

August 20, 2013

**SOLITARIO INTERSECTS 10.7 METERS GRADING 50.84% ZINC + LEAD
ON ITS BONGARÁ ZINC PROJECT, PERU**

Denver, Colorado: Solitario Exploration & Royalty Corp. (NYSE MKT: **XPL**; TSX: **SLR**) reported further outstanding drilling results on its high-grade Bongará zinc project in Peru. Included in these results are core holes V-465, that intersected 10.7 meters grading 45.60% zinc, 5.25% lead and 106.71 gpt silver and hole V-433 that intersected 5.0 meters grading 38.22% zinc, 3.89% lead and 60.76 gpt silver.

All of these newly reported drill hole intercepts were underground core holes drilled from the San Jorge tunnel. The drilling program was managed and entirely funded by Solitario's joint venture partner Votorantim Metais ("Votorantim"). Better intercepts in this round of underground drilling are presented below. Other important mineralized intercepts are reported in a table appended to this news release.

Drilling Highlights: San Jorge - Zone

Drill Hole Number	Intercept* (meters)	Zinc %	Lead %	Zn + Pb %	Silver gpt
V-404	6.8	19.42	0.39	19.81	22.04
V-405	7.0	15.34	1.44	16.78	24.85
	10.2	7.15	0.18	7.33	13.35
V-407	3.6	26.31	1.59	27.90	74.87
V-410	9.9	22.94	3.09	26.04	20.61
V-431	4.3	17.24	0.25	17.50	6.21
V-432	21.1	8.31	1.71	10.02	12.11
V-433	5.0	38.22	3.89	42.12	60.76
V-456	15.7	6.50	0.46	6.96	7.21
V-458	25.5	7.22	0.55	7.77	6.21
V-465	10.7	45.60	5.25	50.84	106.71

* True thickness has not been estimated for each individual intercept.

Chris Herald, President and CEO of Solitario commented, "The technical progress and increasing economic value of our Bongará high-grade zinc project has been reinforced yet again by these excellent drilling results. It is important to highlight our Bongará project as it complements the successes Solitario has had on its development-stage Mt. Hamilton gold project in Nevada during the past couple of years. Our partner, Votorantim Metais, is required to fund 100% of Solitario's share of the Bongará project through the start of production,

essentially making it a dilution-free project to Solitario and its shareholders. Furthermore, most zinc commodity experts are forecasting a strong zinc market 12-24 months out based on significant zinc mine closures and a modest increase in zinc demand. Bongará is currently one of only a handful of new zinc projects that is moving into feasibility and expected development over the next several years.

This round of underground drilling represents some of the highest grade intercepts in the history of the project, and these results are consistent with an almost unbroken string of excellent drilling results since project inception. Drilling was focused on establishing continuity of mineralization on the northeast portion of the currently defined San Jorge Zone. Remarkably, 23 of the 24 holes intersected mineralization grading in excess of 2.0% zinc + lead over at least two meters, or equivalent. Combining these San Jorge underground drilling results with the new recently announced KM-Zone surface drilling, confirms our belief that Bongará represents one of the premier developing zinc projects in the world.”

Underground drilling began in the first quarter of 2013 and was completed in the second quarter. During this period 24 core holes were drilled from the San Jorge tunnel. Votorantim is incorporating these results into a new resource model as part of their effort to complete a prefeasibility study on Bongará by mid-2014.

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/PE_BG_PP_GEO_san-jorge_drillcampaign2013.pdf. Additional project information is found at <http://www.solitarioxr.com/bongara.html>.

2013 Karen-Milagros Surface Results

On August 7, 2013, Solitario released results of the 2013 KM-Zone surface drilling results. Included in these results were 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. A recently constructed cross section depicting the spatial relationship of mineralization drill tested in the 2013 program is provided at http://www.solitarioxr.com/art/KarenMilagrosdrillsection_simplified_Aug2013.pdf. The cross section illustrates excellent continuity over a strike length of at least 800 meters in the KM-Zone,

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 approximately one third 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: HOCM.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

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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 Underground Drilling Results: San Jorge Zone
(Intervals With Grade (Zn + Pb) x Thickness Greater Than 4.0)

DRILL HOLE	From (m)	To (m)	Interval (m)	Zinc (%)	Lead (%)	Zn+Pb (%)	Silver Grams/t
V-403	27.9	28.9	1.0	16.90	0.20	17.10	41.50
	53.4	54.2	0.8	27.10	0.00	27.10	20.10
	91.7	92.7	1.0	13.90	0.00	13.90	6.20
V-404	9.5	16.3	6.8	19.42	0.39	19.81	22.04
	43.7	46.4	2.7	18.59	0.06	18.64	34.77
V-405	5.4	12.4	7.0	15.34	1.44	16.78	24.85
	17.4	27.6	10.2	7.15	0.18	7.33	13.35
	37.9	39.6	1.7	7.00	0.00	7.00	6.61
V-406	2.9	7.7	4.8	3.83	0.35	4.19	9.80
	27.5	29.2	1.7	4.14	0.17	4.31	8.49
V-407	1.3	6.8	5.5	4.99	1.42	6.41	13.44
	83.2	86.8	3.6	26.31	1.59	27.90	74.87
	102.3	102.9	0.6	10.50	9.41	19.90	54.40
V-408	2	6.6	4.6	6.74	0.34	7.09	3.62
	27.8	30	2.2	7.66	0.04	7.70	2.38
	54.2	55.9	1.7	20.66	1.30	21.96	40.51
	89.3	90.6	1.3	3.70	0.00	3.70	1.90
V-409	3.8	7.3	3.5	4.91	1.26	6.17	9.38
V-410	131.6	141.5	9.9	22.94	3.09	26.04	20.61
	155.8	159.6	3.8	3.69	0.30	3.99	2.66
V-411	3.2	7.1	3.9	3.27	0.75	4.02	5.95
	9.5	11.1	1.6	3.67	0.69	4.36	18.41
	13.7	15	1.3	3.85	0.30	4.15	5.20
	26.7	28	1.3	9.69	0.03	9.72	14.70
V-431	9.7	14.0	4.3	17.24	0.25	17.50	6.21
	47.3	49.0	1.7	27.59	7.09	34.68	94.18
	59.7	60.4	0.7	29.30	7.00	36.30	84.80
	70.7	78.0	7.3	7.75	0.23	7.98	8.17
V-432	14.1	15.8	1.7	19.08	0.31	20.11	9.49
	18.1	21	2.9	10.73	0.81	11.54	5.88
	44.5	65.6	21.1	8.31	1.71	10.02	12.11
	100.0	101.0	1.0	12.60	0.14	12.70	1.90
V-433	99.1	104.1	5.0	38.22	3.89	42.12	60.76
V-434	53.7	56.7	3.0	6.71	1.60	7.30	6.57
	64.4	71.0	6.6	4.70	0.11	4.81	3.31
	121.5	122.3	0.8	19.85	0.00	19.85	2.70
V-435	46.8	49.5	2.7	20.21	0.32	20.53	3.44
	60.8	61.8	1.0	8.00	0.00	8.00	2.30
	69.9	72.9	3.0	11.55	1.18	12.73	12.47
	81.6	84.5	2.9	10.95	2.49	13.44	14.09

V-437	112.8	118.0	5.2	6.04	0.97	7.01	13.55
V-438	133.2	139.6	6.4	10.12	0.01	10.13	11.13
V-456	47.9	63.6	15.7	6.50	0.46	6.96	7.21
V-457	62.2	64.7	2.5	26.21	0.84	27.05	11.46
	70.0	72.3	2.3	8.62	0.09	8.71	3.53
	105.1	106.4	1.3	4.08	0.01	4.09	2.40
V-458	85.9	87.9	2.2	12.5	0.51	13.01	6.93
	90.9	116.4	25.5	7.22	0.55	7.77	6.21
V-459	119.5	120.2	0.7	11.55	0.00	11.55	32.50
	154.5	156.8	2.3	6.25	0.50	6.75	6.61
V-465	110.1	120.8	10.7	45.60	5.25	50.84	106.71
V-466	85.0	85.7	0.7	16.35	0.32	16.67	12.90
	119.9	121.9	2.0	12.05	0.12	12.17	2.75
V-478	69.5	70.5	1.0	5.92	9.92	15.84	46.40