UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2023

OR

□ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission File Number. 001-39278

SOLITARIO RESOURCES CORP.

(Exact name of registrant as specified in its charter)

Colorado	84-1285791					
(State or other jurisdiction of	(I.R.S. Employer					
incorporation or organization)	Identification No.)					
4251 Kipling St. Suite 390, Wheat Ridge, CO	80033					
(Address of principal executive offices)	(Zip Code)					
(Registrant's telephone number,						
(Former name, former address, and former fisca	l year, if changed since last report)					
Securities registered pursuant to S	Section 12(b) of the Act:					

		Name of Each Exchange
Title of Each Class	Trading Symbol	on Which Registered
Common Stock, \$0.01 par value	XPL	NYSE American
Indicate by checkmark whether the registrant (1) has file	ed all reports required to be filed by Section 13 or 15(d) of	of the Securities Evolution Act of 1934 during the

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Indicate by checkmark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes 🖂

Yes 🖂

NO \square

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

NO \square

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filerAccelerated filerNon-accelerated filerSmaller reporting companyEmerging Growth Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

YES \Box

NO

There were 79,086,358 shares of \$0.01 par value common stock outstanding as of November 7, 2023.

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Item 1. Financial Statements

PART I - FINANCIAL INFORMATION

SOLITARIO RESOURCES CORP. CONDENSED CONSOLIDATED BALANCE SHEETS (unaudited)

(in thousands, except share and per share amounts)	September 30, 2023		Dec	cember 31, 2022
Assets				
Current assets:				
Cash and cash equivalents	\$	168	\$	316
Short-term investments		3,964		3,951
Investments in marketable equity securities, at fair value		910		949
Prepaid expenses and other		237		38
Total current assets		5,279		5,254
Mineral properties		16,646		16,646
Other assets		186		134
Total assets	\$	22,111	\$	22,034
Liabilities and Shareholders' Equity				
Current liabilities:				
Accounts payable	\$	295	\$	228
Kinross call option		1		-
Operating lease liability		31		35
Total current liabilities		327		263
Long-term liabilities				
Operating lease liability – Long-term		60		-
Asset retirement obligation – Lik		125		125
Total long-term liabilities		185		125
Commitments and contingencies (Note 9)				
communents and contingencies (Fore 7)				
Equity:				
Shareholders' equity:				
Preferred stock, \$0.01 par value, authorized 10,000,000 shares (none issued and outstanding at September 30, 2023 and December 31, 2022)		-		-
Common stock, \$0.01 par value, authorized 100,000,000 shares (69,163,040 and 64,801,373 shares, respectively, issued and outstanding at September 30, 2023 and December 31, 2022)		692		648
Additional paid-in capital		77,507		74,886
Accumulated deficit		(56,600)		(53,888)
Total shareholders' equity	-	21,599		21,646
Total liabilities and shareholders' equity	\$	22,111	\$	21,040
See Notes to Unaudited Condensed Consolidated Financial Statements				<u> </u>

See Notes to Unaudited Condensed Consolidated Financial Statements

SOLITA RIO RESOURCES CORP. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

thousands, except per share amounts) Three months ended September 30					Nine months ended September 30				
		2023		2022		2023		2022	
Costs, expenses and other:			-				-		
Exploration expense	\$	918	\$	655	\$	1,748	\$	1,832	
Depreciation		7		7		19		23	
General and administrative		282		435		1,073		1,099	
Total costs, expenses and other		1,207		1,097	-	2,840		2,954	
Other (loss) income									
Interest and dividend income		35		29		88		97	
Other income		-		20		-		20	
Gain (loss) on derivative instruments		7		-		30		(4)	
Realized loss on sale of marketable equity securities		-		-		-		(159)	
Unrealized gain (loss) on short-term investments		14		(22)		49		(120)	
Unrealized (loss) gain on marketable equity securities		(141)		13		(39)		(142)	
Total other (loss) income		(85)		40		128		(308)	
Net loss	\$	(1,292)	\$	(1,057)	\$	(2,712)	\$	(3,262)	
Loss income per common share:					-				
Basic and diluted	\$	(0.02)	\$	(0.02)	\$	(0.04)	\$	(0.05)	
Weighted average shares outstanding:									
Basic and diluted		67,752		64,769		67,625		64,091	

See Notes to Unaudited Condensed Consolidated Financial Statements

SOLITA RIO RESOURCES CORP. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

(in thousands of U.S. dollars)		nths ended nber 30,
	2023	2022
Operating activities:		
Net loss	\$ (2,712)	\$ (3,262)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	19	23
Amortization of right-of-use lease asset	30	30
Unrealized loss on marketable equity securities	39	142
Unrealized (gain) loss on short-term investments	(49)	120
Employee stock option expense	184	271
Loss on sale of marketable equity securities	-	159
(Gain) loss on derivative instruments	(30)	4
Changes in operating assets and liabilities:		-
Property abandonment and impairment		-
Other income		
Prepaid expenses and other	(199)	266
Accounts payable and other liabilities	34	299
Net cash used in operating activities	(2,684)	(1,948)
Investing activities:		
Sale of short-term investments, net	36	69
Purchase of mineral property	-	(386)
Purchase of other assets – net	(12)	(49)
Cash from sale of marketable equity securities		53
Sale of derivative instruments – net	31	-
Net cash provided (used in) by investing activities	55	(313)
Financing activities:		
Issuance of common stock – net of issuing costs	2,422	2,023
Stock options exercised for cash	59	20
Net cash provided by financing activities	2,481	2,043
Net increase (decrease) in cash and cash equivalents	(148)	(218)
Cash and cash equivalents, beginning of period	316	462
Cash and cash equivalents, end of period	\$ 168	\$ 244
Supplemental Cash Flow information:		
Acquisition of right to use asset	\$ 87	\$ -

See Notes to Unaudited Condensed Consolidated Financial Statements

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. Business and Significant Accounting Policies

Business and company formation

Solitario Resources Corp. ("Solitario," or the "Company") is an exploration stage company as defined by rules issued by the United States Securities and Exchange Commission ("SEC"). Solitario was incorporated in the state of Colorado on November 15, 1984 as a wholly-owned subsidiary of Crown Resources Corporation. In July 1994, Solitario became a publicly traded company on the Toronto Stock Exchange through its initial public offering. Solitario has been actively involved in mineral exploration since 1993. In June 2023, Solitario's shareholders approved an amendment to the Company's Articles of Incorporation to change the Company's name from Solitario Zinc Corp. to Solitario Resources Corp., and that name change was effected in July 2023. Solitario's primary business is to acquire exploration mineral properties or royalties and/or discover economic deposits on its mineral properties and advance these deposits, either on its own or through joint ventures, up to the development stage. At or prior to development, Solitario would likely attempt to sell its mineral properties, pursue their development either independently or through a joint venture with a partner that has expertise in mining operations, or create a royalty with a third party that would continue to advance the property. Solitario has never developed a property. Solitario is primarily focused on the acquisition and exploration of precious metal, zinc and other base metal exploration mineral properties. In addition to focusing on its mineral exploration properties and assets with exploration potential or business combinations that Solitario determines to be favorable to Solitario.

Solitario has recorded revenue in the past from the sale of mineral properties, including the sale of certain mineral royalties. Revenues and / or proceeds from the sale or joint venture of properties or assets, although potentially significant when they occur, have not been a consistent annual source of cash and would only occur in the future, if at all, on an infrequent basis.

Solitario currently considers its carried interest in the Florida Canyon zinc project in Peru (the "Florida Canyon Project"), its interest in the Lik zinc project in Alaska (the "Lik Project"), and its Golden Crest project in South Dakota (the "Golden Crest Project") to be its core mineral property assets. Nexa Resources, Ltd. ("Nexa"), Solitario's joint venture partner, is continuing the exploration and furtherance of the Florida Canyon Project and Solitario is monitoring progress at Florida Canyon. Solitario is working with its 50% joint venture partner in the Lik Project, Teck American Incorporated, a wholly-owned subsidiary of Teck Resources Limited (both companies are referred to as "Teck"), to further the exploration and evaluate potential development plans for the Lik Project. Solitario is conducting mineral exploration on Golden Crest Project on its own.

Solitario anticipates using its cash and short-term investments, in part, to fund costs and activities to further the exploration of the Florida Canyon, Lik and Golden Crest projects, and to potentially acquire additional mineral property assets. The fluctuations in precious metal and other commodity prices contribute to a challenging environment for mineral exploration and development, which has created opportunities as well as challenges for the potential acquisition of early-stage and advanced mineral exploration projects or other related assets at potentially attractive terms.

The accompanying interim condensed consolidated financial statements of Solitario for the three months and nine months ended September 30, 2023 are unaudited and are prepared in accordance with accounting principles generally accepted in the United States of America ("generally accepted accounting principles"). They do not include all disclosures required by generally accepted accounting principles for annual financial statements, but in the opinion of management, include all adjustments necessary for a fair presentation. Interim results are not necessarily indicative of results which may be achieved in the future or for the full year ending December 31, 2023.

These consolidated condensed financial statements should be read in conjunction with the consolidated financial statements and notes thereto which are included in Solitario's Annual Report on Form 10-K for the year ended December 31, 2022 filed with the U.S. Securities and Exchange Commission (the "SEC") on March 16, 2023 and amended by that certain Amendment No. 1 to Form 10-K filed with the SEC on March 24, 2023 (as amended our "2022 Annual Report"). The accounting policies set forth in those annual financial statements are the same as the accounting policies utilized in the preparation of these condensed consolidated financial statements, except as modified for appropriate interim financial statement presentation.

Risks and Uncertainties

Solitario is subject to various risks and uncertainties that are specific to the nature of its business and the exploration of its mineral properties. Solitario also faces various macro risks and uncertainties, such as risks related to health epidemics, pandemics, and other outbreaks or resurgences of communicable diseases, the occurrence of natural disasters, rising geopolitical tension and instability, acts of war or terrorism, global economic uncertainty, inflationary pressures, increased interest rates, and volatility and disruption in national and international financial markets. These risks and uncertainties could significantly disrupt Solitario's operations and may materially and adversely affect its business and financial condition. Certain of these risks and uncertainties are discussed under the heading "Risk Factors" in Item 1A of our 2022 Annual Report and under the heading "Forward-Looking Statements" in Item 2(1) of Part I of this report.

Solitario will continue taking proactive steps to monitor and address the impacts of these risks and uncertainties on its operations, financial condition, and liquidity. Such steps may include, for example, modifying the scope of exploration projects to the extent necessary to respond to public-health emergencies, a step Solitario and its joint venture partners took to address the impacts of the COVID-19 pandemic; reducing costs and increasing operational efficiency in response to inflationary stress and economic downturn; and performing ongoing evaluations of the potential impacts of market volatility, general economic uncertainty, and rising geopolitical tension on Solitario's ability to access future traditional funding sources on the same or reasonably similar terms as in past periods. While Solitario will continue to monitor and address the effects of these risks and uncertainties, the extent to which they ultimately impact Solitario's business, including its exploration and other activities and the market for its securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time.

Financial reporting

The condensed consolidated financial statements include the accounts of Solitario and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The condensed consolidated financial statements are prepared in accordance with generally accepted accounting principles and are expressed in US dollars.

Cash equivalents

Cash equivalents include investments in highly liquid money-market securities with original maturities of three months or less when purchased. As of September 30, 2023, \$82,000 of Solitario's cash is held in brokerage accounts and foreign banks, which are not covered under the Federal Deposit Insurance Corporation ("FDIC") rules for the United States.

Short-term investments

As of September 30, 2023, Solitario has \$1,391,000 of its current assets in United States Treasury Securities ("USTS") with maturities of 30 days to 5 months. The USTS are recorded at their fair value, based upon quoted market prices. The USTS are not covered under the FDIC insurance rules for United States deposits. Solitario's USTS are highly liquid and may be sold in their entirety at any time at their quoted market price and are classified as a current asset. Included in short-term investments at September 30, 2023 is \$2,573,000 in a money market fund held in a brokerage account.

Earnings per share

The calculation of basic and diluted earnings (loss) per share is based on the weighted average number of shares of common stock outstanding during the three and nine months ended September 30, 2023 and 2022. Potentially dilutive shares related to outstanding common stock options of 5,195,000 and 5,390,000, respectively, for the three and nine months ended September 30, 2023 and outstanding common stock options of 5,431,250 and 5,513,000, respectively, for the three and nine months ended September 30, 2022 were excluded from the calculation of diluted loss per share because the effects were anti-dilutive.

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2. Mineral Properties

The following table details Solitario's investment in Mineral Properties:

(in thousands)	Sept	September 30, 2023		cember 31, 2022
Exploration				
Lik project (Alaska – US)	\$	15,611	\$	15,611
Golden Crest (South Dakota – US)		1,035		1,035
Total exploration mineral properties	\$	16,646	\$	16,646

All exploration costs on Solitario's exploration properties, none of which have proven and probable reserves, including any additional costs incurred for subsequent lease payments or exploration activities related to Solitario's projects, are expensed as incurred. During the nine months ended September 30, 2023, Solitario advanced \$350,000 to Teck for planned 2023 exploration expenditures at the Lik project, of which \$193,000 was in prepaid expenses at September 30, 2023.

Exploration expense

The following items comprised exploration expense:

(in thousands)	Three months ended September 30,					Nine months ended September 30,			
		2023		2022		2023		2022	
Geologic and field expenses	\$	895	\$	559	\$	1,630	\$	1,567	
Administrative		23		96		118		265	
Total exploration costs	\$	918	\$	655	\$	1,748	\$	1,832	

Asset Retirement Obligation

In connection with the acquisition of its interest in the Lik project in 2017, Solitario recorded an asset retirement obligation of \$125,000 for Solitario's estimated reclamation cost of the existing disturbance at the Lik project. This disturbance consists of an exploration camp, including certain drill sites and access roads at the camp. The estimate was based upon estimated cash costs for reclamation as determined by the permitting bond required by the State of Alaska for which Solitario has purchased a reclamation bond insurance policy in the event Solitario or its 50% joint venture partner, Teck, do not complete required reclamation.

Solitario has not applied a discount rate to the recorded asset retirement obligation as the estimated time frame for reclamation is not currently known, as reclamation is not expected to occur until the end of the Lik project life, which would follow future development and operations, the start of which cannot be estimated or assured at this time. Additionally, no depreciation will be recorded on the related asset for the asset retirement obligation until the Lik project goes into operation, which cannot be assured.

3. Marketable Equity Securities

Solitario's investments in marketable equity securities are carried at fair value, which is based upon quoted prices of the securities owned. The cost of marketable equity securities sold is determined by the specific identification method. Changes in fair value are recorded in the condensed consolidated statement of operations.



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At September 30, 2023 and December 31, 2022, Solitario owns the following marketable equity securities:

	Septembe	September 30, 2023				2022
		Fair value				Fair value
	shares	(000's)		Shares	(000's)	
Kinross Gold Corp	100,000	\$	456	100,000	\$	409
Vendetta Mining Corp.	7,750,000		172	7,750,000		229
Vox Royalty Corp.	134,055		271	134,055		311
Highlander Silver Corp.	200,000		11	200,000		-
Total		\$	910		\$	949

The following tables summarize Solitario's marketable equity securities and adjustments to fair value:

	1	September 30,		ember 31,
(in thousands)		2023		2022
Marketable equity securities at cost	\$	1,440	\$	1,440
Cumulative unrealized loss on marketable equity securities		(530)		(491)
Marketable equity securities at fair value	\$	910	\$	949

The following table represents changes in marketable equity securities:

(in thousands)		e montl leptemb	hs ended ber 30,	Nine months ended September 30,			
	2023		2022		2023	20)22
Cost of marketable equity securities sold	\$	-	\$ -	\$	-	\$	212
Realized (loss) on marketable equity securities sold		-	-		-		(159)
Proceeds from the sale of marketable equity securities sold		-	-		-		(53)
Net (loss) gain on marketable equity securities		(141)	13		(39)		(301)
Change in marketable equity securities at fair value	\$	(141)	\$ 13	\$	(39)	\$	(354)

The following table represents the realized and unrealized (loss) gain on marketable equity securities:

(in thousands)		Three months ended September 30,					Nine months ended September 30,		
		2023		2022		2023		2022	
Unrealized (loss) gain on marketable securities	\$	(141)	\$	13	\$	(39)	\$	(142)	
Realized (loss) on marketable equity securities sold		-		-		-		(159)	
Net loss on marketable securities	\$	(141)	\$	13	\$	(39)	\$	(301)	

During the three and nine months ended September 30, 2023, Solitario did not sell any marketable equity securities.

During the three months ended September 30, 2022, Solitario did not sell any marketable equity securities. During the nine months ended September 30, 2022, Solitario sold 1,000,000 shares of Vendetta Mining Corp. ("Vendetta") common stock for proceeds of \$53,000 and recorded a loss on sale of \$159,000 on the date of sale.

4. Leases

Solitario accounts for its leases in accordance with ASC 842 *Leases*. Solitario leases one facility, its Wheat Ridge, Colorado office, that has a term of more than one year. Solitario has no other material operating lease costs. During the nine months ended September 30, 2023, Solitario entered into an extension of the lease as a new lease for the same facility (the prior lease and the new lease are referred to as the "WR Lease") and recorded a net increase in the related asset and liability of \$87,000. The WR Lease is classified as an operating lease and has a term of 29 months at September 30, 2023, with no renewal option. At September 30, 2023 and December 31, 2022, the right-of-use office lease asset for the WR Lease is classified as other long-term assets and the related liability as current and long-term operating lease liabilities in the condensed consolidated balance sheet. The amortization of right-of-use lease asset expense is recognized over the lease term, with variable lease payments recognized in the period those payments are incurred.

During the three and nine months ended September 30, 2023, cash lease payments of \$11,000 and \$33,000, respectively, were made on the WR Lease. During the three and nine months ended September 30, 2022, cash lease payments of \$11,000 and \$29,000, respectively, were made on the WR Lease. During the three and nine months ended September 30, 2023, Solitario recognized \$10,000 and \$29,000, respectively, of non-cash amortization of right-of-use lease asset expense for the WR Lease included in general and administrative expense. During the three and nine months ended September 30, 2022, Solitario recognized \$10,000 and \$29,000, respectively, of non-cash amortization of right-of-use lease asset expense for the WR Lease included in general and administrative expense. During the three and nine months ended September 30, 2022, Solitario recognized \$10,000 and \$30,000, respectively, of non-cash amortization of right-of-use lease asset expense for the WR Lease included in general and administrative expense. These cash payments, less imputed interest for each period, reduced the related liability on the WR Lease. The discount rate within the WR Lease is not determinable and Solitario has applied a discount rate of 7% based upon Solitario's estimate of its cost of capital to determine the asset and liability upon the extension of the WR lease during 2023.

The maturities of Solitario's lease liability for its WR Lease are as follows at September 30, 2023:

Future lease payments (in thousands)

Remaining payments 2023	\$ 4
2024	44
2025	45
2026	8
Total lease payments	 101
Less amount of payments representing interest	(10)
Present value of lease payments	\$ 91

5 Other Assets

Other assets consisted of the following items:

(in thousands)	1	mber 30, 023	December 31, 2022		
Furniture and fixtures, net of accumulated depreciation	\$	90	\$	97	
Office lease asset		92		33	
Exploration bonds and other assets		4		4	
Total other	\$	186	\$	134	

6. Derivative Instruments

Covered call options

From time-to-time, Solitario has sold covered call options against its holdings of shares of common stock of Kinross Gold Corporation ("Kinross") included in marketable equity securities. The business purpose of selling covered calls is to provide additional income on a limited portion of shares of Kinross that Solitario may sell in the near term, which is generally defined as less than one year, and any changes in the fair value of its covered calls are recognized in the statement of operations in the period of the change. At September 30, 2023, Solitario has a liability related to covered calls outstanding on its holdings of Kinross of \$1,000. During the nine months ended September 30, 2023, Solitario sold covered calls against its holdings of Kinross for cash proceeds of \$31,000 and Solitario recorded a gain on derivative instruments related to those covered calls during the three and nine months ended September 30, 2023 of \$7,000 and \$30,000, respectively. Solitario did not sell any covered calls during the three and nine months ended September 30, 2022.

Warrants

During the three and nine months ended September 30, 2023 Solitario did not hold any Vendetta warrants. During the nine months ended September 30, 2022, Solitario recorded a loss of \$4,000 related to certain Vendetta warrants it held, which expired unexercised during the nine months ended September 30, 2022.

7. Fair Value

Solitario accounts for its financial instruments under ASC 820 Fair Value Measurement. During the nine months ended September 30, 2023, there were no reclassifications in financial assets or liabilities between Level 1, 2 or 3 categories.

The following is a listing of Solitario's financial assets and liabilities required to be measured at fair value on a recurring basis and where they are classified within the hierarchy as of September 30, 2023:

(in thousands) Assets	Le	evel 1	 Level 2	_	 Level 3		 Total
Short-term investments	\$	3,964	\$	-	\$	-	\$ 3,964
Marketable equity securities	\$	910	\$	-	\$	-	\$ 910
Liabilities							
Kinross call options	\$	1	\$	-	\$	-	\$ 1

The following is a listing of Solitario's financial assets and liabilities required to be measured at fair value on a recurring basis and where they are classified within the hierarchy as of December 31, 2022:

(in thousands) Assets	L	evel 1	Level 2	L	evel 3	Total
Short-term investments	\$	3,951	\$	- \$	- \$	3,951
Marketable equity securities	\$	949	\$	- \$	- \$	949

8. Income Taxes

Solitario accounts for income taxes in accordance with ASC 740 Accounting for Income Taxes. Under ASC 740, income taxes are provided for the tax effects of transactions reported in the condensed consolidated financial statements and consist of taxes currently due plus deferred taxes related to certain income and expenses recognized in different periods for financial and income tax reporting purposes. Deferred tax assets and liabilities represent the future tax return consequences of those differences, which will either be taxable or deductible when the assets and liabilities are recovered or settled. Deferred taxes are also recognized for operating losses and tax credits that are available to offset future taxable income and income taxes, respectively. A valuation allowance is provided if it is more likely than not that some portion or all of the deferred taxassets will not be realized.

At both September 30, 2023 and December 31, 2022, a valuation allowance has been recorded, which fully offsets Solitario's net deferred tax assets, because it is more likely than not that the Company will not realize some portion or all of its deferred tax assets. The Company continually assesses both positive and negative evidence to determine whether it is more likely than not that the deferred tax assets can be realized prior to their expiration.

During the three and nine months ended September 30, 2023 and 2022, Solitario recorded no deferred tax expense.

9. Commitments and contingencies

Solitario has recorded an asset retirement obligation of \$125,000 related to its Lik project in Alaska. See Note 2, "Mineral Properties," above.

Solitario leases office space under a non-cancelable operating lease for the Wheat Ridge, Colorado office which provides for future total minimum rent payments as of September 30, 2023 of \$101,000 through February 2026.



10. Employee Stock Compensation Plans

On June 18, 2013, Solitario's shareholders approved the 2013 Solitario Exploration & Royalty Corp. Omnibus Stock and Incentive Plan, as amended (the "2013 Plan"), which expired in April 2023. Under the terms of the 2013 Plan, a total of 5,750,000 shares of Solitario common stock are reserved for awards to directors, officers, employees and consultants. The 2013 plan permitted the Board of Directors of the Company (the "Board of Directors") or a committee appointed by the Board of Directors to grant awards in the form of stock options, stock appreciation rights, restricted stock, and restricted stock units. As of September 30, 2023, the 2013 Plan has expired and no additional awards may be granted under the 2013 Plan, although awards made prior to the 2013 Plan's expiration will remain outstanding in accordance with their terms. The outstanding awards under the 2013 Plan are detailed below.

On June 20, 2023, Solitario's shareholders approved the 2023 Solitario Stock and Incentive Plan (the "2023 Plan"). Under the terms of the 2023 Plan, a total of 5,000,000 shares of Solitario common stock are reserved for awards to directors, officers, employees and consultants. Awards may take the form of stock options, stock appreciation rights, restricted stock and restricted stock units. The terms and conditions of the awards are pursuant to the 2023 Plan and are granted by the Board of Directors or a committee appointed by the Board of Directors. The 2023 Plan has a term of 10 years. As of September 30, 2023, no awards have been granted under the 2023 Plan.

As of September 30, 2023 and December 31, 2022, there were options outstanding under the 2013 Plan that are exercisable to acquire 5,195,000 and 5,390,000, respectively, shares of Solitario common stock, with exercise prices between \$0.20 and \$0.60 per share. As of September 30, 2023, the outstanding stock options have an intrinsic value of \$765,000 and a weighted average life of 2.24 years.

During the three and nine months ended September 30, 2023, Solitario did not grant any options. During the three and nine months ended September 30, 2022, Solitario granted options to acquire 2,360,000 shares of Solitario common stock. The options have an exercise price of \$0.60 per share, a five-year term and a grant date fair value of \$876,000 based upon a Black-Scholes model, with a 73% volatility and a 3.4% risk-free interest rate.

During the three and nine months ended September 30, 2023, options for 145,000 and 195,000 shares, respectively, were exercised with exercise prices between \$0.28 and \$0.31 per share for proceeds of \$45,000 and \$59,000, respectively, which had intrinsic values of \$37,000 and \$52,000, respectively, on the date of exercise.

No options were exercised during the three months ended September 30, 2022. During the nine months ended September 30, 2022, options for 81,750 shares were exercised with an average exercise price of \$0.25 per share for proceeds of \$20,000, which had an intrinsic value of \$44,000 on the date of exercise.

During the three and nine months ended September 30, 2023, Solitario recorded stock option compensation expense of \$58,000 and \$184,000, respectively included in general and administrative expense. During the three and nine months ended September 30, 2022, Solitario recorded stock option compensation expense of \$245,000 and \$271,000, respectively included in general and administrative expense. At September 30, 2023, the total unrecognized stock option compensation cost related to non-vested options was \$434,000 and is expected to be recognized over a weighted average period of 23 months.

11. Shareholders' Equity

Shareholders' Equity for the nine months ended September 30, 2023:

(in thousands, except

Share amounts)	Common Stock	Common Stock	Additional Paid-in		Accumulated		s	Total hareholders'
	Shares	Amount		Capital		Deficit		Equity
Balance at December 31, 2022	64,801,373	\$ 648	\$	74,886	\$	(53,888)	\$	21,646
Stock option expense	-	-		67		-		67
Net loss	-	-		-		(380)		(380)
Balance at March 31, 2023	64,801,373	\$ 648	\$	74,953	\$	(54,268)	\$	21,333
Stock option expense	-	-		59		-		59
Issuance of shares - option exercises	50,000	1		13		-		14
Net loss	-	-		-		(1,040)		(1,040)
Balance at June 30, 2023	64,851,373	\$ 649	\$	75,025	\$	(55,308)	\$	20,366
Stock option expense	-	-		58		-		58
Issuance of shares - option exercises	145,000	1		44		-		45
Private placement	4,166,667	42		2,380				2,422
Net loss	-	-		-		(1,292)		(1,292)
Balance at September 30, 2023	69,163,040	\$ 692	\$	77,507	\$	(56,600)	\$	21,599

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Shareholders' Equity for the nine months ended September 30, 2022:

(in thousands, except

Share amounts)	Common	Common	Additional				Total
	Stock	Stock	Paid-in	1	Accumulated	S	hareholders'
	Shares	Amount	Capital		Deficit		Equity
Balance at December 31, 2021	62,036,399	\$ 620	\$ 72,523	\$	(49,960)	\$	23,183
Stock option expense	-	-	13		-		13
Issuance of shares – ATM, net	2,650,724	27	1,996		-		2,023
Issuance of shares - option exercises	73,000	1	18		-		19
Net loss	-	-	-		(514)		(514)
Balance at March 31, 2022	64,760,123	\$ 648	\$ 74,550	\$	(50,474)	\$	24,724
Stock option expense	-	-	13		-		13
Issuance of shares - option exercises	8,750	-	1		-		1
Net loss	-	-	-		(1,691)		(1,691)
Balance at June 30, 2022	64,768,873	\$ 648	\$ 74,564	\$	(52,165)	\$	23,047
Stock option expense	-	-	245		-		245
Net loss	-	-	-		(1,057)		(1,057)
Balance at September 30, 2022	64,768,873	\$ 648	\$ 74,809	\$	(53,222)	\$	22,235

Private Placement

On July 31, 2023, Solitario entered into a Stock Purchase Agreement (the "SPA") with Newmont Overseas Exploration Ltd. ("Newmont"), for the purchase and sale of 4,166,667 shares of Solitario common stock of Solitario (the "Shares"), at a price of \$0.60 per share for net proceeds of \$2,422,000 after certain legal and regulatory offering costs of \$78,000. In connection with the sale of the Shares Solitario and Newmont entered into an Investor Rights Agreement, which granted Newmont certain additional rights, including a preemptive right, certain anti-dilution protections and certain other rights and notice provisions related to Solitario's Gold Crest mineral property assets.

At the Market Offering Agreement

On February 2, 2021, Solitario entered into an at-the-market offering agreement (the "ATM Agreement") with H. C. Wainwright & Co., LLC ("Wainwright"), under which Solitario may, from time to time, issue and sell shares of Solitario's common stock through Wainwright as sales manager in an at-the-market offering under a prospectus supplement for aggregate sales proceeds of up to \$9.0 million (the "ATM Program"). The common stock sold under the ATM Program is distributed at the market prices prevailing at the time of sale. As a result, prices of the common stock sold under the ATM Program may vary as between purchasers and during the period of distribution. The ATM Agreement provides that Wainwright is entitled to compensation for its services as sales manager at a commission rate of 3.0% of the gross sales price per share of common stock sold.

During the nine months ended September 30, 2023, Solitario did not sell any shares under the ATM Agreement. During the nine months ended September 30, 2022, Solitario sold an aggregate of 2,650,724 shares of common stock under the ATM Agreement at an average price of \$ 0.79 per share for net proceeds of \$2,023,000 after commissions and sale expenses.

12. Subsequent Events

On October 13, 2023, Solitario completed a private placement of 8,631,818 shares of Solitario common stock, at a price of US\$0.55 per share for total net proceeds of US\$4,747,500 (the "Offering"). The Offering involved qualified non-US investors and was pursuant to one or more exemptions from registration under U.S., Canadian and other applicable law. The Company did not engage an underwriter or placement agent for the Offering, and there were no underwriter discounts or commissions or placement agent fees, and no warrants were issued. The net proceeds of the Offering will be used to advance the Company's exploration activities at its core projects and for general corporate purposes.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the information contained in the consolidated financial statements of Solitario for the years ended December 31, 2022 and 2021, and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Solitario's 2022 Annual Report. Solitario's financial condition and results of operations are not necessarily indicative of what may be expected in future periods. Unless otherwise indicated, all references to dollars are to U.S. dollars.

(a) Business Overview and Summary

We are an exploration stage company as defined by rules issued by the SEC, with a focus on the acquisition of precious and base metal properties with exploration potential and the development or purchase of royalty interests. Currently our primary focus is the acquisition and exploration of precious metals, zinc and other base metal exploration mineral properties. However, we continue to evaluate other mineral properties for acquisition, and we hold a portfolio of mineral exploration properties and assets for future sale, joint venture or on which to create a royalty prior to the establishment of proven and probable reserves. Although our mineral properties may be developed in the future by us, through a joint venture or by a third party, we have never developed a mineral property. In addition to focusing on our current mineral exploration properties, we also from time to time evaluate potential strategic transactions for the acquisition of new precious and base metal properties and assets with exploration potential.

Our current geographic focus for the evaluation of potential mineral property assets is in North and South America; however, we have conducted property evaluations for potential acquisition in other parts of the world. At September 30, 2023, we consider our Golden Crest Project in South Dakota, our carried interest in the Florida Canyon Project in Peru, and our interest in the Lik project in Alaska to be our core mineral property assets. We are conducting exploration activities in the United States on our own at the Golden Crest Project and through joint ventures operated by our partners in Peru at the Florida Canyon Project and in Alaska at the Lik Project. We also conduct potential acquisition evaluations in other countries located in South and North America.

We have recorded revenue in the past from the sale of mineral properties, however revenues and / or proceeds from the sale or joint venture of properties or assets, although generally significant when they have occurred in the past, have not been a consistent source of revenue and would only occur in the future, if at all, on an infrequent basis. We have reduced our exposure to the costs of our exploration activities in the past through the use of joint ventures. Although we anticipate that the use of joint ventures to fund some of our exploration activities will continue for the foreseeable future, we can provide no assurance that these or other sources of capital will be available in sufficient amounts to meet our needs, if at all.

As of September 30, 2023, we have balances of cash and short-term investments that we anticipate using, in part, to (i) fund costs and activities intended to further the exploration of our Lik, Florida Canyon and Golden Crest projects, (ii) conduct reconnaissance exploration and (iii) potentially acquire additional mineral property assets. The fluctuations in precious metal and other commodity prices contribute to a challenging environment for mineral exploration and development, which has created opportunities as well as challenges for the potential acquisition of advanced mineral exploration projects or other related assets at potentially attractive terms.

The extent to which our business, including our exploration and other activities and the market for our securities, may be impacted by public health threats, rising geopolitical tension, general economic uncertainty and market volatility will depend on future developments, which are highly uncertain and cannot be predicted at this time. Please see Item 1A, "Risk Factors," in our 2022 Annual Report.

(b) Results of Operations

Comparison of the three months ended September 30, 2023 to the three months ended September 30, 2022

We had a net loss of \$1,292,000 or \$0.02 per basic and diluted share for the three months ended September 30, 2023 compared to a net loss of \$1,057,000 or \$0.02 per basic and diluted share for the three months ended September 30, 2022. As explained in more detail below, the primary reasons for the increase in our net loss in the three months ended September 30, 2023 compared to the net loss during the three months ended September 30, 2022 were (i) an increase in exploration expense to \$918,000 in the three months ended September 30, 2023 compared to exploration expense of \$655,000 during the three months ended September 30, 2022; (ii) an increase in the unrealized loss on marketable equity securities to \$141,000 during the three months ended September 30, 2023 compared to an unrealized gain on marketable equity securities of \$13,000 during the three months ended September 30, 2022; and (iii) recording of other income of \$20,000 during the three months ended September 30, 2023, were (i) an education expense of \$655,000 during the three months ended September 30, 2022; and (iii) recording of other income of \$20,000 during the three months ended September 30, 2022; and (iii) recording of other income of \$20,000 during the three months ended September 30, 2023, Partially offsetting these items which increased the loss during the 2023 period, compared to the three months ended September 30, 2023 were (i) a reduction in general and administrative costs to \$282,000 during the three months ended September 30, 2022; (ii) an increase in interest and dividend income to \$35,000 during the three months ended September 30, 2023 compared to interest and dividend income to \$35,000 during the three months ended September 30, 2022; (iii) the recording of a gain on derivative instruments of \$7,000 during the three months ended September 30, 2023; and (iv) an unrealized gain on short-term investments of \$14,000 during the three months ended September 30, 2022; compared to a loss of \$22,000 during the three months ended September 3

Our net exploration expense increased to \$918,000 during the three months ended September 30, 2023 compared to exploration expense of \$655,000 during the three months ended September 30, 2022 primarily as a result of the expensing of claim fees of \$292,000 at our Golden Crest project during the three months ended September 30, 2023, compared to \$40,000 during the three months ended September 30, 2022, when Solitario was staking and filing initial claim fees at Golden Crest, which are capitalized during the first year of claim payments. Solitario expenses lease and claim costs for all years, after the initial claim or lease payments are made. See Note 2, "Mineral Properties," to the unaudited financial statements above. In addition, we conducted an increased surface exploration and analysis program at our Golden Crest project which represented approximately \$439,000 of exploration expense during the three months ended September 30, 2023 compared to exploration expenditures of \$354,000 at Golden Crest during the three months ended September 30, 2022. Partially offsetting these increases in exploration expenditures during the three months ended September 30, 2023 were (i) a later start of work at the Lik Project by our joint venture partner, Teck, as Lik exploration was \$139,000 during the three months ended September 30, 2023 compared to \$221,000 of exploration expenditures at Lik during the three months ended September 30, 2022; and (ii) a reduction in reconnaissance exploration during the three months ended September 30, 2023 to \$48,000 compared to reconnaissance exploration of \$80,000 during the three months ended September 30, 2022. During the three and nine months ended September 30, 2023, we had three contract geologists working at our Golden Crest project, as well as several part-time employees who assisted our contract geologists in collecting, organizing and testing soil and rock samples at Golden Crest. In addition, certain of our Denver-based personnel spent a portion of their time on Golden Crest and reconnaissance exploration activities described above and related matters. We have budgeted approximately \$2,000,000 for the full-year exploration expenditure for 2023, which includes approximately \$1,426,000 at the Golden Crest project and \$574,000 for Solitario's share of a joint drilling program with Teck at the Lik project. We expect our full-year exploration expenditures for 2023 to be above the exploration expenditures for full-year 2022.

Exploration expense (in thousands) by project consisted of the following:

	Three months ended September 30,					Nine mon Septen		
Project Name	2	2023		2022		2023		2022
Golden Crest	\$	731	\$	354	\$	1,458	\$	909
Lik		139		221		172		669
Reconnaissance		48		80		118		254
Total exploration expense	\$	918	\$	655	\$	1,748	\$	1,832

General and administrative costs, excluding stock option compensation costs, discussed below, were \$224,000 during the three months ended September 30, 2023 compared to \$190,000 during the three months ended September 30, 2022. The major components of our general and administrative costs were (i) salaries and benefit expense of \$108,000 during the three months ended September 30, 2023 compared to salary and benefit costs of \$88,000 during the three months ended September 30, 2023 compared to salary and benefit costs of \$88,000 during the three months ended September 30, 2022; (ii) legal and accounting expenditures of \$47,000 in the three months ended September 30, 2023 compared to \$50,000 in the three months ended September 30, 2022; (iii) office rent and expenses of \$35,000 during the three months ended September 30, 2023, compared to \$29,000 during the three months ended September 30, 2022; (iii) office rent and expenses of \$35,000 during the three months ended September 30, 2022; (iii) office rent and expenses of \$35,000 during the three months ended September 30, 2023, compared to \$29,000 during the three months ended September 30, 2022; (iii) office rent and expenses of \$35,000 during the three months ended September 30, 2023, compared to \$29,000 during the three months ended September 30, 2022; (iii) and (iv) travel and shareholder relation costs of \$34,000 during the three months ended September 30, 2023 compared to \$23,000 during the three months ended September 30, 2022. We anticipate the full-year general and administrative costs will be comparable for 2023 and 2022.

We recorded \$58,000 of stock option compensation expense for the amortization of unvested grant date fair value with a credit to additional paid-in-capital during the three months ended September 30, 2023 compared to \$245,000 of stock option compensation expense during the three months ended September 30, 2022. These non-cash charges related to the expense for vesting on stock options outstanding during the three months ended September 30, 2023 and 2022. The primary reason for the increase in stock option compensation expense during the three months ended September 30, 2022 compared to the three months ended September 30, 2023 was as a result of the grant of 2,360,000 options in the third quarter of 2022, which included the expensing of the initial vesting of 25% of the grant date fair value of the option grant of \$876,000 or \$218,000 during the three months ended September 30, 2022, with no similar grant of options during the three months ended September 30, 2023. See Note 10, "Employee Stock Compensation Plans," above, for additional information on our stock option expense.

We recorded a non-cash unrealized loss on marketable equity securities of \$141,000 during the three months ended September 30, 2023 compared to an unrealized gain on marketable equity securities of \$13,000 during the three months ended September 30, 2022. The non-cash unrealized loss during the three months ended September 30, 2023 was primarily related to (i) a decrease in the value of our 7,750,000 shares of Vendetta common stock, which decreased to a fair value of \$172,000 at September 30, 2023 from a fair value of \$234,000 at June 30, 2023 or a decrease of \$62,000 based on quoted market prices; (ii) a decrease in the value of our 134,055 shares of Vox Royalty Corp. ("Vox") common stock to \$271,000 at September 30, 2023 compared to a value of \$324,000 at June 30, 2023 or a decrease of \$62,000 based on quoted market prices; (iii) a decrease of \$54,000 based on quoted market prices and (iii) a decrease in the value of our holdings of 100,000 shares of Kinross common stock to \$456,000 at September 30, 2023 was primarily related to (i) an increase in the value of our holdings of 100,000 shares of Kinross common stock, which increased to a fair value of \$21,000 based on quoted market prices. The non-cash unrealized gain during the three months ended September 30, 2022 from a fair value of \$358,000 at June 30, 2022 or an increase of \$18,000 based on quoted market prices; and (ii) an increase in the value of our holdings of 100,000 shares of Kinross common stock, which increase in the value of our holdings of \$18,000 based on quoted market prices; and (ii) an increase in the value of \$376,000 at September 30, 2022 from a fair value of \$358,000 at June 30, 2022 or an increase of \$18,000 based on quoted market prices; and (ii) an increase in the value of \$291,000 at September 30, 2022 from a fair value of \$279,000 at June 30, 2022 or an increase of \$12,000, based on quoted market prices. The changes in the prices of our marketable equity securities are based on quoted market prices over which we have no control. See

We recorded interest and dividend income of \$35,000 during the three months ended September 30, 2023 compared to interest income of \$29,000 during the three months ended September 30, 2022. This increase was primarily due to an increase in interest income on our short-term investments, including our invested balance in a money market account at a brokerage firm. This increase was primarily the result of the completion of the \$2,500,000 Newmont private placement discussed above in Note 11, "Shareholders' Equity." In addition, the average interest rate on our short-term investments was higher during the three months ended September 30, 2023 compared to the three months ended September 30, 2022. We anticipate our interest and dividend income will be higher for the full year of 2023 compared to 2022 as a result of the private placement to Newmont, the \$4,747,500 private placement completed subsequent to September 30, 2023 and the higher interest rates currently being paid on short-term investments during 2023 compared to 2022. We expect to utilize a portion of our short-term investments including proceeds from maturing USTS to fund our exploration and general and administrative expenditures.

We recorded a non-cash unrealized gain on our short-term investments of \$14,000 during the three months ended September 30, 2023 compared to an unrealized loss on our short-term investments of \$22,000 during the three months ended September 30, 2022 primarily due to the maturing of our USTS, which are marked-to-market and prior reductions in the quoted fair value of our existing USTS that were purchased at lower yield to maturities than current market values were reversed as the USTS matured and approached face value. These changes in interest rates are a result of many factors that are not related to our business and do not affect the yield-to-maturity quoted for our investments in USTS or CDs at the time we acquire these short-term investments, to the extent we hold the investments to maturity.

During the three months ended September 30, 2023, we recorded a non-cash gain on derivative instruments of \$7,000 related to certain Kinross calls we sold during 2023, with no comparable amount during the three months ended September 30, 2022. See Note 6, "Derivative Instruments," above for a discussion of our Kinross calls.

We regularly perform evaluations of our mineral property assets to assess the recoverability of our investments in these assets. All long-lived assets are reviewed for impairment whenever events or circumstances change which indicate the carrying amount of an asset may not be recoverable utilizing guidelines based upon future net cash flows from the asset as well as our estimates of the geological potential of an early-stage mineral property and its related value for future sale, joint venture or development by us or others. During the three and nine months ended September 30, 2023 and 2022, we recorded no property impairments.

We recorded no income tax expense or benefit during the three and nine months ended September 30, 2023 or 2022 as we provide a valuation allowance for the tax benefit arising out of our net operating losses for all periods presented. As a result of our administrative expenses and exploration activities, we anticipate we will not have currently payable income taxes during 2023. In addition to the valuation allowance discussed above, we provide a valuation allowance for our foreign net operating losses, which are primarily related to our exploration activities in Peru. We anticipate we will continue to provide a valuation allowance for these net operating losses until we are in a net tax liability position with regards to those countries where we operate or until it is more likely than not that we will be able to realize those net operating losses in the future.

Comparison of the nine months ended September 30, 2023 to the nine months ended September 30, 2022

We had a net loss of \$2,712,000 or \$0.04 per basic and diluted share for the nine months ended September 30, 2023 compared to a net loss of \$3,262,000 or \$0.05 per basic and diluted share for the nine months ended September 30, 2022. As explained in more detail below, the primary reasons for the decrease in our net loss were (i) a decrease in exploration expense to \$1,748,000 during the nine months ended September 30, 2023 compared to exploration expense of \$1,832,000 during the nine months ended September 30, 2022; (ii) a decrease in general and administrative expenses to \$1,073,000 during the nine months ended September 30, 2023 compared to general and administrative expenses of \$1,099,000 during the nine months ended September 30, 2022; (iii) a gain on derivative instruments of \$30,000 during the nine months ended September 30, 2023 compared to a loss on derivative instruments of \$4,000 during the nine months ended September 30, 2022; (iv) a realized loss of \$159,000 on the sale of marketable equity securities during the nine months ended September 30, 2022; (iv) a realized loss on short-term investments of \$120,000 during the nine months ended September 30, 2022; and (vi) an unrealized loss of \$39,000 on marketable equity securities during the nine months ended September 30, 2022; and (vi) an unrealized loss of \$39,000 on marketable equity securities during the nine months ended September 30, 2022; and (vi) an unrealized loss of \$39,000 on marketable equity securities during the nine months ended September 30, 2022; and (vi) an unrealized loss of \$39,000 on marketable equity securities during the set reductions in the loss for the nine month ended September 30, 2023 compared to a nurealized loss on \$142,000 during the nine months ended September 30, 2022; and (vi) an unrealized loss of \$39,000 on marketable equity securities during the set reductions in the loss for the nine month ended September 30, 2023 compared to interest income of \$97,000 during the nine months ended September 30, 2022; and (ii) other

Our net exploration expense decreased to \$1,748,000 during the nine months ended September 30, 2023 compared to \$1,832,000 during the nine months ended September 30, 2022. The primary reasons for the decrease were that the exploration expenditures at our Lik project in Alaska were \$172,000 during the nine months ended September 30, 2023 compared to exploration expenditures of \$669,000 during the nine months ended September 30, 2022, where our joint venture partner, Teck, completed a portion of a planned \$1.3 million (total) exploration program for 2022, including drilling, of which we are responsible for one-half of the total costs incurred, while the drilling program for 2023 was delayed until the fourth quarter of 2023; and (ii) our reconnaissance exploration expenditures dropped to \$118,000 during the nine months ended September 30, 2022. Partially offsetting this decrease in exploration expenditures during the nine months ended September 30, 2022 was an increase in our expenditures at the Golden Crest project to \$1,458,000 during the nine months ended September 30, 2023 compared to \$200, 2022, as a result of an increase in claim filing expenditures and additional permitting work and soil and rock sampling during 2023 compared to 2022.

General and administrative costs, excluding stock option compensation costs discussed below, were \$889,000 during the nine months ended September 30, 2023 compared to \$828,000 during the nine months ended September 30, 2022. The major components of the costs were (i) salary and benefit expense during the nine months ended September 30, 2022, with these increases as a result of increased personnel and salaries in 2023; (ii) legal and accounting expenditures of \$193,000 during the nine months ended September 30, 2022, with these increases as a result of increased personnel and salaries in 2023; (ii) legal and accounting expenditures of \$193,000 during the nine months ended September 30, 2022, compared to \$247,000 during the nine months ended September 30, 2022; (iii) office and other costs of \$108,000 during the nine months ended September 30, 2022; and (iv) travel and shareholder relation costs of \$217,000 during the nine months ended September 30, 2022; and (iv) travel and shareholder relation costs of \$217,000 during the nine months ended September 30, 2022; and (iv) travel and shareholder relation costs of \$217,000 during the nine months ended September 30, 2022; and (iv) travel and shareholder relation costs of \$217,000 during the nine months ended September 30, 2022.

During the nine months ended September 30, 2023 and 2022, Solitario recorded \$184,000 and \$271,000, respectively, of stock option expense for the amortization of unvested grant date fair value with a credit to additional paid-in capital. The decrease during the nine months ended September 30, 2023 was primarily related to the addition of 2,360,000 options granted during the third quarter of 2022 with a grant date fair value of \$876,000, which increased the amortization of unvested options grant date fair value during the nine months ended September 30, 2022, related to the 25% of grant date fair value was expensed in the three months ended September 30, 2022, with no similar grant of options during the nine months ended September 30, 2023.

We recorded an unrealized loss on marketable equity securities of \$39,000 during the nine months ended September 30, 2023 compared to an unrealized loss on marketable equity securities of \$142,000 during the nine months ended September 30, 2022. The non-cash unrealized gain during the nine months ended September 30, 2023 was primarily related to (i) a decrease in the fair value of our holdings of 7,750,000 shares of Vendetta common stock to \$172,000 at September 30, 2022 compared to a fair value of \$229,000 at December 31, 2022, based on quoted market prices; and (ii) a decrease in the fair value of our holdings of 134,055 shares of Vox to \$271,000 at September 30, 2022 compared to a fair value of \$311,000 at December 31, 2022 based on quoted market prices. Partially offsetting these decreases in value during the nine months ended September 30, 2023 was an increase in the fair value of our holdings of 100,000 shares of Kinross common stock at September 30, 2023 to \$456,000 compared to a fair value of \$409,000 at December 31, 2022, based on quoted market prices. The non-cash unrealized loss during the nine months ended September 30, 2022 compared to (i) a decrease in the fair value of our holdings of 8,000,000 shares of Vendetta common stock to \$291,000 at September 30, 2022 compared to a fair value of \$303,000 at December 31, 2021, based on quoted market prices; (ii) a decrease in the fair value of \$302,000 at September 30, 2022 compared to a fair value of \$303,000 at December 31, 2021, based on quoted market prices; (ii) a decrease in the fair value of \$376,000 at September 30, 2022 compared to a fair value of \$376,000 at September 30, 2022 compared to a fair value of \$376,000 at September 30, 2022 compared to a fair value of \$376,000 at September 30, 2022 compared to a fair value of \$303,000 at December 31, 2021, based on quoted market prices; (ii) a decrease in the fair value of \$376,000 at September 30, 2022 compared to a fair value of \$376,000 at September 30, 2022 compared to a fair value of \$376,000 at S

We recorded interest and dividend income of \$88,000 during the nine months ended September 30, 2023 compared to interest and dividend income of \$97,000 during the nine months ended September 30, 2022. The reduction in interest income was primarily related to a reduction in our average outstanding balance of short-term investment during the nine months ended September 30, 2023, which was partially offset by an increase in the average interest rate and income earned on our short-term investments during the nine months ended September 30, 2023 compared to the average interest rate during the nine months ended September 30, 2022. We anticipate our interest income will increase in 2023 compared to 2022 as a result of the sale of common stock in private placements in the third and fourth quarters of 2023, as discussed in Note 11, "Shareholders' Equity," above. We anticipate we will use a portion of our short-term investments and our cash balances for ordinary overhead, operational costs, and the exploration, evaluation and or acquisition of mineral properties discussed above. See "Liquidity and Capital Resources" below for further discussion of our cash and cash equivalent balances.

We recorded a non-cash unrealized gain on our short-term investments of \$49,000 during the nine months ended September 30, 2023 compared to an unrealized loss on our short-term investments of \$120,000 during the nine months ended September 30, 2022. The unrealized gain during 2023 was primarily due to certain of our USTS increasing in value as they approached maturity. Our USTS are recorded at fair values which may be above or below the face value of the USTS depending on the current interest rates that may be below or above the stated interest rate on a USTS. These non-cash changes in the mark-to-market amount for these securities does not affect the yield-to-maturity rates of our USTS at the time the USTS were acquired to the extent the USTS are held to maturity.

We did not sell any marketable equity securities during the nine months ended September 30, 2023. During the nine months ended September 30, 2022, we sold 1,000,000 shares of our holdings of Vendetta common stock for proceeds of \$53,000 and recorded a loss on sale of marketable equity securities of \$159,000. See Note 3, "Marketable Equity Securities" to the condensed consolidated financial statements for a discussion of the sale of marketable equity securities.

During the nine months ended September 30, 2023, we recorded a non-cash gain on derivative instruments of \$30,000 related to certain Kinross calls we sold during the nine months ended September 30, 2023. During the nine months ended September 30, 2022, we recorded a non-cash loss of \$4,000 on certain warrants related to our holdings of Vendetta common stock.

(c) Liquidity and Capital Resources

Cash and Short-term Investments

As of September 30, 2023, we have \$4,132,000 in cash and short-term investments. As of September 30, 2023, we have \$1,391,000 of our current assets in USTS with naturities of 30 days to 5 months. In addition, we have \$2,573,000 invested in a money market account with a brokerage firm. The USTS are recorded at their fair value based upon quoted market prices. We anticipate we will roll over that portion of our short-term investments not used for exploration expenditures, operating costs or mineral property acquisitions as they become due during the remainder of 2023. We intend to utilize a portion of our cash and short-term investments in our exploration activities and the potential acquisition of mineral assets over the next several years.

Investment in Marketable Equity Securities

Our marketable equity securities are carried at fair value, which is based upon market quotes of the underlying securities. At September 30, 2023, we own 7,750,000 shares of Vendetta common stock, 100,000 shares of Kinross common stock, 134,055 shares of Vox common stock and 200,000 shares of Highlander Silver Corp. common stock. At September 30, 2023, the Vendetta shares are recorded at their fair value of \$172,000, the Kinross shares are recorded at their fair value of \$456,000; the Vox shares are recorded at their fair value of \$271,000 and the Highlander Silver Corp. shares are recorded at their fair value of \$11,000. We did not sell any of our marketable equity securities during the nine months ended September 30, 2023. During the nine months ended September 30, 2022 we sold 1,000,000 shares of Vendetta common stock, as discussed above. See Note 3, "Marketable Equity Securities" in the condensed consolidated financial statements. We anticipate we may sell some portion of our holdings of marketable equity securities during the remainder of 2023 depending on cash needs and market conditions.

Working Capital

We had working capital of \$4,952,000 at September 30, 2023 compared to working capital of \$4,991,000 as of December 31, 2022. Our working capital at September 30, 2023 consists primarily of our cash and cash equivalents, our investment in short-term investments, discussed above, our investment in marketable equity securities of \$910,000, and other current assets of \$237,000, less our accounts payable of \$295,000 and other current liabilities of \$32,000. As of September 30, 2023, our cash balances along with our short-term investments and marketable equity securities are adequate to fund our expected expenditures over the next year.



The nature of the mineral exploration business requires significant sources of capital to fund exploration, development and operation of mining projects. We will need additional capital if we decide to develop or operate any of our current exploration projects or any projects or assets we may acquire. We anticipate we would finance any such development through the use of our cash reserves, short-term investments, joint ventures, issuance of debt or equity, or the sale of our interests in other exploration projects or assets.

Stock-Based Compensation Plans

As of September 30, 2023 and December 31, 2022, there were options outstanding from the 2013 Plan to acquire 5,195,000 and 5,390,000 shares, respectively, of Solitario common stock. The outstanding options have exercise prices between \$0.60 per share and \$0.20 per share. During the nine months ended September 30, 2023, options for 195,000 shares were exercised with exercise prices between \$0.28 and \$0.31 per share for proceeds of \$59,000. During the nine months ended September 30, 2022, options for 81,750 shares were exercised with an average exercise price of \$0.25 per share for proceeds of \$20,000. We do not anticipate the exercise of options to be a significant source of cash flow during the remainder of 2023.

At the Market Offering Agreement

On February 2, 2021, we entered into the ATM Agreement with Wainwright, under which we may, from time to time, issue and sell shares of our common stock through Wainwright as sales manager in an at-the-market offering under a prospectus supplement for aggregate sales proceeds of up to \$9.0 million. There were no sales of shares of common stock under the ATM program during the nine months ended September 30, 2023. During the nine months ended September 30, 2022, we sold an aggregate of 2,650,724 shares of common stock under the ATM Program at an average price of \$0.76 per share of common stock for net proceeds after commissions and expenses of approximately \$2,023,000. Solitario may sell additional shares under the ATM program during the remainder of 2023 if market conditions warrant such sales.

(d) Cash Flows

Net cash used in operations during the nine months ended September 30, 2023 increased to \$2,684,000 compared to \$1,948,000 of net cash used in operations for the nine months ended September 30, 2022 primarily as a result of (i) the pre-payment of \$350,000 during the second quarter of 2023 to our joint venture partner Teck for an advance on the planned 2023 exploration program at the Lik project in Alaska, of which \$193,000 remained in pre-paid expense at September 30, 2023 and is included in the changes in prepaid expenses and other current assets as a use of cash; (ii) an increase in non-stock option general and administrative expense to \$889,000 during the nine months ended September 30, 2023 compared to \$828,000 during the nine months ended September 30, 2023 compared to \$828,000 during the nine months ended September 30, 2023 compared to \$828,000 during the nine months ended September 30, 2023 compared to \$828,000 during the nine months ended September 30, 2022; and (iv) the provision of cash from changes in prepaid expenses and other current assets of \$266,000 during the nine months ended September 30, 2022; and (iv) the provision of cash of \$34,000 from an increase in accounts payable and other current liabilities during the nine months ended September 30, 2022 as a result of in exploration expense to \$1,748,000 during the nine months ended September 30, 2023 compared to exploration expense of \$1,832,000 during the nine months ended September 30, 2023 compared to in exploration expense to \$1,748,000 during the nine months ended September 30, 2023; and dividend income of \$97,000 during the nine months ended September 30, 2023, primarily for exploration related to our Golden Crest and Lik projects and reconnaissance exploration. See "Results of Operations through the remainder of 2023, primarily for exploration related to our Golden Crest and Lik projects and reconnaissance exploration. See "Results of Operations" discussed above for further explanation of some of these variances.

During the nine months ended September 30, 2023, we provided \$36,000 of cash from the net sale of short-term investments compared to the provision of \$69,000 in cash during the nine months ended September 30, 2022 from the net sales of short-term investments. The change during 2023 was primarily due to the offsetting effects of our cash exploration and general and administrative expenditures and the provision of cash from the sale of securities in the private placement to Newmont, discussed above in Note 11, "Shareholders' Equity." During the nine months ended September 30, 2023, we acquired equipment and other assets used in our exploration activities of \$12,000 compared to \$49,000 of equipment acquired during the nine months ended September 30, 2022. We received cash proceeds of \$31,000 from the sale of Kinross calls during the nine months ended September 30, 2023 with no similar sales during the nine months ended September 30, 2022. During the nine months ended September 30, 2022, we sold certain marketable equity securities for proceeds of \$53,000, with no similar sales during the nine months ended September 30, 2022 with no similar sales during the nine months ended September 30, 2022, we sold certain marketable equity securities for proceeds of \$53,000, with no similar sales during the nine months ended September 30, 2022 with no similar sales during the nine months ended September 30, 2022. We also used \$386,000 of our cash to acquire additional mineral claims at our Golden Crest project during the nine months ended September 30, 2023. We also used \$386,000 of our cash to acquire additional mineral claims at our Golden Crest project during the remainder of 2023; however, we do not anticipate the sale of marketable equity securities will be a significant source of cash during the remainder of 2023. We will continue to liquidate a portion of our short-term investments as needed to fund our operations and our potential mineral property acquisitions during the remainder of 2023. Any potential mineral propert

During the nine months ended September 30, 2023, we received net proceeds of \$2,422,000 from a private placement to Newmont, discussed above. During the nine months ended September 30, 2022, we received net proceeds of \$2,023,000 from the issuance of common stock under the ATM Program, discussed above. In addition, during the nine months ended September 30, 2023 and 2022 we received \$59,000 and \$20,000, respectively, from the issuance of common stock from the exercise of stock options, discussed above in Note 10, "Employee Stock Compensation Plans," to the condensed consolidated financial statements.

(e) Mineral Resources

CAUTIONARY NOTE REGARDING DISCLOSURE OF MINERAL PROPERTIES

Mineral Reserves and Resources

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "1934 Act"), and applicable Canadian securities laws, and as a result we report our mineral resources according to two different standards. U.S. reporting requirements, are governed by Item 1300 of Regulation S-K ("S-K 1300") issued by the SEC. Canadian reporting requirements for disclosure of mineral properties are governed by National Instrument 43-101 Standards of Disclosure for Mineral Projects adopted from the definitions provided by the Canadian Institute of Mining, Metallurgy and Petroleum. Both sets of reporting standards have similar goals in terms of conveying an appropriate level of confidence in the disclosures being reported, but the standards generally embody slightly different approaches and definitions.

In our public filings in the U.S. and Canada and in certain other announcements not filed with the SEC, we disclose measured, indicated and inferred resources, each as defined in S-K 1300. The estimation of measured resources and indicated resources involve greater uncertainty as to their existence and economic feasibility than the estimation of proven and probable reserves, and therefore investors are cautioned not to assume that all or any part of measured or indicated resources will ever be converted into S-K 1300-compliant reserves. The estimation of inferred resources involves far greater uncertainty as to their existence and economic viability than the estimation of other categories of resources, and therefore it cannot be assumed that all or any part of inferred resources will ever be upgraded to a higher category. Therefore, investors are cautioned not to assume that all or any part of inferred resources exist, or that they can be mined legally or economically.

(f) Off-balance sheet arrangements

As of September 30, 2023 and December 31, 2022, we had no off-balance sheet obligations.

(g) Development Activities, Exploration Activities, Environmental Compliance and Contractual Obligations

We are not involved in any development activities, nor do we have any contractual obligations related to any potential development activities as of September 30, 2023. As of September 30, 2023, there have been no material changes to our contractual obligations for exploration activities, environmental compliance or other obligations from those disclosed in our Management's Discussion and Analysis included in our 2022 Annual Report.

(h) Discontinued Projects

We did not record any mineral property write-downs during the three and nine months ended September 30, 2023 and 2022.

(i) Significant Accounting Policies and Critical Accounting Estimates

See Note 1 to the consolidated Financial Statements included in our Annual Report for a discussion of our significant accounting policies.

Solitario's valuation of mineral properties is a critical accounting estimate. We review and evaluate our mineral properties for impairment when events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Significant negative industry or economic trends, adverse social or political developments, geologic results, geo-technical difficulties, or other disruptions to our business are a few examples of events that we monitor, as they could indicate that the carrying value of the mineral properties may not be recoverable. In such cases, a recoverability test may be necessary to determine if an impairment charge is required. There has been no change to our assumptions, estimates or calculations during the three and nine months ended September 30, 2023.

(j) Related Party Transactions

As of September 30, 2023, and for the three and nine months ended September 30, 2023, we have no related party transactions or balances.

(k) Recent Accounting Pronouncements

No recent accounting pronouncements are applicable to Solitario at this time..

(I) Forward Looking Statements

This Form 10-Q contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the 1934 Act, with respect to our financial condition, results of operations, business prospects, plans, objectives, goals, strategies, future events, capital expenditures, and exploration and development efforts. Words such as "anticipates," "expects," "intends," "forecasts," "plans," "believes," "seeks," "estimates," "may," "will," and similar expressions identify forward-looking statements. These forward-looking statements are based on our current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. When considering forward-looking statements, you should keep in mind the risk factors and other cautionary statements described herein and the risk factors included under the heading "Risk Factors" in Item 1A of our 2022 Annual Report to which there have been no material changes. These forward-looking statements appear in a number of places in this report and include statements with respect to, among other things:

- Our estimates of the value and recovery of our short-term investments;
- Our estimates of future exploration, development, general and administrative and other costs;
- Our ability to realize a return on our investment in the Lik and Golden Crest projects;
- Our ability to successfully identify and execute on transactions to acquire new mineral exploration properties and other related assets;
- Our ability to secure financing in the credit or capital markets in amounts and on terms that will allow us to execute our business strategy, invest in new projects, and maintain adequate liquidity;



- Our estimates of fair value of our investment in shares of Vendetta, Vox and Kinross;
- Our expectations regarding development and exploration of our properties including those subject to joint venture and shareholder agreements;
- The impact of political and regulatory developments;
- The impact of technological changes, system failures, or breaches of our network security as well as other cyber security risks that could subject us to increased operating costs, litigation and other liabilities:
- The effects of volatile economic conditions, including financial market volatility, inflation, rising interest rates, and labor and supply shortages;
- Our future financial condition or results of operations and our future revenues and expenses;
- Our business strategy and other plans and objectives for future operations; and
- Risks related to natural disasters or adverse external events such as endemics or pandemics.

Although we have attempted to identify important factors that could cause actual results to differ materially from those described in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that these statements will prove to be accurate as actual results and future events could differ materially from those anticipated in the statements. Except as required by law, we assume no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Smaller Reporting Companies are not required to provide the information required by this item.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

As required by Rule 13a-15 under the 1934 Act, as of September 30, 2023, we carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures. This evaluation was carried out under the supervision and with the participation of our Chief Executive Officer (our principal executive officer) and our Chief Financial Officer (our principal financial officer). Based upon and as of the date of that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2023.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the 1934 Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed under the 1934 Act is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) promulgated under the 1934 Act) during the quarter ended September 30, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

None..

Item 1A. Risk Factors

As of September 30, 2023, there were no material changes to the Risk Factors associated with our business disclosed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2022.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Any unregistered sales of equity securities effected during the quarter ended September 30, 2023 were previously reported on a Current Report on Form 8-K.

Item 3. Defaults upon Senior Securities

None

Item 4. Mine Safety Disclosures

None

Item 5. Other Information

During the quarter ended September 30, 2023, none of the Company's directors or officers adopted, modified, or terminated a "Rule 10b5-1 trading arrangement" or a "non-Rule 10b5-1 trading arrangement," as those terms are defined in Item 408(a) of Regulation S-K

Item 6. Exhibits

The Exhibits to this report are listed in the Exhibit Index.

SIGNATURES

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

SOLITARIO RESOURCES CORP.

November 7, 2022 Date By: /s/ James R. Maronick James R. Maronick Chief Financial Officer

EXHIBIT INDEX

<u>3.1</u>	Amended and Restated Articles of Incorporation of Solitario Exploration & Royalty Corp., as Amended (incorporated by reference to Exhibit 3.1 to Solitario's Form 10-Q filed on August 10, 2010)
<u>3.1.1</u>	Articles of Amendment to Restated Articles of Incorporation of Solitario Zinc Corp. (incorporated by reference to Exhibit 3.1 to Solitario's Current Report on Form 8-K filed on July 14, 2017)
<u>3.1.1</u>	Articles of Amendment to Restated Articles of Incorporation of Solitario Resources Corp. (incorporated by reference to Exhibit 3.1 to Solitario's Current Report on Form 8-K filed on July 19, 2023)
<u>3.2</u>	Amended and Restated By-laws of Solitario Resources Corp. (incorporated by reference to Exhibit 3.1 to Solitario's Form 8-K filed on April 23, 2021)
<u>10.1</u>	Purchase Agreement by and between Solitario Resources Corp. and Newmont Overseas Exploration Ltd. (incorporated by reference to Exhibit 10.1 to Solitario's Form 8-K filed on August 2, 2023)
<u>10.2</u>	Investor Rights Agreement by and between Solitario Resources Corp. and Newmont Overseas Exploration Ltd. dated July 31, 2023 (incorporated by reference to Exhibit 10.2 to Solitario's Form8-K filed on August 2, 2023)
<u>31.1*</u>	Certification of Chief Executive Officer pursuant to SEC Rule 13a-14(a)/15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
<u>31.2*</u>	Certification of Chief Financial Officer pursuant to SEC Rule 13a-14(a)/15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
<u>32.1*</u>	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101*	The following condensed consolidated financial statements, formatted in XBRL: (i) Condensed Consolidated Balance Sheets as of September 30, 2023 and December 31, 2022, (ii) Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2023 and 2022, (iii) Condensed Consolidated Statements of Cash Flows for the three and nine months ended September 30, 2023 and 2022; and (iv) Notes to the Condensed Consolidated Financial Statements, tagged as blocks of text.
104*	Cover Page Interactive Data File (included in Exhibit 101)
*	Filed herewith

CERTIFICATIONS

I, Christopher E. Herald, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Solitario Zinc Corp. for the three and nine months ended September 30, 2023.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) and we have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2023 By: /s/ Christopher E. Herald Christopher E. Herald President and Chief Executive Officer

CERTIFICATIONS

I, James R. Maronick, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Solitario Zinc Corp. for the three and nine months ended September 30, 2023.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) and we have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2023 By: /s/ James R. Maronick James R. Maronick Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Solitario Zinc Corp. (the "Company") on Form 10-Q for the period ended September 30, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Christopher E. herald, Chief Executive Officer, and James R. Maronick, Chief Financial Officer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to our knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934.

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/Christopher E. Herald Christopher E. Herald

Chief Executive Officer

Dated: November 7, 2023

/s/James R. Maronick James R. Maronick Chief Financial Officer

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