

August 23, 2012

**SOLITARIO REPORTS BEST HOLE EVER DRILLED ON ITS
BONGARÁ HIGH-GRADE 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 is the best hole ever drilled on the project, underground core hole V-297, that intersected 56.6 meters grading 22.69% zinc, 1.15% lead and 31.23 gpt silver. In addition, drill hole V-298 intersected 7.4 meters grading 40.05% zinc, 3.68% lead and 58.99 gpt silver, representing the highest grade ever intersected at Bongará.

All drill holes reported in this news release were drilled from the San Jorge underground exploration tunnel completed in late-2011, a part of the overall 2012 Florida Canyon drilling program managed and entirely funded by Solitario's joint venture partner Votorantim Metais ("Votorantim"). The 12 best intercepts in this round of underground drilling are presented below.

Drill Hole Number	Intercept* (meters)	Zinc %	Lead %	Zn + Pb %	Silver gpt
V-278	22.1	8.72	2.28	11.00	17.73
V-292	22.2	12.45	0.97	13.42	17.23
V-294	13.8	7.17	2.66	9.83	27.78
V-297	56.6	22.69	1.15	23.84	31.23
V-298	7.4	40.05	3.68	43.73	58.99
And	6.5	14.75	2.5	17.25	20.90
V-299	7.7	19.03	2.80	21.83	30.26
V-300	14.5	26.57	2.15	28.72	29.46
And	8.7	12.87	1.41	14.28	11.14
V-301	15.4	22.81	0.40	23.21	35.00
V-302	16.9	19.16	0.98	20.14	31.12
V-354	11.2	11.62	0.09	11.71	12.73
And	11.8	11.87	0.48	12.35	10.10

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

The San Jorge underground drilling program began in the fourth quarter of 2011 and was completed in the second quarter of 2012. During this period 70 core holes totaling 12,342 meters were completed from eight different underground drill stations. Results from 39 of the final 48 core holes are presented in the table at the end of this release. None of the results contained in this news release were previously reported. The San Jorge mineralized area, and the Florida Canyon deposit in general, remains open to expansion in all directions.

One of the most important advancements of this drilling program is the discovery that zinc grades at the San Jorge area increase to the south. In fact, the southernmost area of the underground drilling program (Drill Station #1) contains some of the highest zinc grades ever encountered on the property. Based on these results, Votorantim has proposed extending the San Jorge exploration tunnel a further 300 meters to the south where high-grade mineralization remains wide-open.

Votorantim continues to aggressively advance the project on a number of fronts, including prefeasibility-level resource definition drilling and the evaluation of the hydrologic and geotechnical characteristics of the Florida Canyon mineralized area. Recently another round of metallurgical testing at Pilot Plant scale was completed confirming excellent zinc recoveries in excess of 90%.

Chris Herald, President and CEO of Solitario commented, "These results are exceptional and amply demonstrate that the Bongará project is emerging as one of the best undeveloped zinc projects in the world. A significant surface drilling program in the Karen-Milagros area north of San Jorge was also recently completed and final drilling results are expected within the next several weeks. Votorantim is now well advanced in its 2013 planning and we hope to announce the most aggressive exploration and development program in the history of the project within the next couple of months."

The Bongará project hosts the high-grade Florida Canyon zinc deposit where high-grade zinc mineralization has been intersected over a four square kilometer area. Underground drill stations at San Jorge are situated about 40 meters apart and are designed to drill test in detail approximately 350 meters of strike length of the San Jorge mineralization, situated in the southwestern part of the Florida Canyon deposit. Anywhere from 4 to 15 core holes are fan-drilled from each drill station. A drill hole map can be accessed at <http://www.solitarioxr.com/art/Bongara082312.jpg>. Additional project information is found at <http://www.solitarioxr.com/bongara.html>.

Drill hole information contained within this release is reported under a 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 37% of revenues from production of zinc, nickel, steel (Siderurgia) 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 recently completed a Feasibility Study on its 80%-owned Mt. Hamilton Gold project in eastern Nevada. Solitario is a gold, silver, platinum-palladium, and base metal exploration and royalty company actively exploring in the United States, Brazil, Mexico, and Peru. Besides Votorantim, Solitario has a significant business relationship with Anglo Platinum, with Anglo 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.

2012 Underground Drilling Results
Intervals With Grade (Zn + Pb) x Thickness Greater Than 4.0
(True thickness has not been estimated for each individual intercept)

Drill Hole - (Drill Station)	From - To (m)	Interval (m)	Zinc %	Lead %	Zn + Pb %	Silver Grams/t
V-292 - (DS-1)	103.00 -125.2	22.2	12.45	0.97	13.42	17.23
V-293 - (DS-1)	212.4-219.7	7.3	7.55	0.33	7.88	5.78
	234.7-237.7	2.7	4.26	0.13	4.39	2.99
	253.1-253.8	0.7	10.60	0.01	10.61	3.70
V-294 - (DS-1)	96.6-110.4	13.8	7.17	2.66	9.83	27.78
	114.4-115.4	1.0	8.99	0.27	9.26	15.50
	125.6-127.1	1.5	8.24	0.02	8.26	22.45
V-295 - (DS - 1)	59.6-61.5	1.9	9.66	0.17	9.83	4.55
V-296 - (DS - 1)	145.5-146.0	0.5	12.70	0.07	12.77	20.05
	384.0-385.3	1.3	9.14	0.01	9.15	1.59
V-297 - (DS - 1)	42.0-43.3	1.3	7.18	0.79	7.97	18.20
	91.5-92.3	0.8	13.10	0.07	13.17	0.25
	198.8-202.2	3.4	9.08	0.01	9.09	7.85
	210.8-267.4	56.6	22.69	1.15	23.84	31.23
V-298 - (DS - 1)	36.4-38.4	2.0	2.67	0.28	2.95	3.80
	115.5-122.9	7.4	40.05	3.68	43.73	58.99
	129.2-135.7	6.5	14.75	2.50	17.25	20.90
V-299 - (DS - 1)	59.6-60.3	0.7	5.43	0.73	6.16	14.30
	82.1-89.8	7.7	19.03	2.80	21.83	30.26
	94.3-96.3	2.0	9.97	0.18	10.15	9.94
	118.3-120.7	2.4	9.48	1.17	10.65	16.08
	122.5-127.9	5.4	3.75	0.01	3.76	2.16
	129.1-130.3	1.2	5.03	0.02	5.05	2.00
V-300 - (DS - 1)	64.8-79.3	14.5	26.57	2.15	28.72	29.46
	87.0-88.8	1.8	3.69	0.53	4.22	6.03
	112.2-112.8	0.6	30.83	0.43	31.26	7.20
	117.7-119.4	1.7	4.35	0.68	5.03	7.51
	188.3-197.0	8.7	12.87	1.41	14.28	11.14
	200.5-202.7	2.2	16.28	1.07	17.35	14.99
V-301 - (DS - 1)	51.3-51.9	0.6	12.00	0.02	12.02	1.80
	125.0-140.4	15.4	22.81	0.40	23.21	35.00
V-302 - (DS - 1)	46.0-46.7	0.7	8.21	0.01	8.22	1.10
	49.0-50.9	1.9	5.60	0.01	5.61	0.54
	63.2-64.5	1.3	6.15	0.06	6.21	2.81
	91.9-108.8	16.9	19.16	0.98	20.14	31.12
V-303 - (DS - 1)	65.4-67.4	2.0	2.16	0.00	2.16	0.94
	78.9-79.9	1.0	8.48	0.12	8.60	1.40
	84.5-85.3	0.8	7.38	0.98	8.36	19.10

	153.8-155.5	1.7	8.21	0.01	8.22	1.91
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V-354 - (DS - 1)	32.5-38.8	6.3	2.84	0.12	2.96	3.93
	177.4-180.4	3.0	19.65	0.21	19.86	22.48
	195.4-206.6	11.2	11.62	0.09	11.71	12.73
	209.1-211.1	2.0	11.02	0.01	11.03	12.24
	213.8-225.6	11.8	11.87	0.48	12.35	10.10
	260.8-263.2	2.4	11.43	0.04	11.47	23.08
	280.1-281.4	1.3	19.25	0.00	19.25	17.60
	309.9-310.6	0.7	13.20	0.02	13.22	2.80
V-355 - (DS - 1)	111.9-113.9	2.0	2.35	0.08	2.43	0.73
	116.9-120.0	3.1	4.82	1.43	6.25	7.95
	167.0-167.3	0.3	18.70	0.28	18.98	7.20
	194.2-198.8	4.6	10.42	2.11	12.53	43.68
	258.5-260.2	1.7	5.44	2.53	7.97	11.16
V-356 - (DS - 1)	141.9-143.9	2.0	2.62	0.01	2.63	3.65
	172.1-172.8	0.7	10.80	0.00	10.80	2.40
	182.2-182.5	0.3	17.70	0.01	17.71	10.30
	211.9-220.2	8.3	10.21	0.00	10.21	0.25
	229.2-241.9	12.7	5.62	0.01	5.76	3.03
V-282 - (DS - 2)	96.3-97.3	1.0	1.81	7.29	9.10	49.76
	110.0-112.0	2.0	5.94	0.02	5.96	9.90
V-283 - (DS - 2)	79.6-82.4	2.8	4.96	0.66	5.62	16.60
	97.8-106.6	8.8	5.89	0.03	5.92	25.07
	114.5-118.6	4.1	12.42	0.04	12.46	32.34
	127.3-130.2	2.9	3.57	1.02	4.59	8.82
V-284 - (DS - 2)	89.5-97.3	7.8	6.27	0.24	6.51	4.97
V-285 - (DS - 2)	113.3-114.7	1.4	20.30	7.46	27.76	54.90
V-267 - (DS - 3)	53.6-59.9	6.3	15.92	0.92	16.84	12.89
	98.8-100.1	1.3	3.92	0.83	4.75	10.68
V-272 - (DS - 6)	26.5-33.4	6.9	6.85	1.55	8.40	15.39
	36.7-42.3	5.6	12.41	2.77	15.18	37.95
	57.9-65.1	7.2	8.30	0.22	8.52	18.44
	77.4-81.4	4.0	15.26	0.01	15.27	8.24
	84.3-89.0	4.7	7.67	0.00	7.67	3.24
V-273 - (DS - 6)	29.1-37.1	8.0	11.21	0.27	11.48	20.86
	47.5-50.1	2.6	4.29	0.01	4.30	6.55
V-274 - (DS - 6)	21.5-22.3	0.8	27.30	1.75	29.05	37.10
V-275 - (DS - 6)	22.7-28.1	5.4	4.79	0.02	4.81	3.98
V-276 - (DS - 6)	21.5-25.6	4.1	13.27	0.54	13.81	24.74
	65.0-67.0	2.0	5.30	0.08	5.38	18.45
	73.6-79.9	6.3	11.42	0.71	12.13	27.49
	83.9-85.2	1.3	3.46	0.59	4.05	3.32
V-277 - (DS - 6)	51.3-53.0	1.7	3.83	0.04	3.87	2.74
	69.9-88.5	18.6	3.46	0.59	4.05	3.32

V-278 - (DS - 6)	38.4-40.3	1.9	3.60	0.00	3.60	0.87
	60.7-62.7	2.0	4.21	0.08	4.29	1.58
	80.8-84.8	4.0	7.87	1.59	9.46	4.65
	89.0-111.1	22.1	8.72	2.28	11.00	17.73
V-307 - (DS - 7)	9.8-11.8	2.0	5.18	0.07	5.25	1.60
	18.5-24.5	6.0	1.79	2.09	3.88	16.16
	27.9-36.1	8.2	5.74	0.15	5.89	4.10
	56.6-57.8	1.2	4.64	0.01	4.65	5.40
	61.2-71.9	10.7	6.05	0.02	6.07	5.31
74.8-78.5	3.7	2.72	0.00	2.72	1.79	
V-309 - (DS - 7)	32.2-41.3	9.1	8.86	0.25	9.11	14.51
V-310 - (DS - 7)	10.9-20.9	10.0	6.49	0.25	6.74	2.42
V-311 - (DS - 7)	0.0-3.0	3.0	2.89	0.60	3.49	3.11
	8.8-18.2	9.4	6.51	0.14	6.65	3.91
	45.4-47.3	1.9	2.24	0.00	2.24	2.03
	49.2-51.0	1.8	9.87	0.01	9.88	5.73
V-312 - (DS - 7)	0.0-10.3	10.3	6.03	1.37	7.40	7.63
	24.8-25.5	0.7	11.00	0.07	11.07	29.60
	43.4-48.0	4.6	6.57	1.55	8.12	14.75
	58.1-66.4	8.3	12.63	0.17	12.80	19.00
V-313 - (DS - 7)	2.1-9.4	7.3	10.32	0.83	11.15	12.72
	16.8-17.1	0.3	21.90	6.40	28.30	107.00
	83.5-85.8	2.3	2.33	0.16	2.49	3.68
	101.2-103.6	2.4	21.03	4.58	25.61	56.68
V-314 - (DS - 7)	16.5-19.1	2.6	5.60	0.56	6.16	9.67
	91.1-93.1	2.0	3.05	0.03	3.08	3.85
	97.2-98.6	1.4	5.86	0.00	5.86	3.72
	198.2-199.1	0.9	5.19	0.00	5.19	0.70
V-316 - (DS - 7)	7.9-9.9	2.0	10.58	0.02	10.60	1.45
	31.5-33.5	2.0	2.23	0.28	2.51	7.40
V-341 - (DS - 8)	79.8-89.0	9.2	1.85	0.00	1.85	1.60
V-344 - (DS - 8)	79.8-80.2	0.4	35.21	0.00	35.21	110.00
V-346 - (DS - 8)	41.9-42.2	0.3	14.40	26.30	40.70	79.50
	68.0-70.0	2.0	2.82	0.02	2.84	3.97
	108.6-110.4	1.8	6.06	0.00	6.06	3.56
	112.3-118.8	6.5	5.14	0.01	5.15	2.66
	174.1-176.1	2.0	4.14	0.13	4.27	9.96
V-347 - (DS - 8)	8.6-9.8	1.2	6.40	0.22	6.62	5.80
	151.9-152.4	0.5	36.04	0.01	36.05	47.20