

"About Royalties"

AMEX: XPL | TSX: SLR

Solitario Exploration & Royalty



This presentation includes certain "Forward-Looking Statements" within the meaning of section 21E of the United States Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact, included herein, including without limitation, statements regarding potential mineralization and reserves, exploration results and future plans and objectives of Solitario, are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Development of Solitario's properties are subject to the success of exploration, completion and implementation of an economically viable mining plan, obtaining the necessary permits and approvals from various regulatory authorities, compliance with operating parameters established by such authorities and political risks such as higher tax and royalty rates, foreign ownership controls and our ability to finance in countries that may become politically unstable. Important factors that could cause actual results to differ materially from Solitario's expectations are disclosed under the heading "Risk Factors" and elsewhere in Solitario's documents filed from time to time with Canadian Securities Commissions, the United States Securities and Exchange Commission and other regulatory authorities. This presentation also contains information about adjacent properties on which we have no right to explore or mine. We advise U.S. investors that the SEC's mining guidelines strictly prohibit information of this type in documents filed with the SEC. U.S. investors are cautioned that mineral deposits on adjacent properties are not indicative of mineral deposits on our properties.

Exploration & Royalty

- Solitario is an exploration company with:
 - Operations in Mexico, Peru and Brazil
 - •A diversified commodity mix consisting of gold, silver, platinum-palladium, zinc, lead and copper
 - •\$24 million in cash/securities and no debt
- Solitario is a royalty company with five NPI-Royalty structured joint ventures:
 - •30% on the high-grade Bongara zinc-lead project
 - •30% on the emerging Pachuca Real silver-gold project
 - •35% on the advanced Pedra Branca platinum-palladium project
 - •30% on our vast Chambara regional zinc project
 - •25% on our Newmont-financed Peru Alliance projects



About Royalties

- There are two common royalties:
 - Net Smelter Return ("NSR") Royalty
 - Net Profits Interest ("NPI") Royalty
- Traditionally royalty companies have been built on NSR-Royalties
- But is that the best business model in a strong commodity market?



Net Smelter Return Royalties

Generate revenues by being paid a small percentage (typically 1-4%) of the gross value of the products

- The favorable attributes to a NSR-Royalty are:
 - Insulation from increases in operational costs
 - No construction, environmental or closure costs
 - Limited management-time administering asset
- The negative aspects to a NSR-Royalty are:
 - High acquisition costs
 - Difficulty in acquiring a royalty that significantly enhances earnings per share
 - No influence on production decisions



Net Profit Royalties

Generate revenues by participating in a significant percentage (typically 20-40%) of the net profits from an operation

- The favorable attributes to a NPI-Royalty are:
 - insulation from equity dilution for feasibility/construction costs
 - significantly higher revenues and earnings than a NSR-Royalty for the same producing asset
 - limited management time administering asset; reduced staffing requirements; continued focus on exploration
- Negative aspects to a NPI-Royalty are:
 - exposure to increases in operational costs
 - pay-back of construction costs, but only from production profits
 - exposure to the operational capabilities of the operator
 - must usually make discoveries to create the royalty



Advantages of Solitario's Joint Ventures Over Traditional NPI-Royalties

- Assuming and upon production, Solitario would receive 20-50% of its proportionate cash flow whereas NPI-Royalties usually do not receive any cash-flow distributions until construction capital has been paid-back
- Solitario would have influence over production decisions.



Revenue Streams

NSR Royalty vs. NPI Royalty vs. 100% Participation

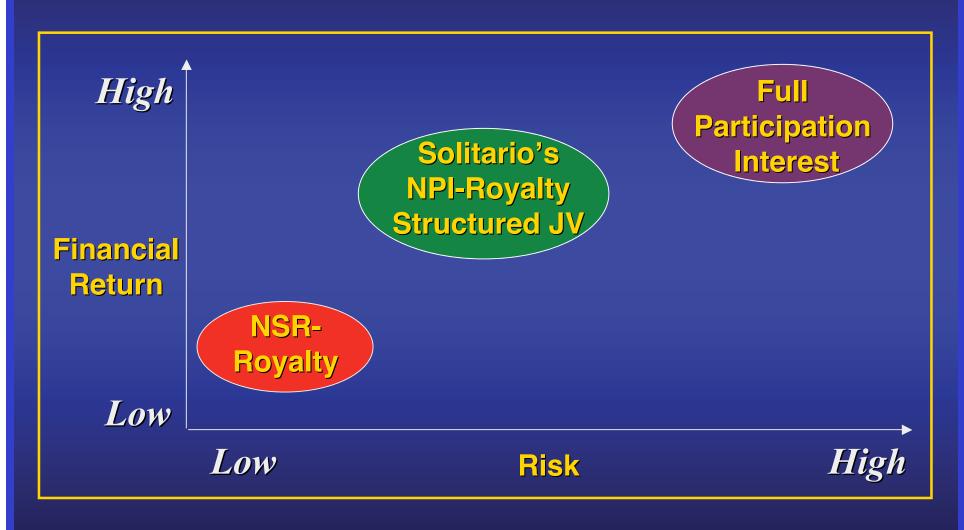
Assumes 200,000 ounces gold/year production for 10 years; cash operating costs of \$375 per ounce; gold at \$750 per ounce and a company with 30 million shares outstanding

	3.0% NSR	33.3% NPI	<u>100%</u>
Exploration/Acquisition Costs	27	3	15
Feasibility Costs	0	0	25
Construction Costs	0	0	200
Risk Capital Before Revenue	27	3	240
Operating Costs (LOM)	0	283*2	780
Finance Costs (Libor+4%)*1	9	94	83
Total Costs (LOM)	36	377	1,103
Total Revenues (LOM)	\$45	\$500	\$1,500
Pre-tax Total Profit (LOM)	\$ 9	\$123	\$ 397
Risk	low	low	high
Average Annual Earnings	\$0.03	\$0.41	\$1.32
Per Share Over 10 Years			

All numbers are millions of US\$'s except earnings per share; LOM=Life of Mine *1 Assumes 100% debt paid back over seven years *2 Includes sustaining capital, closure costs and 3% management fee



Financial Return vs. Risk





Solitario's Joint Ventures Are Essentially NPI Royalties

	Bongará	Pedra Branca	Pachuca Real	Chambara	Peru Alliance
Solitario Costs	\$0.5	\$5.0	\$0.2	\$0.1	\$2.2
Partner Est. Past Costs	20.0	7.0	1.5	6.0	0.0
Partner Future Costs					
for Initial Interest	14.0	4.8	10.5	6.3	3.0
Partner Initial					
Interest Earned	61%	51%	51%	49%	51%
Partner Feasibility					
and Construction	Yes	Yes*	Yes	Yes	Yes
Financing Required					
Future Solitario					
Cash Contributions	\$0.0	\$6.0	\$0.0	\$0.0	\$1.5
to Reach Production	,		,	,	,
Solitario's Interest					
Upon Cash Flow	30%	35%	30%	30%	25%
Partner Global	Votorantim			Votorantim	
Production	3rd largest	largest		3rd largest	
Ranking	Zn	PGM	Au	Zn	Au SOLITAR

All dollar figures are millions of US\$'s.. * After partner spends \$17 million, we contribute 49% funding for feasibility, but not construction.

An Innovative Business Model Combining:

The most compelling reason to own an exploration company

Superior market leverage associated with exploration discoveries

With the best attribute of a royalty company

Reduced financial risk

We execute this model by adhering to three guiding principals

- Focus on exploration and entrust mining operations to global mining companies
- Preserve our ability to make 100%-owned blockbuster discoveries
- Keep financial risk and shareholder dilution low through Net Profit Interest ("NPI") Royalty structured joint ventures

