

**SILVER BAY PROJECT  
AVALON DEVELOPMENT CORP.  
EXPLORATION SUMMARY 2015**

**Commodities:** Gold, silver

**Access:** Tidewater and limited road.

**Infrastructure:** Adjacent to regional population/infrastructure centers

**Land and Competitors:** Open State and Federal lands, no other competitors adjacent or nearby.

**History:** Total estimated production was less than 2,500 ounces. All production prior to 1942.

**Resources:** No industry compliant resources currently in place.

**Geology:** Upper Jurassic to Lower Cretaceous metamorphosed grey to black carbonaceous greywacke, argillite sandstone, siltstone and mudstone turbidite sequence. Regional and project-scale high angle structures and folds are important. Intrusives do not appear to play a significant role in mineralization.

**Mineralization:** Mineralization occurs within the +80 kilometer-long Sitka – Chichagof gold belt as low sulfide gold-quartz veins hosted in turbidite sequence rocks. The predominantly high angle veins and vein swarms are continuous for up to 1,000 feet along strike individually with vein swarms that are continuous for up to +4,500 feet horizontally and +4,000 feet vertically. Vein widths vary from <1 foot to +16 feet. Sulfides include pyrite, pyrrhotite, arsenopyrite, and rare galena. Mineralization is similar to other turbidite-hosted orogenic gold deposits.

**Recent Exploration:** No mining since 1942, no significant exploration in the last 25 years.

**Ore Deposit Model:** The geological characteristics of the Silver Bay area of the Sitka – Chichagof gold belt are remarkably similar to those identified in turbidite-hosted orogenic gold deposits. Nearby examples include the adjacent Juneau Gold Belt and the Chichagof and Hirst-Chichagof mines on the north end of the Sitka – Chichagof gold belt. There has been no substantive exploration of the Sitka – Chichagof gold belt targeting the diagnostic exploration parameters found in turbidite-hosted orogenic gold deposits.

Interested parties should contact:

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Table 1: Comparison of geological features between the Sitka - Chichagof gold belt and typical turbidite-hosted orogenic gold deposits. Compiled by Avalon Development Corp., 2014.

<b>Characteristic</b>	<b>Sitka - Chichagof Belt</b>	<b>Typical Turbidite Orogenic Gold Deposit</b>
Host Rocks	Carbonaceous Graywacke	Carbonaceous Graywacke
Intrusive Types	Rare to absent	Rare to absent
Intrusive Ages	42 - 52 Ma	Archean to Tertiary
Metamorphic Grades	Low Greenschist	Greenschist to amphibolite
Proximal Alteration	Quartz and carbonate	Quartz, sericite, carbonate +/- tourmaline
Distal Alteration	Unknown	Ankerite-siderite haloes
Graphite/Carbon Role	Present, unknown significance	Present, unknown significance
Vein Texture/Structure	Sharp walls, host partings	Sharp walls, host partings
Wallrock Alteration	Carb proximal	Ser-Carb proximal
Placer Gold Size and Fineness	Insignificant, silver-bearing	Variably present, silver-bearing
Lode Gold Fineness	818 Au, 172 Ag	Generally >900 Au
Gold:Silver Ratio	4.75:1	Generally >5:1
Sulfide Volume	1-5%	Averages 2.5%
Primary Sulfides	Py>>aspy>>po>>cpy	Py>>aspy>>po>>cpy
Secondary Sulfides	Gal-spl-Hg	Gal-spl-mo-bis-stib-sulphosalts
Arsenic Mineralization	Pervasive	Pervasive
Copper Mineralization	Sporadic	Sporadic
Mercury Mineralization	Pervasive but low	Inconsistent
Fluid Chemistry	2.5% CO <sub>2</sub> , 6% NaCl	5% CO <sub>2</sub> , Low salinity
Sulfur Isotopes	0 per mil	Variable, not diagnostic
Temperature and Pressure	225-250C, 1 kb	220-600C, 0.5 - 4.5 kb
Age of Mineralization	42 Ma white mica	Archean to Tertiary
Tectonic Regime	Convergent plate margin	Continental margin/back arc basin
Deposit Form	Irregular veins, shears	Irregular veins, shears, saddle reefs
Faults Controls	Regional and deposit scale	Regional and deposit scale
Fold Controls	Uncertain but suspect	Fold hinges are important control
Permeability Controls	Unknown	Variable but significant
High Angle Faults	Reverse faults common	Reverse faults common
Low Angle Normal Faults	Common, secondary	Common, secondary
Thrust Faults	Unknown	Important in some deposits
Depth of Formation	3 kilometers	1.5 to 13.5 kilometers
Geophysics - Mag - EM	Unknown	Not diagnostic
Geophysics - Radiometric	Unknown	Not diagnostic
Geophysics - Gravimetric	Unknown	Correlative with gold minz where tested
Lode Production	>800,000 oz Au	> 50 Moz
Lode Resources	<200,000 oz	100,000 to >175 million oz
Average Gold Grade	Approx. 1 opt	0.1 to >1 opt