

**August 7, 2013**

**SOLITARIO REPORTS HIGH-GRADE DRILLING RESULTS  
ON ITS BONGARÁ ZINC PROJECT, PERU**

**Denver, Colorado:** Solitario Exploration & Royalty Corp. (NYSE MKT: **XPL**; TSX: **SLR**) announced continued outstanding drilling results on its high-grade Bongará zinc project in Peru. Included in these results are core holes V-451, that intersected 30.7 meters grading 13.1% zinc, 5.0% lead and 32.6 gpt silver and hole V-453 that intersected 22.0 meters grading 13.7% zinc, 1.5% lead and 14.5 gpt silver.

All drill holes reported in this news release were drilled from the surface in the Karen Milagros mineralized area ("KM-Zone"). The drilling program was managed and entirely funded by Solitario's joint venture partner Votorantim Metais ("Votorantim"). Better intercepts in this round of surface drilling are presented below.

**Drilling Highlights: KM-Zone**

<b>Drill Hole Number</b>	<b>Intercept* (meters)</b>	<b>Zinc %</b>	<b>Lead %</b>	<b>Zn + Pb %</b>	<b>Silver gpt</b>
<b>V-378</b>	<b>7.7</b>	<b>14.62</b>	<b>2.11</b>	<b>16.73</b>	<b>15.69</b>
<b>V-386</b>	<b>16.2</b>	<b>10.70</b>	<b>1.71</b>	<b>12.41</b>	<b>11.13</b>
<b>V-394</b>	<b>3.5</b>	<b>21.72</b>	<b>7.08</b>	<b>28.79</b>	<b>48.69</b>
<b>V-397</b>	<b>2.4</b>	<b>33.00</b>	<b>21.33</b>	<b>54.33</b>	<b>133.96</b>
<b>V-401</b>	<b>12.7</b>	<b>7.38</b>	<b>1.78</b>	<b>9.16</b>	<b>13.29</b>
<b>V-412</b>	<b>5.5</b>	<b>17.17</b>	<b>0.94</b>	<b>18.11</b>	<b>8.49</b>
<b>V-424</b>	<b>17.2</b>	<b>5.83</b>	<b>0.26</b>	<b>6.09</b>	<b>2.36</b>
<b>V-427</b>	<b>15.1</b>	<b>12.06</b>	<b>2.75</b>	<b>14.81</b>	<b>17.59</b>
<b>V-436</b>	<b>17.0</b>	<b>11.74</b>	<b>1.08</b>	<b>12.81</b>	<b>18.48</b>
<b>and</b>	<b>6.0</b>	<b>15.51</b>	<b>2.52</b>	<b>18.04</b>	<b>29.74</b>
<b>V-451</b>	<b>30.7</b>	<b>13.06</b>	<b>4.97</b>	<b>18.03</b>	<b>32.64</b>
<b>V-452</b>	<b>19.4</b>	<b>7.66</b>	<b>0.73</b>	<b>8.38</b>	<b>7.33</b>
<b>V-453</b>	<b>22.0</b>	<b>13.70</b>	<b>1.54</b>	<b>15.24</b>	<b>14.47</b>

\* True thicknesses have not been estimated for each individual intercept, but are generally thought to be about 70-80% of the actual drilled thicknesses.

Chris Herald, President and CEO of Solitario commented, "It's not often that intercepts of plus 50% zinc + lead or 30 meters of 18% zinc + lead are intersected. But more important than these reported exceptional grades and thicknesses, is the fact that these results also demonstrated favorable continuity of mineralization in the KM-Zone."

Surface drilling began in the first quarter of 2013 and was completed in the second quarter. During this period 61 core holes were drilled totaling 7,545 meters. Four of the holes did not reach the target depth. Of the 58 drill holes that reached their target depth, 40 holes intersected mineralization grading in excess of 2.0% zinc + lead over at least two meters, or equivalent. This latest round of surface drilling was focused in the central portion of the KM-Zone that had previously been sparsely drilled. Other important mineralized intercepts are reported in a table appended to this news release. None of the results contained in this news release were previously reported.

In addition to the KM surface drilling program, Votorantim also conducted underground drilling within the San Jorge zone. Results from this program should be ready for release within the next two weeks. Both the KM and San Jorge mineralized zones are contained within the Florida Canyon mineralized system which remains open to expansion in all directions.

A drill hole map can be accessed at [http://www.solitarioxr.com/art/Bongara08\\_2013.pdf](http://www.solitarioxr.com/art/Bongara08_2013.pdf). Additional project information is found at <http://www.solitarioxr.com/bongara.html>.

Drill hole information contained within this release is reported under Votorantim's quality control program reviewed by Mr. Walt Hunt, COO for Solitario Exploration & Royalty Corp., who is a qualified person as defined by National Instrument 43-101. Samples are derived from 50% splits of HQ and NQ (2.5 and 1.9 inch) diameter core. Samples are then shipped via secured third-party land and air transportation companies and analyzed by ALS Chemex Inc., North Vancouver, Canada, an ISO9002 registered company.

### **Bongará Joint Venture Agreement with Votorantim Metais**

Votorantim Metais can earn up to a 70% interest in the project by committing to place the project into production based upon a positive feasibility study. After earning 70%, Votorantim Metais has further agreed to finance Solitario's 30% participating interest for construction. Solitario will repay the loan facility through 50% of its net cash flow distributions.

### **About Votorantim Metais**

Votorantim Metais belongs to a privately held Brazilian business conglomerate that is a leader in every market segment in which it operates, including cement, pulp and paper, metals, chemicals, orange juice, and finance. The metals business division accounted for 29% of Votorantim's consolidated revenues from production of zinc, nickel, steel and aluminum. Votorantim Metais is the world's fifth largest primary zinc producer with three operating zinc smelters and two operating zinc mines. It owns the Cajamarquilla zinc smelter and is the majority shareholder of Milpo, both located in Peru. Votorantim Metais also has operations in the United States and China.

### **About Solitario**

Solitario is a gold, silver, platinum-palladium, and base metal exploration and royalty company actively exploring in the United States, Brazil, Mexico, and Peru. Solitario is currently focused

on permitting its 80%-owned Mt. Hamilton Gold project in eastern Nevada. Besides Votorantim, Solitario has significant business relationships with Hochschild Mining plc (LSE: HOCH.L / HOC LN) ("Hochschild") and Anglo Platinum. Hochschild is funding a significant exploration program on its Pachuca Norte silver-gold project in Mexico and Anglo Platinum is funding the continued exploration of the Pedra Branca PGM project in Brazil. Solitario is traded on the NYSE MKT ("XPL") and on the Toronto Stock Exchange ("SLR"). Additional information about Solitario is available online at [www.solitarioxr.com](http://www.solitarioxr.com)

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*This press release 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, future plans and objectives of Solitario's joint venture partner Votorantim Metais 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.*

**2013 Surface Drilling Results: Karen-Milagros Zone**  
(Intervals With Grade (Zn + Pb) x Thickness Greater Than 4.0)

<b>DRILL HOLE</b>	<b>From (m)</b>	<b>To (m)</b>	<b>Interval (m)</b>	<b>Zinc (%)</b>	<b>Lead (%)</b>	<b>Zn+Pb (%)</b>	<b>Silver Grams/t</b>
<b>V_377</b>	111.4	116.0	4.6	8.49	1.50	9.99	9.39
<b>V_378</b>	94.7	101.4	6.7	13.08	1.32	14.40	8.80
<b>V_379</b>	125.8	133.5	7.7	14.62	2.11	16.73	15.69
	152.7	153.4	0.7	8.22	0.20	8.42	1.90
	159.3	160.1	0.8	5.35	0.00	5.35	1.20
<b>V_380</b>	125.7	126.5	0.8	8.46	0.10	8.56	1.70
	135.5	137.8	2.3	3.83	0.01	3.83	0.73
<b>V_381</b>	80.2	89.9	9.7	7.93	1.28	9.22	7.15
	110.7	112.7	2.0	3.23	0.52	3.75	3.74
	120.4	121.1	0.7	12.70	4.70	17.40	25.10
<b>V_383 incl</b>	104.3	108.2	3.9	12.22	0.09	12.31	4.55
	105	106.7	1.7	26.80	0.20	27.00	3.60
	124.6	130.2	5.6	5.75	0.88	6.63	6.86
<b>V_385</b>	98.1	103.4	5.3	9.11	6.19	15.30	36.07
<b>V_386</b>	74.5	90.7	16.2	10.70	1.71	12.41	11.13
	100.8	101.5	0.7	10.40	1.40	11.80	10.70
	110.8	111.8	1.0	16.80	14.40	31.20	89.20
<b>V_388</b>	107.5	108.5	1.0	6.19	0.33	6.52	5.50
<b>V_389</b>	109.2	111.9	2.7	9.95	0.10	10.04	1.30
	128.1	131.1	3.0	4.21	0.20	4.41	2.10
<b>V_394</b>	86.2	87.8	1.6	5.57	0.16	5.72	0.95
	100	103.5	3.5	21.72	7.08	28.79	48.69
<b>V_397</b>	96.3	98.7	2.4	33.00	21.33	54.33	133.96
<b>V_398</b>	89.6	91.6	2.0	6.50	0.34	6.84	4.05
<b>V_400</b>	109.6	111.6	2.0	21.95	1.54	23.49	11.40
<b>V_401</b>	122.7	126	3.3	8.88	1.32	10.21	7.81
	155.0	167.7	12.7	7.38	1.78	9.16	13.29
<b>V_412</b>	102.4	107.9	5.5	17.17	0.94	18.11	8.49
	127	128.3	1.3	30.60	12.40	43.00	80.30
	133.4	134.4	1.0	29.40	4.30	33.70	36.30
<b>V_413</b>	102.1	104.1	2.0	3.33	0.34	3.66	2.65
	122.6	126	3.4	14.52	2.77	17.29	20.18
<b>V_414</b>	72.3	73.4	1.1	3.77	0.11	3.88	0.80
<b>V_418</b>	84.4	87.2	2.8	4.71	0.02	4.73	0.96
<b>V_421</b>	83.4	86.5	3.1	6.23	1.17	7.41	9.39
<b>V_424</b>	87.3	104.5	17.2	5.83	0.26	6.09	2.36
	122.0	123.0	1	7.10	0.70	7.80	5.30
<b>V_426</b>	89.2	91.2	2	12.82	0.31	13.14	5.46
	108.3	110.3	2.0	30.90	13.60	44.50	95.50
	114.9	118.8	3.9	5.86	0.06	5.92	12.36

<b>V_427</b>	96.6	103.5	6.9	5.50	0.15	5.65	1.95
	120.5	135.6	15.1	12.06	2.75	14.81	17.59
<b>V_428</b>	77.0	80.1	3.1	4.16	0.69	4.85	4.37
<b>V_436</b>	39.6	40.5	0.9	42.70	0.20	42.90	0.80
	52.2	69.2	17.0	11.74	1.08	12.81	18.48
	75.0	80.0	5.0	5.28	0.05	5.33	1.01
	87.0	93.0	6.0	15.51	2.52	18.04	29.74
	122.9	129.4	6.5	9.57	2.58	12.15	15.23
<b>V_440</b>	30.3	34.9	4.6	16.19	1.69	17.87	9.36
	51.6	53.2	1.6	20.54	0.57	21.11	7.15
<b>V_441</b>	26.4	31.4	5.0	17.68	2.21	19.89	15.02
<b>V_443</b>	61.7	62.4	0.7	9.37	0.20	9.57	3.80
	67.7	68.7	1.0	4.31	2.28	6.59	16.40
<b>V_444</b>	31.0	33.0	2.0	7.55	0.04	7.59	1.80
	47.0	50.8	3.8	17.25	1.78	19.02	14.78
<b>V_445</b>	44.8	46.9	2.1	21.19	5.44	26.63	38.10
<b>V_446</b>	34.6	39.5	4.9	16.21	1.43	17.64	9.42
<b>V_447</b>	29.0	30.0	1.0	9.55	0.28	9.83	3.50
	38.0	47.0	9.0	4.50	0.63	5.13	6.27
<b>V_448</b>	29.0	31.0	2.0	17.63	0.60	18.23	5.50
	47.0	48.1	1.1	9.17	2.14	11.31	16.20
<b>V_449</b>	35.0	37.4	2.4	15.49	1.27	16.75	8.22
	44.9	46.2	1.3	3.15	0.19	3.34	1.60
	63.3	64.1	0.8	3.73	1.97	5.70	15.30
<b>V_450</b>	40.5	45.2	4.7	12.06	2.95	15.01	20.11
	76.3	77.4	1.1	4.55	0.00	4.55	0.25
<b>V_451</b>	46.5	77.2	30.7	13.06	4.97	18.03	32.64
	89.2	90.5	1.3	20.70	7.32	28.02	59.40
<b>V_452</b>	29.3	48.7	19.4	7.66	0.73	8.38	7.33
<b>V_453</b>	36.4	58.4	22.0	13.70	1.54	15.24	14.47
	74.4	79.4	5.0	12.33	2.01	14.34	22.12
<b>V_454</b>	53.5	54.8	1.3	3.83	0.04	3.87	0.60
	77.3	79.0	1.7	21.38	0.92	22.31	14.95
<b>V_455</b>	50.5	51.7	1.2	8.13	2.04	10.17	15.10