The San Juan Silver Project

- Rio Grande Silver, Inc. (RGS) is a wholly owned subsidiary of Hecla Mining Company.
- San Juan Silver Mining Joint Venture formed in 2008.
  - RGS operator with 70% interest
  - Emerald Mining & Leasing and Golden 8 Mining minority partners
- Creede Mining District:
  - Consolidated Mining District
  - 37M oz Ag resource
  - Multiple vein structures
  - Excellent exploration potential
Project Location

Map showing the project location in Mineral County, Colorado, with the San Juan Silver Project Site indicated.
Total Creede District Production

- Silver (Ag): 86 million ounces
- Lead (Pb): 170,000 tons
- Zinc (Zn): 54,000 tons
- Gold (Au): 160,000 ounces
- Copper (Cu): 3,400 tons
- **Consolidated Land Package**

- **13,421 Acres**
  - Unpatented Mining Claims
  - Patented Mining Claims
  - Patented Millsite Claims

- **Two Historic Mines**
  - Bulldog – 37M oz Ag
  - Equity
Three components to the Project.

- District surface exploration
- Underground exploration – Equity Project
- Bulldog pre-development/exploration
Surface Exploration
In February of 2008 the San Juan Silver Mining Joint Venture was formed. RGS, Emerald Mining & Leasing and Golden 8 Mining are the partners.

Started the permitting process for a 5 year Plan Of Operations (POO) for surface exploration.

Permitted to construct 8 drill pads under a Categorical Exclusion near the Bulldog mine resource.

Drilled two core holes totaling 4,840 feet of core targeting the Bulldog Vein.
Continued the permitting process for the 5 year POO.

RGS was able to extend the Categorical Exclusion permit into 2009.

Five core holes totaling 8,040 feet of core was drilled.

Targeted the Bulldog and Midwest veins.
The 5 year POO was approved by the USFS in June.

Twenty-four core holes were drilled totaling 39,103 of core from seven drill pads.

The Bulldog and Amethyst veins were targeted.
2011 Program

- Seventeen core holes were drilled totaling 32,985 feet of core targeting the Amethyst, Bulldog and the N50W Rat Creek trend from seven drill pads.
- Re-Opening of the Equity was permitted in July.
- Planning for re-opening the historic Bulldog Mine began in April and the POO was approved by the USFS on October 31.
- RGS acquired remaining 30% of the property that contains the main resource trends. A new exploration JV was set up with partners Emerald Mining & Leasing and Golden 8 Mining for the remainder of the property.
RGS – San Juan JV Claims
2012 Program

- Five core holes were completed totaling 14,041 feet of core from two drill pads.

- Drilling targeted the Amethyst Vein below the existing Equity development.

- 91,264 feet of surface core drilled on project to date.
2012 Surface Core Drilling

Oblique Section
View Looking North
2013 Surface Exploration

- 27,000 feet of core drilling is planned with two drills.

- 22,000 feet on the North Amethyst Vein below and south of the Equity.

- 5,000 feet on the Bulldog Vein system north of the existing Bulldog development.
District Surface Exploration

- North Amethyst-Equity Vein Intersection
- North Extension of the Bulldog A and N-Veins
Equity Underground Exploration
Equity Exploration Project
Underground Drilling

- Equity permitted and re-opened in July 2011. Rehabilitation began, surface infrastructure was constructed and UG drilling began with one drill on December 14, 2011, second drill added in April, 2012.

- UG drill program is testing the East-West Equity Vein and the North-South Amethyst Vein from existing development.

- Total core footage drilled December 14, 2011 through December 10, 2012 – 89,005 feet.
  - Equity Vein: 96 holes - 60,105 feet
  - Amethyst Vein: 43 holes - 28,900 feet
  - Resource estimate being calculated from drilling

- 2013 program has three drill holes planned totaling 9,000 feet of core.
  - Targeting the Amethyst Vein in the 10,000 to 9,000 feet elevation horizon below the existing development
Equity - Plan View

- Current Drill Stations
- Planned Drill Stations

E-65, Portal, E-23, E-25, E-20, E-39, E-100
Equity Vein – Cross Section

View Looking East
Equity - Plan View
Bulldog Pre-Development

December 2011

Surface Infrastructure

Portal Access

Portal Face-Up
Bulldog Pre-Development

- Bulldog Mine
  - Owned and operated by Homestake Mining Company
  - Operations from 1969 to 1985
  - Narrow vein underground mine
  - On-site mill that produced a silver-lead concentrate and silver dore
  - Approximately 320 tons per day production
  - Employment of approximately 150 people
  - Total production:
    - Silver (Ag): 25.4 million ounces (~30% of District Total)
    - Lead (Pb): 24,300 tons (~15% of District Total)
  - Closed due to low silver prices
Bulldog Pre-Development

- Planning for re-opening the historic Bulldog Mine began in April 2011 and the POO was approved by the USFS on October 31, 2011.
  - The access road, portal face-up and surface infrastructure was constructed.
- 2,800 foot, -1% decline designed to access the existing development.
  - 14’ x 14’ profile
  - Lattice girder and shotcrete ground support
- Decline construction began on September 14, 2012.
  - Estimated completion date of October 2013
Decline Alignment
Excavation Cycle
Lattice Girder and Shotcrete Application
Decline accesses 37M oz Ag resource.

- 51,750 tons Pb
- 40,800 tons Zn

EA currently be conducted by USFS.

- Water treatment infrastructure to dewater historic workings
- Underground Exploration and Development Program
Bulldog Development – Plan View

A Vein

N Vein
Bulldog – A-Vein Resource

A-Vein Longitudinal Section
Expand underground exploration activities into the submerged zones of the historic Bulldog Mine.

Purpose: To fully validate potential for future economic mining and milling at the Bulldog.

- Geologic Mapping and Drilling
- Geotechnical Assessment (testing ground conditions)
- Geochemical Sampling
- Test Mining
- Metallurgical Testing (Mill Studies)
Bulldog Sunrise
Questions