0.48	12	0.4
	Oxide/Transition					
	Measured	0.13	9,594	0.91	8,754	281
	Indicated	0.13	5,393	0.90	4,880	157
	Sulphide					
	Measured	0.19	7,760	1.21	9,361	301
	Indicated	0.19	18,272	1.02	18,545	596
	Oxide/Transition					
	Inferred	0.13	407	0.92	375	12
Intermedia	Sulphide					
	Inferred	0.19	464	0.94	436	14
	Oxide/Transition/Sulphides					
	Measured	0.21	388	1.01	390	13
	Indicated	0.21	2,760	0.94	2,599	84
	Oxide/Transition/Sulphides					
La Colpa	Inferred	0.21	9	0.56	5	0.2
	Oxide/Transition					
	Inferred	0.18	1,109	0.43	473	15
	Sulphide					
All Deposits	Inferred	0.22	741	0.53	395	13
	Oxide/Transition/Sulphides					
	Measured	Various	18,783	1.03	19,289	620
	Indicated	Various	32,409	0.96	30,943	995
	Oxide/Transition/Sulphides					
	Measured+Indicated	Various	51,192	0.98	50,232	1,615
	Oxide/Transition/Sulphides					
	Inferred	Various	2,755	0.62	1,696	55

Notes to Accompany Mineral Resources Table:

1. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability
2. Mineral Resources are reported at various cut-off grades for oxide, transition, and sulphide material.
3. Mineral Resources are reported as undiluted.
4. Mineral Resources are reported within a conceptual pit shell
5. Mineral Resources are reported using a long-term gold price of US\$1,200/oz, variable mining and processing costs and variable recoveries that are based on the oxidation state of the sulphides in the deposit.
6. Totals tonnes and grade values may be rounded.

The AMEC resource estimation is based on information from 430 drill holes totalling 74,453 meters. The average drillhole spacing is approximately 50m.

About Argonaut

Argonaut is a Canadian gold company engaged in exploration, mine development and production activities. Its primary assets are the production-stage El Castillo Mine in the State of Durango, Mexico, the development stage San Antonio project, the past producing La Colorada project, and the exploration stage La Fortuna project, all of which are located in Mexico.

Creating the Next Quality Mid-Tier Gold Producer in the Americas.

Cautionary Note Regarding Forward-looking Statements

This news release contains forward-looking statements that involve risks and uncertainties that could cause results to differ materially from management's current expectations. Actual results may differ materially due to a number of factors. Except as required by law, Argonaut Gold Inc. assumes no obligation to update the forward-looking information contained in this news release.

The potential quantities and grades disclosed herein in connection with the drilling results at San Antonio and La Colorada are conceptual in nature and there has been insufficient exploration to define an updated mineral resource on these results and it is uncertain if further exploration will result in these targets being delineated as a mineral resource.

Qualified Persons

Preparation of this press release was supervised by Mr. Thomas Burkhart, Argonaut's Vice President of Exploration and, a "Qualified Persons" as defined by NI 43-101. Mr. Alberto Orozco, Argonaut's Mexico Exploration Manager. Mr. Alberto Orozco also supervised the reverse circulation drill program and on-site sample preparation procedures at San Antonio. Mr. Edward J.C. Orbock of AMEC E & C Services of Reno, NV, who is an "Independent Qualified Person" as defined by NI 43-101 and the lead person responsible for completing the updated San Antonio resource has reviewed this press release as it relates to the San Antonio project.

For sample analysis the Company utilizes a system of Quality Assurance/Quality Control that includes insertion and verification of standards, blanks and duplicates consistent with industry standards. Samples from the La Colorada Project are collected at site by personnel of Inspectorate's preparation laboratory in Hermosillo where samples are prepared and pulps sent for assay in Inspectorate's Sparks, NV laboratory. Samples are analyzed for gold by Fire Assay and Atomic absorption finish (PKG-AuAg assay code; 0.005 to 10ppm detection limit) plus Silver by Aqua Regia and Atomic Absorption finish (0.1 to 200 ppm detection limit). Samples over 10 g/t Au are assayed with gravimetric finish (Assay code Au-1AT-GV). All samples are also assayed by ICP-AES (code GENX-30) for a suite of 30 elements.

Samples from the San Antonio project are shipped by commercial courier from the city of La Paz to ALS Chemex's preparation laboratory in Hermosillo, Sonora. Samples are prepared by ALS in Hermosillo and pulps sent to their assay laboratory in North Vancouver. Samples are analyzed for gold by fire assay with atomic absorption (Au AA-23 assay method code; 0.005 to 10ppm detection limit). Samples over 10 g/t Au are assayed with gravimetric finish (Assay code AU-GRA21). All samples are also assayed by ICP-MS (code ME-ICP41) for a suite of 35 elements.

For further information on the San Antonio project please see the NI 43-01 compliant technical report entitled "San Antonio Project, Baja California Sur, Mexico. NI 43-101 Technical Report on Preliminary Assessment" dated August 10, 2010 and available on www.sedar.org.

For further information on the La Colorada project please see the NI 43-01 compliant technical report entitled "Geological Report on the La Colorada Property with a resource estimate on the La Colorada and El Creston Mineralized Zones" dated November 30, 2009 and available on www.sedar.org.

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