

ITEM 7.01 Regulation FD Disclosure

2

On August 8, 2017 Solitario Zinc Corp. (“Solitario”) filed the attached technical report entitled “ NI 43-101 Technical Report Preliminary Economic Assessment Florida Canyon Zinc Project Amazonas Department, Peru” dated August 3, 2017 (the “Report”) with securities regulatory authorities in Canada. It is hereby furnished to, not filed with, the Securities Exchange Commission (the “SEC”) on Form 8-K to satisfy Solitario’s “public disclosure” obligations under Regulation FD of the Securities Exchange Act of 1934.

The Report was prepared in accordance with National Instrument 43-101 of the Canadian Securities Administrators (“NI 43-101”) by SRK Consulting (US), Inc. (“SRK”). The following individuals are listed as a Qualified Person as defined by NI 43-101 for the preparation of the Report:

J.B. Pennington, MSc, CPG, AIPG / SRK Principal Mining Geologist

Daniel H. Sepulveda, SRK Associate Consultant (Metallurgist)

Joanna Poeck, BEng Mining, SME-RM, MMSAQP / SRK Senior Consultant (Mining Engineer)

Jeff Osborn, BEng Mining, MMSAQP / SRK Principal Consultant (Mining Engineer)

James Gilbertson, MCSM, CGeol, FGS / SRK Principal Exploration Geologist

John Tinucci, PhD, PE / SRK Principal Consultant (Geotechnical Engineer)

Walter Hunt, CPG / Solitario Zinc Corp, COO

As a company listed on the Toronto Stock Exchange and a reporting issuer under Canadian securities laws, Solitario is required to prepare its technical reports in accordance with the policies of NI 43-101, the Canadian securities laws and the rules of the Toronto Stock Exchange.

All mineral resources in the Report have been estimated in accordance with the definition standards on mineral resources and mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in NI 43-101. U.S. reporting requirements for disclosure of mineral properties are governed by the SEC Industry Guide 7 (“Guide 7”). NI 43-101 and Guide 7 standards are substantially different. The terms “mineral reserve”, “proven mineral reserve” and “probable mineral reserve” are Canadian mining terms as defined in accordance with NI 43-101. These definitions differ from the definitions in Guide 7. Under Guide 7 standards, a “final” or “bankable” feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority.

The Report uses the terms “mineral resource,” “measured mineral resource,” “indicated mineral resource” and “inferred mineral resource”. These terms are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves. “Inferred mineral resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. Disclosure of

“contained pounds” in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute “reserves” by SEC standards as in place tonnage and grade without reference to unit measures.

On August 2, 2017, the Solitario issued the attached press release relating to the Report.

ITEM
9.01 FINANCIAL STATEMENTS AND EXHIBITS

Exhibits Exhibit Description

The following Exhibits relating to Item 7.01 are intended to be furnished to, not filed with, the SEC pursuant to Regulation FD.

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| 99.1 | NI 43-101 Technical Report Preliminary Economic Assessment Florida Canyon Zinc Project Amazonas Department, Peru |
| 99.2 | Press Release of Solitario Zinc Corp. dated August 2, 2017 |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

August 8, 2017

Solitario Zinc Corp.

By: /s/ James R. Maronick
James R. Maronick, Chief Financial Officer

NI 43-101 Technical Report Preliminary Economic Assessment Florida Canyon Zinc Project Amazonas Department,
Peru