

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

FORM 6-K

REPORT OF FOREIGN ISSUER
PURSUANT TO RULE 13a-16 OR 15b-16 OF
THE SECURITIES EXCHANGE ACT OF 1934

For the month of March 2011

Commission File Number: 000-52509

Argonaut Gold, Inc.
(formerly Pediment Gold Corp.)
(Translation of Registrant's name into English)

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

1. Exhibit 99.1 – Press Release March 15, 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 ☒

SIGNATURES

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

ARGONAUT GOLD, INC.

By: /s/ Barry Dahl

March 22, 2011

Name: Barry Dahl
Title: Chief Financial Officer



**Argonaut Gold Reports on Resource Expansion Drilling at San Antonio;
Intermediate Zone looks to expand resource, reports 34 Meters of 2.51 g/t gold**

Toronto, Ontario - (March 15, 2011) **Argonaut Gold Inc. (TSX: AR)** ("**Argonaut**" or the "**Company**") is pleased to provide an update on the continuing exploration program at its 100% owned San Antonio project ("San Antonio") following completion of the acquisition of Pediment Gold Corp ("Pediment") in January, 2011. San Antonio is located in Baja California Sur, Mexico. The San Antonio gold resource identified within a two-kilometer long mineralized trend has seen significant drilling since 2007. Data from the 36,000 meters of drilling completed in 2010 is not included in the current resource estimate and is being incorporated into an updated National Instrument 43-101 compliant resource study scheduled for completion by the end of Q2, 2011.

SAN ANTONIO DRILL PROGRAM, OVER 36,000 METERS COMPLETED IN 2010

The 2010 drill program included 26,746 meters of reverse-circulation drilling (RVC) and 9,324 meters of combined PQ-HQ-size core drilling, contained within the following areas:

Summary of Infill and step-out drilling		Other drill programs	
Los Planes	13,903	Met Samples (PQ)	1,818
Intermediate Zone	7,974	Oriented geothech (HQ)	1,844
Las Colinas	4,206	Condemnation and monitor wells*	4,359
La Colpa	1,968		
Total infill 2010	28,050	Total Other programs	8,020
TOTAL 2010 PROGRAM – 36,070			

LOS PLANES SIGNIFICANT RESULTS:

- Increase drill density to enhance and convert gold mineralization into a measured category.
- New mineralization identified 200 meters from the Los Planes resource area in step-out drill-hole 10CORC-305, intercepted 30.48 meters of 0.91 g /t Au starting at 232.3 meters.

- Additional step-out drill holes revealed other newly discovered gold zones that will see 2011 follow-up drilling
- **Drill Hole Highlights:** Drill hole 10PLDD-40 intercepting 45 meters of 8.53 g/t Au.

Table 1 Highlight gold assays for the Los Planes Drill holes marked as “infill” are RVC, while those marked as “metallurgy” are PQ-size diamond holes

Drill hole	Section (Northing) (meters)	Azimuth / Dip (Degrees)	From (m)	To (m)	Length (m)	Au (g/t)	Comments
10PLDD-38	2,639,825	000/-90	92.80	109.20	16.40	4.37	Metallurgy
And			118.00	148.50	30.50	3.73	
10PLDD-39	2,639,789	000/-90	28.05	54.64	26.59	1.85	Metallurgy
And			61.66	95.90	34.24	0.80	
And			103.30	169.50	66.20	1.85	
10PLDD-40	2,639,793	090/-78	70.51	115.50	44.99	8.53	Metallurgy
And			155.85	192.50	36.65	1.55	
10PLDD-52	2,639,503	000/-90	38.90	69.79	30.89	2.63	Metallurgy
And			92.65	131.05	38.40	1.77	
10PLDD-53	2,639,502	090/-60	19.00	32.85	13.85	0.57	Metallurgy
And			60.75	72.90	12.15	1.55	
And			78.50	85.95	7.45	0.49	
10PLDD-56	2,639,556	000/-90	13.20	76.70	63.50	0.89	Metallurgy
10PLDD-80	2,639,753	090/-60	41.00	99.00	58.00	3.72	Infill
And			113.00	169.00	56.00	1.10	
10PLRC-259	2,639,519	000/-90	23.47	37.19	13.72	0.72	Infill
And			96.62	177.39	80.77	1.39	
10PLRC-260	2,639,396	090/-85	136.25	188.06	51.82	2.26	Infill
And			195.68	207.87	12.19	0.51	
10PLRC-271	2,639,571	000/-90	24.99	53.95	28.96	0.49	Infill
And			58.52	79.86	21.34	1.25	
And			111.86	203.30	91.44	1.68	
10PLRC-272	2,639,571	090/-65	17.37	31.09	13.72	0.88	Infill
And			84.43	148.44	64.01	1.66	

Table 2 Highlight gold assays for 2010 step-out holes. All holes presented in this table are RVC

Drill hole	Section (Northing) (meters)	Azimuth / Dip (Degrees)	From (m)	To (m)	Length (m)	Au (g/t)
10CORC-303	2,639,543	090/-60	72.24	75.29	3.05	1.13
And			134.72	139.29	4.57	1.10
And			226.16	229.21	3.05	0.59
And			282.55	299.31	16.76	0.27
And			305.40	308.45	3.05	1.18
10CORC-305	2,639,800	090/-60	232.27	262.75	30.48	0.91
and			293.24	299.33	6.10	0.27
10CORC-306	2,640,466	090/-60	79.86	84.43	4.57	0.80
and			143.87	153.01	9.14	0.55
10CORC-307	2,640,662	090/-60	98.15	102.72	4.57	1.77
10CORC-311	2,640,203	090/-60	180.44	206.35	25.91	0.20

INTERMEDIATE ZONE SIGNIFICANT RESULTS:

- New discovered continuous gold mineralization identified on a strike length of four-hundred meters; 2010 drilling significantly expanded the **Intermediate Zone** both on strike and down dip by adding a total of 7,900 meters of drilling (see previous Pediment news releases dated October 6, 2010 and November 18, 2010).
- **Drill Hole Highlights:** Drill hole 10PLDD-75 intercepting 34 meters of 2.51 g/t Au.

Table 3 Highlight gold assays for the Intermediate zone. All holes in this table are core holes.

Drill hole	Section (Northing) (meters)	Azimuth / Dip (Degrees)	From (m)	To (m)	Length (m)	Au (g/t)
10PLDD-61	2,639,150	000/-90	18.00	36.27	18.27	1.27
and			62.90	78.20	15.30	0.99
and			84.20	100.40	16.20	0.48
10PLDD-62	2,639,101	090/-70	155.00	189.90	34.90	1.27
10PLDD-63	2,639,196	090/-70	20.72	55.60	34.88	0.66
and			64.00	85.20	21.20	0.45
10PLDD-67	2,639,042	090/-75	137.80	167.00	29.20	1.57
10PLDD-70	2,638,996	000/-90	159.90	192.00	32.10	0.77
10PLDD-75	2,639,150	090/-60	57.00	91.00	34.00	2.51
and			97.00	120.00	23.00	0.68

LAS COLINAS SIGNIFICANT RESULTS

- In-fill and step out drilling has continued to confirm the continuity of the ore zone and extend gold mineralization down-dip
- **Drill Hole Highlights:** Drill hole 10LCDD-72 with 48 meters of 0.89 g/t Au, starting at surface. One of the deeper noted intercepts in drill hole 10PLRC-286 shows 39.62 meters of 1.09 g/t gold. This zone starts at 118 meters down dip and supports the depth continuity of the Las Colinas zone.

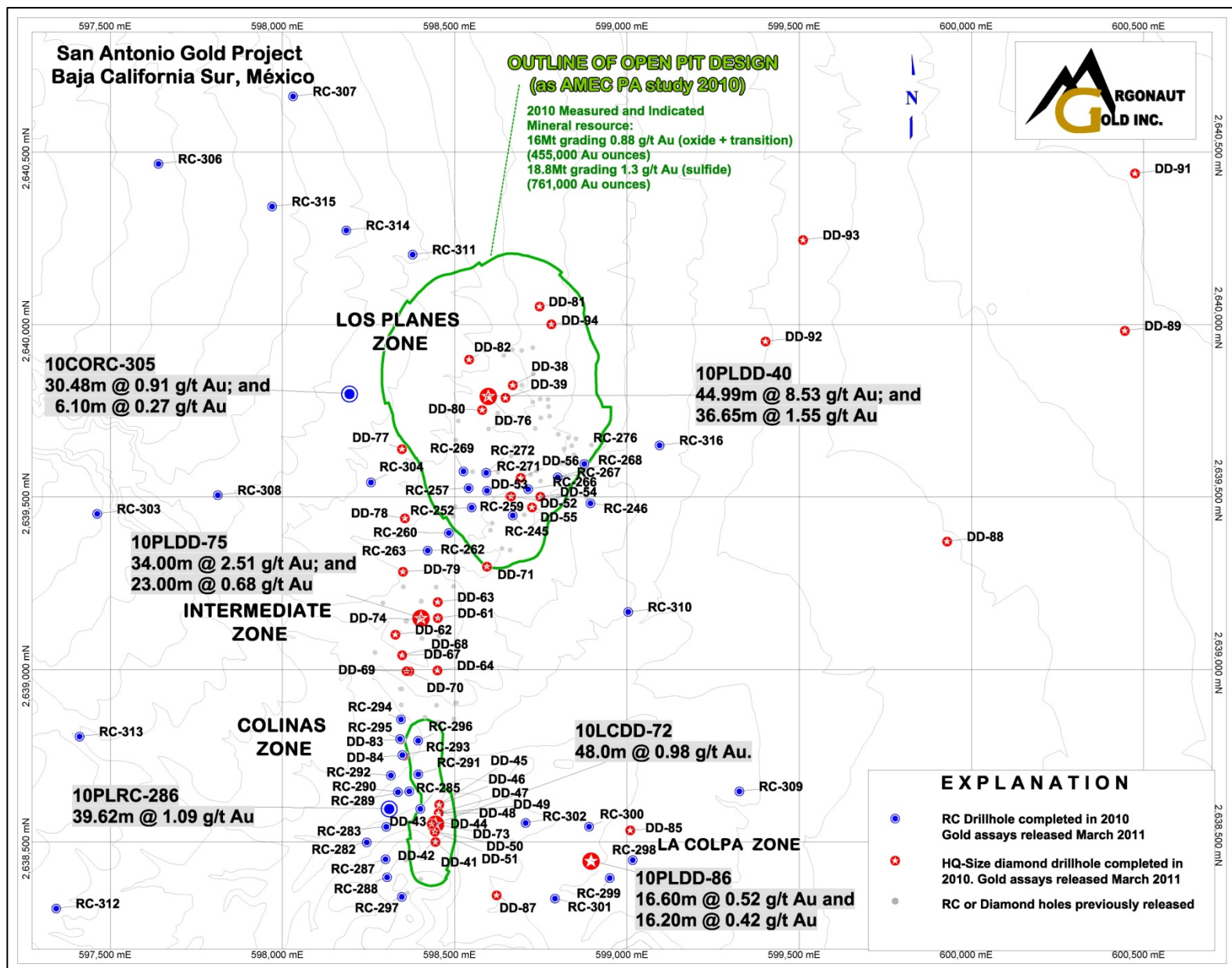
Table 44 Highlight gold assays for the Las Calinas zone. Drill hole	Section (Northing) (meters)	Azimuth / Dip (Degrees)	From (m)	To (m)	Length (m)	Au (g/t)
10LCDD-72	2,638,553	090/-70	0.00	48.00	48.00	0.89
10PLRC-283	2,638,545	090/-78	133.20	169.77	36.58	1.07
and			175.87	194.16	18.29	0.59
10PLRC-285	2,638,597	000/-90	46.33	95.10	48.77	0.98
10PLRC-286	2,638,597	090/-77	117.96	157.58	39.62	1.09
10PLRC-293	2,638,753	090/-85	82.91	116.43	33.53	1.19

ADDITIONAL DRILLING ACCOMPLISHMENTS

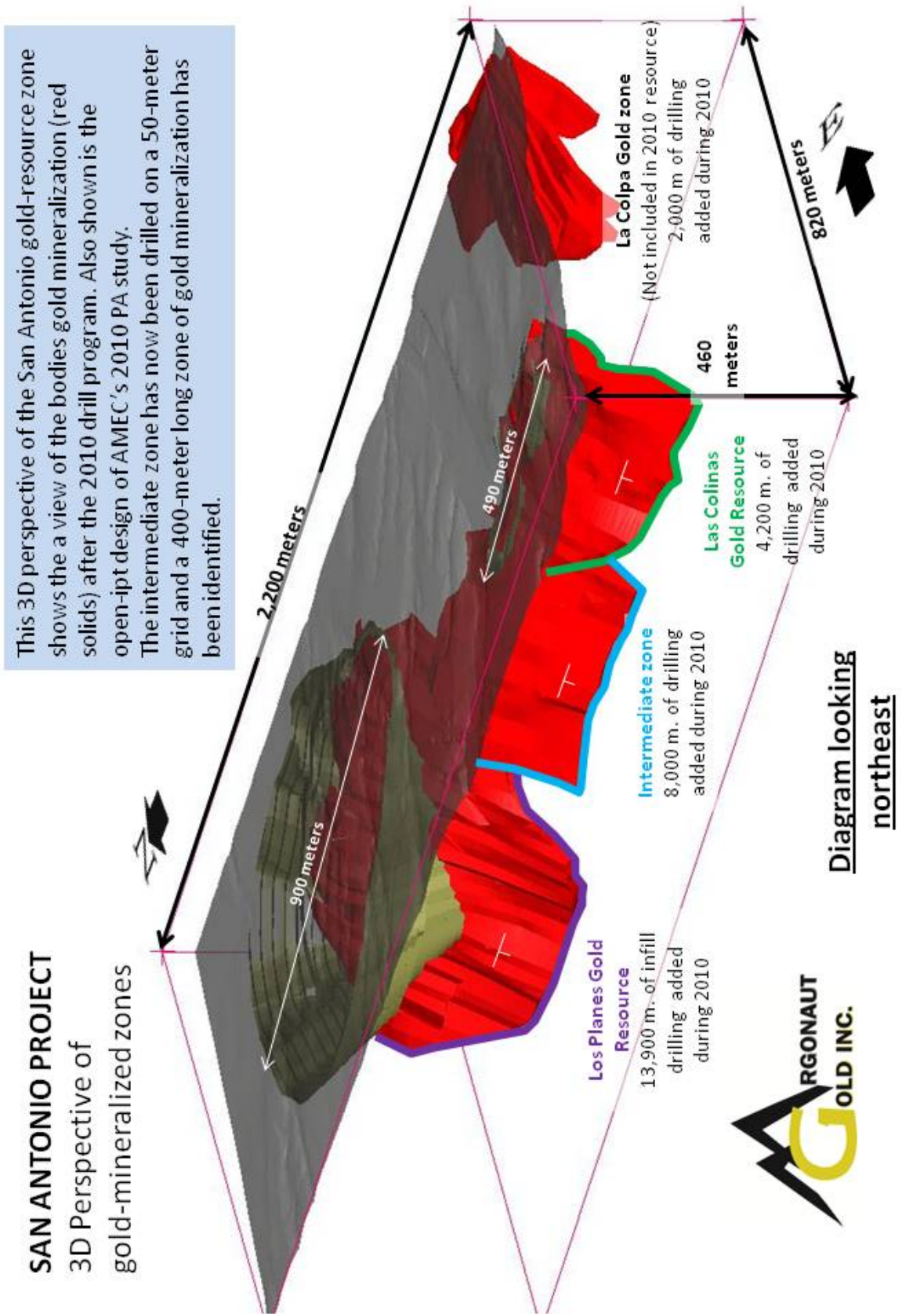
- Obtained development data to include: oriented core for Pit Slope Design, PQ core diamond drilling for metallurgical studies, condemnation drilling to sterilize areas for operations and drilling for support in hydrological studies.

Please see the Argonaut website for a complete list of drill holes under the Pediment ownership.

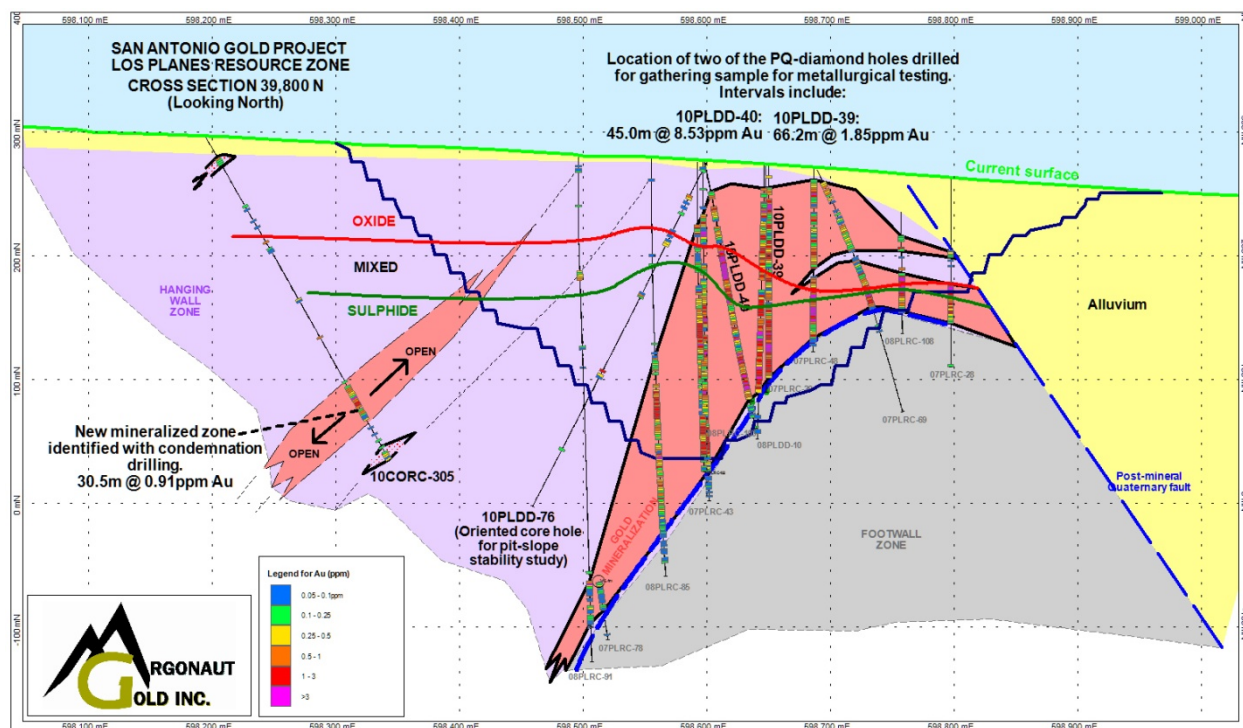
Drill Map



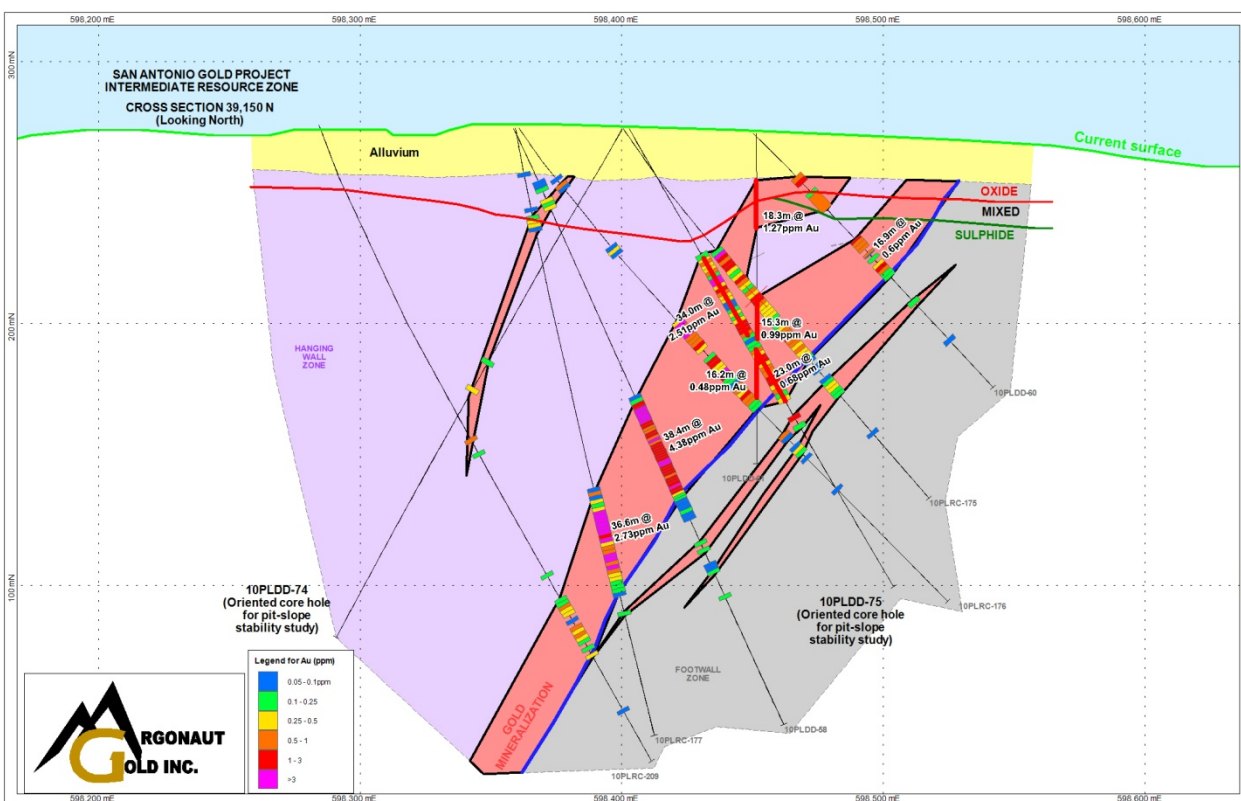
3D Model



Los Planes Cross Section



Intermediate Cross Section



In regards to the San Antonio gold resource expansion as a result of the drilling in 2010, Vice President of Exploration for Argonaut, Mr. Tom Burkhardt said "The exploration and development work conducted at San Antonio during 2010 has significantly advanced the project. I am confident we have excellent potential to expand the project's gold resource. We have made good headway toward our objective of connecting the Las Colinas and Los Planes zones via the extension of the Intermediate zone. This represents a significant milestone as 400 meters of new strike length has been discovered and confirmed; this, coupled with the deposit expansion thru step out drilling indicates that significant exploration upside remains at San Antonio."

2011 DRILL PROGRAM FOR SAN ANTONIO

In mid-March, the Company commenced a 10,000 meter drill program that will include approximately 30 RVC holes in the Intermediate Zone and 40 RVC holes in Las Colinas. The objective is to upgrade the resources in both gold bearing areas to a measured category. Tom Burkhardt added: "At San Antonio, there are three main ore zones hosted within the same large structural zone that strikes to the north/south and dips steeply to the west. The 2011 drill program will attempt to join the three gold zones by targeting minor post mineral offsets that currently separate these three resources. Ultimately, we believe this is one continuous structural feature."

In addition, further drilling is planned at La Colpa, which lies 100 meters east of Las Colinas. This underexplored area may represent a parallel mineralized zone where recent drilling results included a 16.6 meter intercept grading 0.52 g/t gold starting at surface, in drill hole number PLDD-86."

RESOURCE UPDATE PLANNED BY SECOND QUARTER OF 2011

All drill data has been provided to AMEC E&C Services, Inc. (AMEC) in Reno Nevada who have been contracted to complete an updated National Instrument 43-101 compliant Technical Report, which will include an updated resource study utilizing all the 2010 drill data. This work is in progress and scheduled for completion by the end of the second quarter of 2011.

Qualified Person Comments/Quality Control Procedures

All summarized interval reported in this news release were calculated using a 0.20 g/t cut-off grade. Intervals contain no more than three low-grade to barren samples between mineralized samples containing over 0.20 g/t gold. The Company utilizes a system of Quality Assurance/Quality Control that includes insertion and verification of standards, blanks and duplicates consistent with industry standards. This Press Release was reviewed and approved by Thomas Burkhardt, Argonaut Gold's Vice President of Exploration a Qualified Person under National

Instrument 43-101. Mr. Burkhart also reviewed the reverse circulation and core drilling programs and on-site sample preparation procedures at San Antonio.

Samples from the San Antonio Project are shipped by commercial courier from the Company's facility in San Antonio directly to the preparation laboratory of ALS Chemex in Hermosillo, Sonora. The prep lab then sends the sample pulps to ALS Chemex's laboratory in North Vancouver, where they are assayed 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.

Statement regarding width of gold intercepts and true width: The structurally-controlled San Antonio deposit has a north-south to north-northeast strike and dips 45 to 55 degrees to the west. Drill holes oriented on an azimuth of 090 and a dip between 45 and 55 degrees are the closest to representing true widths. On the east portion of Los Planes, the mineralization folds over and becomes sub horizontal. Vertical holes at that location are the most representative of true width.

The potential quantities and grades disclosed herein are conceptual in nature, there has been insufficient exploration to define an updated mineral resources and it is uncertain if further exploration will result in these targets being delineated as an updated mineral resource. For further information on the San Antonio project, please refer to the technical report entitled "San Antonio Project, Baja California Sur, Mexico, NI 43-101 Technical Report on Preliminary Assessment", dated August 2, 2010 and revised August 10, 2010 available on SEDAR and Argonaut's website.

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 and the past producing La Colorada project, both located in Mexico. Argonaut is a producing gold company created by former executive management team members of Meridian Gold Inc.

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.

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