UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)
[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **June 30, 2022**
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 ZINC CORP.

(Exact name of registrant as specified in its charter)

Colorado	**84-1285791**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.**
4251 Kipling St. Suite 390, Wheat Ridge, CO	**80033**
(Address of principal executive offices)	**(Zip Code)**
(303) 534-1030	
(Registrant's telephone number, including area code)	

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Each Exchange on Which Registered
Common Stock, $0.01 par value	XPL	NYSE American

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 ☒ NO ☐

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).

YES ☒ NO ☐

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 filer ☐	Accelerated filer ☐	Non-accelerated filer ☒	Smaller reporting company ☒	Emerging Growth Company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
YES ☐ NO ☒

There were 64,768,873shares of $0.01 par value common stock outstanding as of August 10, 2022.

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

SOLITARIO ZINC CORP.
CONDENSED CONSOLIDATED BALANCE SHEETS
(unaudited)

(in thousands of U.S. dollars, except share and per share amounts)	June 30, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 346	$ 462
Short-term investments	5,870	5,087
Investments in marketable equity securities, at fair value	940	1,307
Prepaid expenses and other	81	303
Total current assets	7,237	7,159
Mineral properties	16,316	16,306
Other assets	165	154
Total assets	$23,718	$23,619
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$490	$239
Operating lease liability	42	37
Total current liabilities	532	276
Long-term liabilities		
Asset retirement obligation – Lik	125	125
Operating lease liability	14	35
Total long-term liabilities	139	160
Commitments and contingencies		
Equity:		
Shareholders' equity:		
Preferred stock, $0.01 par value, authorized 10,000,000 shares (none issued and outstanding at June 30, 2022 and December 31, 2021)	-	-
Common stock, $0.01 par value, authorized 100,000,000 shares (64,768,873 and 62,036,399 shares, respectively, issued and outstanding at June 30, 2022 and December 31, 2021)	648	620
Additional paid-in capital	74,564	72,523
Accumulated deficit	(52,165)	(49,960)
Total shareholders' equity	23,047	23,183
Total liabilities and shareholders' equity	$23,718	$23,619

See Notes to Unaudited Condensed Consolidated Financial Statements

SOLITARIO ZINC CORP.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

(in thousands of U.S. dollars, except per share amounts)	Three months ended June 30		Six months ended June 30	
	2022	2021	2022	2021
Costs, expenses and other:				
Exploration expense	$ 951	$ 237	$ 1,177	$ 384
Depreciation	8	7	16	12
General and administrative	277	256	664	536
Total costs, expenses and other	1,236	500	1,857	932
Other (loss) income				
Interest income	41	36	68	66
Other income	-	-	-	10
Loss on derivative instruments	(3)	(30)	(4)	(33)
Unrealized loss on short-term investments	(47)	(32)	(98)	(56)
(Loss) gain on sale of marketable equity securities	(78)	6	(159)	19
Unrealized loss on marketable equity securities	(368)	(148)	(155)	(270)
Total other (loss) income	(455)	(168)	(348)	(264)
Net (loss) income	$(1,691)	$(668)	$(2,205)	$(1,196)
(Loss) income per common share:				
Basic and diluted	$(0.03)	$(0.01)	$(0.03)	$(0.02)
Weighted average shares outstanding:				
Basic and diluted	64,769	58,431	63,748	58,342

See Notes to Unaudited Condensed Consolidated Financial Statements

SOLITARIO ZINC CORP.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

(in thousands of U.S. dollars)	Six months ended June 30, 2022	2021
Operating activities:		
Net loss	$(2,205)	$(1,196)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	16	12
Amortization of right of use lease asset	20	20
Unrealized loss on marketable equity securities	155	270
Unrealized loss on short-term investments	98	56
Employee stock option expense	26	72
(Loss) gain on sale of marketable equity securities	159	(19)
Other income	-	(10)
Loss on derivative instruments	3	33
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	222	5
Accounts payable and other liabilities	234	27
Net cash used in operating activities	(1,272)	(730)
Investing activities:		
(Purchase) sale of short-term investments, net	(881)	493
Purchase of mineral property	(10)	(201)
Purchase of other assets - net	(49)	(39)
Cash from sale of marketable equity securities	53	88
Sale of derivative instruments – net	-	8
Net cash (used in) provided by investing activities	(887)	349
Financing activities:		
Issuance of common stock – net of acquisition costs	2,023	98
Stock options exercised for cash	20	83
Net cash provided by financing activities	2,043	181
Net decrease in cash and cash equivalents	(116)	(200)
Cash and cash equivalents, beginning of period	462	605
Cash and cash equivalents, end of period	$ 346	$ 405
Supplemental Cash Flow information:		
Accrued mineral property acquisition costs included in accounts payable	$ -	$173
Accrued common stock acquisition costs included in accounts payable	$ -	$ 65
Acquisition of right to use asset	$ -	$ 99

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 Zinc 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 ("Crown"). 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. 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 that point, or sometime prior to that point, Solitario would likely attempt to sell its mineral properties, pursue their development either on its own or through a joint venture with a partner that has expertise in mining operations, or create a royalty with a third party that continues to advance the 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 the evaluation of mineral properties for acquisition, Solitario also evaluates potential strategic transactions for the acquisition of new precious and base metal 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 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 project in Peru, its interest in the Lik project in Alaska, and its Golden Crest project in South Dakota 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 deposit, 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 its 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 and six months ended June 30, 2022 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, 2022.

These financial statements should be read in conjunction with the financial statements and notes thereto which are included in Solitario’s Annual Report on Form 10-K for the year ended December 31, 2021. The accounting policies set forth in those annual financial statements are the same as the accounting policies utilized in the preparation of these financial statements, except as modified for appropriate interim financial statement presentation.

Risks and Uncertainties

Solitario faces risks related to health epidemics and other outbreaks of communicable diseases, which could significantly disrupt its operations and may materially and adversely affect its business and financial condition.

Solitario's business still could be adversely impacted by the effects of the coronavirus ("COVID-19") or other epidemics or pandemics. Solitario has recommended all of its employees and contractors follow government guidelines for health and safety policies for employees and contractors, including encouraging tele-commuting and working from home where possible. Solitario has evaluated the effects of COVID-19 on its operations and taken pro-active steps to address the impacts on its operations, including at times reducing costs, in response to the economic uncertainty associated with potential risks from COVID-19. These prior cost reductions included implementing salary reductions and evaluating and reducing certain planned 2021 exploration programs through its joint venture partners at the Florida Canyon and Lik exploration projects. Also, Solitairo has evaluated the potential impacts on its ability to access future traditional funding sources on the same or reasonably similar terms as in past periods. Solitario will continue to monitor the effects of COVID-19 on its operations, financial condition and liquidity. However, the extent to which COVID-19 impacts Solitario's business, including our exploration and other activities and the market for our securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time, and include the duration, severity and scope of any new outbreak and the actions taken to contain or treat the COVID-19 pandemic.

Financial reporting

The 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 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 June 30, 2022, $267,000 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 June 30, 2022, Solitario has $5,622,000 of its current assets in United States Treasury Securities ("USTS") with maturities of 15 days to 18 months. In addition, at June 30, 2022, Solitario has one bank certificate of deposit ("CD") with a face value of $250,000 recorded at its fair value of $248,000. The CD has a maturity of six months. The USTS and CD 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 and CD 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.

Financial statement classification

Solitario separately shows its classification of changes in the fair value of its short-term investment in USTS and CDs as unrealized gain or loss on short-term investments in the statement of operations rather than a portion of interest and dividend income (net). During the three and six months ended June 30, 2022 the non-cash decrease in the fair value of Solitario's short-term investments, due primarily to changes in interest rates on held securities, was $47,000 and $98,000, respectively. During the three and six months ended June 30, 2021 the non-cash decrease in the fair value of its short-term investments, due primarily to changes in interest rates on held securities, was $32,000 and $56,000, respectively. The 2021 income statement and cash flows have been reclassified for comparability to the 2022 presentation. Total other income (expense) and net cash used in operations in 2021 was not impacted by the reclassification.

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 six months ended June 30, 2022 and 2021. Potentially dilutive shares related to outstanding common stock options of 5,431,250 and 5,513,000, respectively, for the six months ended June 30, 2022 and 2021 were excluded from the calculation of diluted loss per share because the effects were anti-dilutive.

2. Mineral Properties

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

(in thousands)	June 30, 2022	December 31, 2021
Exploration		
Lik project (Alaska – US)	$15,611	$15,611
Golden Crest (South Dakota – US)	705	695
Total exploration mineral properties	$16,316	$16,306

All exploration costs on our exploration properties, none of which have proven and probable reserves, including any additional costs incurred for subsequent lease payments or exploration activities related to our projects, are expensed as incurred.

Exploration expense

The following items comprised exploration expense:

(in thousands)	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Geologic and field expenses	$814	$213	$1,008	$338
Administrative	137	24	169	46
Total exploration costs	$951	$237	$1,177	$384

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% 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 market value are recorded in the condensed consolidated statement of operations.

At June 30, 2022 and December 31, 2021 Solitario owns the following marketable equity securities:

	June 30 2022		December 31 2021	
	shares	Fair value (000's)	Shares	Fair value (000's)
Kinross Gold Corp	100,000	$358	100,000	$581

Vendetta Mining Corp.	8,000,000	279	9,000,000	356
Vox Royalty Corp.	134,055	303	134,055	370
Total		$940		$1,307

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

(in thousands)	June 30, 2022	December 31, 2021
Marketable equity securities at cost	$1,492	$1,704
Cumulative unrealized loss on marketable equity securities	(552)	(397)
Marketable equity securities at fair value	$940	$1,307

The following table represents changes in marketable equity securities:

(in thousands)	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Cost of marketable equity securities sold	$ 105	$ 4	$ 212	$ 69
Realized (loss) gain on marketable equity securities sold	(78)	6	(159)	19
Proceeds from the sale of marketable equity securities sold	(27)	(10)	(53)	(88)
Net loss on marketable equity securities	(446)	(142)	(314)	(251)
Change in marketable equity securities at fair value	$(473)	$(152)	$(367)	$(339)

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

(in thousands)	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Unrealized (loss) gain on marketable securities	$(368)	$(148)	$(155)	$(270)
Realized (loss) gain on marketable equity securities sold	(78)	6	(159)	19
Net loss on marketable securities	$(446)	$(142)	$(314)	$(251)

During the three months ended June 30, 2022, Solitario sold 500,000 shares of Vendetta Mining Corp. ("Vendetta") common stock for proceeds of $27,000 and recorded a loss on sale of $78,000 on the date of sale. During the six months ended June 30, 2022, Solitario sold 1,000,000 shares of Vendetta common stock for proceeds of $53,000 and recorded a loss on sale of $159,000 on the date of sale.

During the three months ended June 30, 2021, Solitario sold 143,000 shares of TNR Gold Corp ("TNR"). common stock for proceeds of $10,000 and recorded a gain on sale of $6,000. During the six months ended June 30, 2021, Solitario sold (i) 1,010,000 shares of Vendetta common stock for proceeds of $51,000 and recorded a loss on sale of $2,000; (ii) 430,000 shares of TNR. common stock for proceeds of $28,000 and recorded a gain on sale of $19,000 and (iii) 3,200 shares of Vox Royalty Corp. ("Vox") for proceeds of $9,000 and recorded a gain on sale of $2,000.

4. Leases

Solitario accounts for its leases in accordance with ASC 842. 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 six months ended June 30, 2021, Solitario entered into a new lease for the same facility (both the prior lease and new lease are referred to as the "WR Lease") and recorded a net increase in the related asset and liability of $99,000. The WR Lease is classified as an operating lease and has a term of 14 months at June 30, 2022, with no renewal option. At June 30, 2022 and December 31, 2021, 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 on a straight-line basis over the lease term, with variable lease payments recognized in the period those payments are incurred.

During the three and six months ended June 30, 2022, cash lease payments of $8,000 and $18,000, respectively, were made on the WR Lease. During the three and six months ended June 30, 2021, cash lease payments of $10,000 and $17,000, respectively, were made on the WR Lease. During the three and six months ended June 30, 2022, Solitario recognized $10,000 and $20,000, 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 six months ended June 30, 2021, Solitario recognized $10,000 and $20,000, 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 5% based upon Solitario's estimate of its cost of capital.

The maturities of Solitario's lease liability for its WR Lease are as follows at June 30, 2022:

Future lease payments (in thousands)	
2022	$22
2023	36
Total lease payments	58
Less amount of payments representing interest	(2)
Present value of lease payments	$56

Supplemental cash flow information related to our operating lease was as follows for the three and six months ended June 30, 2022 and 2021:

(in thousands)	Three months ended June 30,		Six months ended June 30,	
	2022	2021	2022	2021
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash outflows from the WR Lease payments	$ 8	$ 10	$ 18	$ 17
Non-cash amounts related to the WR lease				
Leased assets recorded in exchange for new operating lease liabilities	$ -	$ -	$ 99	$ 99

5 Other Assets

The following items comprised other assets:

(in thousands)	June 30, 2022	December 31, 2021
Furniture and fixtures, net of accumulated depreciation	$109	$ 65
Lik project equipment, net of accumulated depreciation	-	10
Office lease asset	52	72
Vendetta warrants	-	3
Exploration bonds and other assets	4	4
Total other	$165	$154

6. Derivative Instruments

Vendetta Warrants

On July 31, 2019, Solitario purchased 3,450,000 Vendetta units for a total of $233,000. Each Vendetta unit consisted of one share of Vendetta common stock and one Vendetta warrant (the "Vendetta Warrants"). Each Vendetta Warrant entitles the holder to purchase one additional share of Vendetta common stock for a purchase price of Cdn$0.13 per share for a period of three years. On the purchase date Solitario recorded marketable equity securities of $165,000 for the Vendetta shares acquired and $68,000 for the Vendetta Warrants based upon an allocation of the purchase price of the Vendetta units, determined by (i) the fair value of the Vendetta common shares received based upon the quoted market price for Vendetta common shares. and (ii) the fair value of Vendetta Warrants based upon a Black Scholes model. During the three and six months ended June 30, 2022, Solitario charged loss on derivative instruments of $3,000 and $4,000, respectively, for the change in the fair value of the Vendetta Warrants based on a Black Scholes model. During the three and six months ended June 30, 2021, Solitario charged loss on derivative instruments of $37,000 and $40,000, respectively, for the change in the fair value of the Vendetta Warrants based on a Black Scholes model.

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. Solitario did not sell any covered calls during the three and six months ended June 30, 2022. During the three months ended June 30, 2021, Solitario sold covered calls against its holdings of Kinross for cash proceeds of $8,000 and recorded a gain on derivative instruments related to those covered calls of $7,000.

7. Fair Value

Solitario accounts for its financial instruments under ASC 820 *Fair Value Measurement*. During the six months ended June 30, 2022, 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 June 30, 2022:

(in thousands)	Level 1	Level 2	Level 3	Total
Assets				
Short-term investments	$5,870	$ -	$ -	$5,870
Marketable equity securities	$ 940	$ -	$ -	$ 940

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, 2021:

(in thousands)	Level 1	Level 2	Level 3	Total
Assets				
Short-term investments	$5,087	$ -	$ -	$5,087
Marketable equity securities	$1,307	$ -	$ -	$1,307
Vendetta Warrants	$ -	$ 3	$ -	$ 3

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 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 tax assets will not be realized.

At both June 30, 2022 and December 31, 2021, 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 six months ended June 30, 2022 and 2021, 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 June 30, 2022 of $58,000 through October of 2023.

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"). 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. Awards granted under the 2013 Plan 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 2013 Plan and are granted by the Board of Directors of the Company (the "Board of Directors") or a committee appointed by the Board of Directors.

As of June 30, 2022, and December 31, 2021 there were options outstanding that are exercisable to acquire 5,431,250 and 5,513,000, respectively, shares of Solitario common stock, with exercise prices between $0.20 and $0.77 per share.

During the three and six months ended June 30, 2022, Solitario did not grant any options. During the three months ended June 30, 2022, options for 8,750 shares were exercised with an average exercise price of $0.20 per share for proceeds of $2,000. During the six months ended June 30, 2022, options for 81,750 shares were exercised with an average exercise price of $0.25 per share for proceeds of $20,000.

During the three and six months ended June 30, 2021, Solitario granted 140,000 options with an average exercise price of $0.68 per share, a five-year term and a grant date fair value of $58,000 based upon a Black-Scholes model, with a 76% volatility and a 0.9% risk-free interest rate. During the three and six months ended June 30, 2021, options for 64,750 and 185,000 shares, respectively, were exercised with an average exercise price of $0.25 and $0.45 per share, respectively, for proceeds of $16,000 and $83,000, respectively.

During the three and six months ended June 30, 2022, Solitario recorded stock option compensation expense of $13,000 and $26,000, respectively. During the three and six months ended June 30, 2021, Solitario recorded stock option compensation expense of $44,000 and $72,000, respectively. At June 30, 2022, the total unrecognized stock option compensation cost related to non-vested options was $54,000 and is expected to be recognized over a weighted average period of 16 months.

11. Shareholders' Equity

Shareholders' Equity for the six months ended June 30, 2022:

(in thousands, except Share amounts)	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity
Balance at December 31, 2021	**62,036,399**	**$620**	**$72,523**	**$(49,960)**	**$23,183**
Stock option expense	-	-	26	-	26
Issuance of shares – ATM, net	2,650,724	27	1,996	-	2,023
Issuance of shares - option exercises	81,750	1	19	-	20

Net loss	-	-	-	(2,205)	(2,205)
Balance at June 30, 2022	**64,768,873**	**$648**	**$74,564**	**$(52,165)**	**$23,047**

Shareholders' Equity for the six months ended June 30, 2021:

(in thousands, except Share amounts)	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Equity
Balance at December 31, 2020	**58,108,366**	**581**	**$70,514**	**$(47,593)**	**$23,502**
Stock option expense	-	-	72	-	72
Issuance of shares – ATM, net	150,400	2	31	-	33
Issuance of shares - option exercises	185,000	1	82	-	83
Net loss	-	-	-	(1,196)	(1,196)
Balance at June 30, 2021	**58,443,766**	**$584**	**$70,699**	**$(48,789)**	**$22,494**

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 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 at a commission rate of 3.0% of the gross sales price per share of common stock sold. During the six months ended June 30, 2021, Solitario recorded $144,000 as a charge to additional paid-in-capital for one-time expenses related to entering into the ATM Agreement.

During the six months ended June 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. During the six months ended June 30, 2021, Solitario sold an aggregate of 150,400 shares of common stock under the ATM Program at an average price of $1.21 per share for net proceeds of $177,000 after commissions and sale expenses.

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, 2021 and 2020, and Management's Discussion and Analysis of Financial Condition and Results of Operations contained in Solitario's Annual Report on Form 10-K for the year ended December 31, 2021. 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 metal, 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 June 30, 2022, 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 the United States on our own at Golden Crest and through joint ventures operated by our partners in Peru 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 June 30, 2022, 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.

As of June 30, 2022, we do not expect the effects of the COVID-19 pandemic to have a material effect on Solitario's planned activities related to the exploration of its Lik, Florida Canyon or Golden Crest projects. However, we continue to monitor planned activities for the full year 2022 at our Florida Canyon, Lik and Golden Crest projects. The extent to which the COVID-19 pandemic impacts our business, including our exploration and other activities and the market for our securities, will depend on future developments, which are highly uncertain and cannot be predicted at this time. Please see Item 1A, "Risk Factors," in our Annual Report on Form 10-K for the year ended December 31, 2021.

(b) Results of Operations

Comparison of the three months ended June 30, 2022 to the three months ended June 30, 2021

We had a net loss of $1,691,000 or $0.03 per basic and diluted share for the three months ended June 30, 2022 compared to a net loss of $668,000 or $0.01 per basic and diluted share for the three months ended June 30, 2021. As explained in more detail below, the primary reasons for the increase in our net loss in the three months ended June 30, 2022 compared to the net loss during the three months ended June 30, 2021 were (i) an increase in exploration expense to $951,000 in the three months ended June 30, 2022 compared to exploration expense of $237,000 during the three months ended June 30, 2021; (ii) an increase in general and administrative expense to $277,000 in the three months ended June 30, 2022 compared to general and administrative expense of $256,000 during the three months ended June 30, 2021; (iii) an increase in the unrealized loss on marketable equity securities to $368,000 during the three months ended June 30, 2022 compared to an unrealized loss on marketable equity securities of $148,000 during the three months ended June 30, 2021; (iv) an increase in the unrealized loss on short-term investments to $47,000 during the three months ended June 30, 2022 compared to an unrealized loss on short-term investments of $32,000 during the three months ended June 30, 2021; and (v) the recording of a loss on the sale of marketable equity securities of $78,000 during the three months ended June 30, 2022 compared to a gain on the sale of marketable equity securities of $6,000 during the three months ended June 30, 2021. Partially offsetting the above items were (i) an increase in interest income to $41,000 during the three months ended June 30, 2022 compared to interest income of $36,000 during the three months ended June 30, 2021; and (ii) a reduction in the loss on derivative instruments to $3,000 during the three months ended June 30, 2022 compared to a loss on derivative instruments of $30,000 during the three months ended June 30, 2021. Each of the major components of these items is discussed in more detail below.

Our net exploration expense increased to $951,000 during the three months ended June 30, 2022 compared to exploration expense of $237,000 during the three months ended June 30, 2021 as a result of (i) our exploration efforts at the Golden Crest project which resulted in $428,000 of direct exploration expenditures, including a comprehensive soil and rock sampling program on a portion of our claims that cover over 28,000 acres, and we performed a inductive polarization study at Golden Crest during the second quarter of 2022 which was reflected in the increased costs at Golden Crest during the three months ended June 30, 2022 compared to $113,000 of direct exploration expenditures at Golden Crest during the three months ended June 30, 2021; (ii) our share of exploration costs of $444,000 at our Lik project in Alaska (where we are responsible for one-half of the total costs incurred plus a 5% management fee) during the three months ended June 30, 2022 incurred by our joint venture partner, Teck, which included drilling expenditures, compared to our share of exploration expenditures of $82,000 during the three months ended June 30, 2021, when Teck was performing mapping and surface sampling at Lik; and (iii) reconnaissance exploration expenditures of $79,000, which included activities near our claims at Golden Crest and evaluation of other exploration projects for potential acquisition during the three months ended June 30, 2022 compared to reconnaissance exploration expenditures of $28,000 during the three months ended June 30, 2021. These increases in exploration expenditures were partially offset by a decrease in expenditures at our Florida Canyon project, where Nexa was responsible for all exploration costs during the three months ended June 30, 2022 compared to expenditures of $14,000 during the three months ended June 30, 2021, when we independently completed certain exploration activities at Florida Canyon. During the three and six months ended June 30, 2022 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 personnel spent a portion of their time on Golden Crest and reconnaissance exploration activities described above and related matters. We have budgeted approximately $2,350,000 for the full-year exploration expenditure for 2022, which includes approximately $1,723,000 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 2022 to be above the exploration expenditures for full-year 2021.

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

	Three months ended June 30,		Six months ended June 30,	
Project Name	2022	2021	2022	2021
Golden Crest	$428	$113	$555	$113
Lik	444	82	448	83
Florida Canyon	-	14	-	64
Gold Coin	-	-	-	9
Reconnaissance	79	28	174	115
Total exploration expense	$951	$237	$1,177	$384

General and administrative costs, excluding stock option compensation costs, discussed below, were $264,000 during the three months ended June 30, 2022 compared to $210,000 during the three months ended June 30, 2021. The major components of our general and administrative costs were (i) salaries and benefit expense of $99,000 during the three months ended June 30, 2022 compared to salary and benefit costs of $68,000 during the three months ended June 30, 2021; (ii) legal and accounting expenditures of $65,000 in the three months ended June 30, 2022 compared to $42,000 in the three months ended June 30, 2021; (iii) office rent and expenses of $32,000 during the three months ended June 30, 2022, compared to $24,000 during the three months ended June 30, 2021; and (iv) travel and shareholder relation costs of $68,000 during the three months ended June 30, 2022 compared to $76,000 during the three months ended June 30, 2021. We anticipate the full-year general and administrative costs will be higher for 2022 compared to 2021.

We recorded $13,000 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 June 30, 2022 compared to $44,000 of stock option compensation expense during the three months ended June 30, 2021. These non-cash charges related to the expense for vesting on stock options outstanding during the three months ended June 30, 2022 and 2021. The primary reason for the decrease in stock option compensation expense during the three months ended June 30, 2022 compared to the three months ended June 30, 2021 was as a result of certain options previously granted becoming fully vested during 2021 and 2022, which reduced the amortization of grant date fair value expense during the three months ended June 30, 2022 compared to the same period of 2021. 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 $368,000 during the three months ended June 30, 2022 compared to an unrealized loss on marketable equity securities of $148,000 during the three months ended June 30, 2021. The non-cash unrealized loss during the three months ended June 30, 2022 was primarily related to (i) a decrease in the value of our holdings of 100,000 shares of Kinross common stock, which decreased to a fair value of $358,000 at June 30, 2022 from a fair value of $588,000 at March 31, 2022 or a decrease of $230,000 based on quoted market prices; and (ii) a decrease in the value of our 8,000,000 shares of Vendetta common stock, which decreased to a fair value of $279,000 at June 30, 2022 from a fair value of $416,000 at March 31, 2022 or a decrease of $137,000, based on quoted market prices. The unrealized loss during the three months ended June 30, 2021 was primarily related to (i) a decrease in the value of our holdings of 100,000 shares of Kinross common stock, which decreased to a fair value of $635,000 at June 30, 2021 from a fair value of $667,000 at March 31, 2021 or a decrease of $32,000 based on quoted market prices; and (ii) a decrease in the value of our 134,055 shares of common stock of Vox, which decreased to a fair value of $383,000 at June 30, 2022 from a fair value of $503,000 at March 31, 2021 or a decrease of $120,000, based on quoted market prices.

During the three months ended June 30, 2022, we sold 500,000 shares of our holdings of Vendetta common stock for proceeds of $27,000 and recorded a loss on sale of marketable equity securities of $78,000. During the three months ended June 30, 2021, we sold 143,000 shares of our holdings of Vox common stock for proceeds of $10,000 and recorded a gain on sale of marketable equity securities of $6,000. See Note 3 “Marketable Equity Securities” to the condensed consolidated financial statements for a discussion of the sales of Vendetta and Vox common stock.

We recorded interest income of $41,000 during the three months ended June 30, 2022 compared to interest income of $36,000 during the three months ended June 30, 2021. This increase was primarily due to an increase in the amount of USTS we held during the three months ended June 30, 2022 compared to the amount of USTS we held during the three months ended June 30, 2021, due to the investment of a majority of the funds from the sale of 2,650,000 shares of our common stock for $2,023,000 during the three months ended June 30, 2022. In addition, the average interest rate earned on our short-term investments in USTS was higher during the three months ended June 30, 2022 compared to the three months ended June 30, 2021. We anticipate interest income will decrease during the remainder of 2022 from the amounts recorded through the six months ended June 30, 2022 as we expect to utilize the proceeds from maturing USTS to fund our exploration and general and administrative expenditures.

We recorded a non-cash unrealized loss on our short-term investments of $47,000 during the three months ended June 30, 2022 compared to an unrealized loss on our short-term investments of $32,000 during the three months ended June 30, 2021 primarily due to an increase in market interest rates on USTS, which reduces the quoted fair value of our existing USTS and to a lesser degree our CDs. 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 June 30, 2022, we recorded a non-cash loss on derivative instruments of $3,000 related to a reduction in the value of our holdings of Vendetta Warrants which will expire in August 2022. As of June 30, 2022 we expect the Vendetta warrants to expire worthless upon maturity compared to a fair value of $3,000 at March 31, 2022 and $4,000 at December 31, 2021. During the three months ended June 30, 2021 we recorded a non-cash loss of $37,000 on our Vendetta Warrants, which was partially offset by a gain on derivative instruments of $7,000 during the three months ended June 30, 2021 related to certain Kinross covered 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 six months ended June 30, 2022 and 2021, we recorded no property impairments.

We recorded no income tax expense or benefit during the three and six months ended June 30, 2022 or 2021 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 2022. 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 six months ended June 30, 2022 to the six months ended June 30, 2021

We had a net loss of $2,205,000 or $0.03 per basic and diluted share for the six months ended June 30, 2022 compared to a net loss of $1,196,000 or $0.02 per basic and diluted share for the six months ended June 30, 2021. As explained in more detail below, the primary reasons for the increase in our net loss were (i) an increase in exploration expense to $1,177,000 during the six months ended June 30, 2022 compared to exploration expense of $384,000 during the six months ended June 30, 2021; (ii) an increase in general and administrative expenses to $664,000 during the six months ended June 30, 2022 compared to general and administrative expenses of $536,000 during the six months ended June 30, 2021; (iii) a decrease in other income to $10,000 from the forgiveness of our PPP loan during the six months ended June 30, 2021 with no similar item during the six months ended June 30, 2022; (iv) the recording of a realized loss of $159,000 from the sale of marketable equity securities during the six months ended June 30, 2022 compared with a realized gain of $19,000 from the sale of marketable equity securities during the six months ended June 30, 2021; and (v) the recording of an unrealized loss on short-term investments of $98,000 during the six months ended June 30, 2022 compared to an unrealized loss of $56,000 on our holdings of short-term investments during the six months ended June 30, 2021. These causes of the increase in our net loss during the first six months of 2022 compared to the first six months of 2021 were partially offset by (i) a decrease in the unrealized loss on marketable equity securities to $155,000 during the six months ended June 30, 2022 compared to an unrealized loss on marketable equity securities of $270,000 during the six months ended June 30, 2021; (ii) an increase in interest income to $68,000 during the six months ended June 30, 2022 compared to interest income of $66,000 during the six months ended June 30, 2021; and (iii) a decrease in the loss on derivative instruments to $4,000 during the six months ended June 30, 2022 compared to a loss on derivative instruments of $33,000 during the six months ended June 30, 2021. The significant changes for these items are discussed in more detail below.

Our net exploration expense increased to $1,177,000 during the six months ended June 30, 2022 compared to $384,000 during the six months ended June 30, 2021. The primary reasons for the increase were(i) the exploration expenditures at our Golden Crest project of $555,000 during the six months ended June 30 2022 compared to Golden Crest exploration expenditures of $113,000 during the six months ended June 30, 2021; (ii) exploration expenditures at our Lik project in Alaska of $448,000 during the six months ended June 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, compared to our share of expenditures at Lik during 2021 of $83,000 recorded during the six months ended June 30, 2021; and (iii) reconnaissance exploration of $174,000 during the six months ended June 30, 2022, which included evaluation of additional areas around Golden Crest and evaluation of other potential exploration projects, compared to $115,000 in reconnaissance exploration expenditures during the six months ended June 30, 2021. These increases in exploration expense were partially offset by (i) a reduction in our exploration expenditures at Florida Canyon where all expenditures during the six months ended June 30, 2022 were conducted and paid by our joint venture partner, Nexa compared our expenditures of $64,000 during the six months ended June 30 2021, when we were preparing an analysis of the Florida Canyon deposit for future drilling or expansion; and (ii) expenditures of $9,000 at the Gold Coin project during the six months ended June 30, 2021, which we abandoned during 2021 and there were no similar expenditures during the six months ended June 30, 2022.

General and administrative costs, excluding stock option compensation costs discussed below, were $638,000 during the six months ended June 30, 2022 compared to $463,000 during the six months ended June 30, 2021. The major components of the costs were (i) salary and benefit expense during the six months ended June 30, 2022 of $218,000 compared to salary and benefit expense of $136,000 during the six months ended June 30, 2021, with these increases as a result of increased personnel and salaries in 2022; (ii) legal and accounting expenditures of $197,000 during the six months ended June 30, 2022, compared to $101,000 during the six months ended June 30, 2021; (iii) office and other costs of $53,000 during the six months ended June 30, 2022 compared to $44,000 during the six months ended June 30, 2021; and (iv) travel and shareholder relation costs of $170,000 during the six months ended June 30, 2022 compared to $182,000 during the six months ended June 30, 2021.

During the six months ended June 30, 2022 and 2021, Solitario recorded $26,000 and $72,000, 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 six months ended June 30, 2022 was primarily related to certain previously granted options becoming fully vested during 2021 and 2022 which reduced the stock option amortization expense during the first six months of 2022 compared to the first six months of 2021.

We recorded an unrealized loss on marketable equity securities of $155,000 during the six months ended June 30, 2022 compared to an unrealized loss on marketable equity securities of $270,000 during the six months ended June 30, 2021. The non-cash unrealized loss during the six months ended June 30, 2022 was primarily related to (i) a decrease in the fair value of our holdings of 8,000,000 shares of Vendetta common stock to $279,000 at June 30, 2022 compared to a fair value of $317,000 at December 31, 2021, based on quoted market prices; (ii) a decrease in the fair value of our holdings of 100,000 shares of Kinross common stock to $358,000 compared to a fair value of $581,000 at December 31, 2021, based on quoted market prices; and (iii) a decrease in the fair value of our holdings of 134,055 shares of Vox to $303,000 at June 30, 2022 compared to a fair value of $370,000 at December 31, 2021 based on quoted market prices. The non-cash unrealized loss during the six months ended June 30, 2021 was primarily related to (i) a decrease in the fair value of our holdings of 10,540,000 shares of Vendetta common stock, which we held at June 30, 2021, to $383,000 at June 30, 2021 compared to a fair value of $496,000 at December 31, 2020, based on quoted market prices; and (ii) a decrease in the fair value of our holdings of 100,000 shares of Kinross common stock to $635,000 compared to a fair value of $734,000 at December 31, 2020, based on quoted market prices. We may reduce our holdings of marketable equity securities depending on cash needs and market conditions, which may reduce the volatility of the changes in unrealized gains and losses in marketable equity securities during the remainder of 2022.

We recorded interest income of $68,000 during the six months ended June 30, 2022 compared to interest income of $66,000 during the six months ended June 30, 2021. The comparable interest amounts were related to a decrease in the average outstanding balance of USTS and CDs during the six months ended June 30, 2022 compared to the six months ended June 30, 2021, despite the increase in the ending balance of short-term investments as of the end of June 2022 compared to the end of June 2021. This decrease in the average outstanding balance was offset by an increase in the average interest rate earned on our short-term investments during the six months ended June 30, 2022 compared to the six months ended June 30, 2022. We anticipate our interest income will decrease in 2022 compared to 2021 as a result of the use 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 loss on our short-term investments of $98,000 during the six months ended June

30, 2022 compared to an unrealized loss on our short-term investments of $56,000 during the six months ended June 30, 2021 primarily due to an increase in market interest rates on USTS, which reduces the quoted fair value of our existing USTS and to a lesser degree our CDs.

During the six months ended June 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. During the six months ended June 30, 2021, we sold (i) 1,010,000 shares of Vendetta common stock for proceeds of $51,000 and recorded a loss on sale of $2,000; (ii) 430,000 shares of TNR. common stock for proceeds of $28,000 and recorded a gain on sale of $19,000 and (iii) 3,200 shares of Vox common stock for proceeds of $9,000 and recorded a gain on sale of $2,000. See Note 3 “Marketable Equity Securities” to the condensed consolidated financial statements for a discussion of the sale of marketable equity securities.

During the six months ended June 30, 2022 we recorded a non-cash loss of $4,000 on our Vendetta Warrants. During the six months ended June 30, 2021 we recorded a non-cash loss of $40,000 on our Vendetta Warrants, which was partially offset by a gain on derivative instruments of $7,000 during the six months ended June 30, 2021 related to certain Kinross covered calls.

(c) Liquidity and Capital Resources

Cash and Short-term Investments

As of June 30, 2022, we have $6,216,000 in cash and short-term investments. As of June 30, 2022, we have $5,622,000 of our current assets in USTS with maturities of 15 days to 18 months. In addition, we have one CD with a face value of $250,000 that matures in six months and is carried at its quoted market value of $248,000. The USTS and CDs 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 2022. 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 June 30, 2022 we own 8,000,000 shares of Vendetta common stock, 100,000 shares of Kinross common stock and 134,055 shares of Vox common stock. At June 30, 2022, the Vendetta shares are recorded at their fair value of $279,000, the Kinross shares are recorded at their fair value of $358,000; and the Vox shares are recorded at their fair value of $303,000. During the six months ended June 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 2022 depending on cash needs and market conditions.

Working Capital

We had working capital of $6,705,000 at June 30, 2022 compared to working capital of $6,883,000 as of December 31, 2021. Our working capital at June 30, 2022 consists primarily of our cash and cash equivalents, our investment in USTS and CDs, discussed above, our investment in marketable equity securities of $940,000, and other current assets of $81,000, less our accounts payable of $490,000 and other current liabilities of $42,000. As of June 30, 2022, 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 June 30, 2022, and December 31, 2021 there were options outstanding to acquire 5,431,250 and 5,513,000 shares, respectively, of Solitario common stock. The outstanding options have exercise prices between $0.77 per share and $0.20 per share. During the six months ended June 30, 2022, options for 81,750 shares were exercised with an average exercise price of $0.25 per share for proceeds of $20,000. During the six months ended June 30, 2021, options for 185,000 shares were exercised with an average exercise price of $0.45 per share for proceeds of $83,000. There were no exercises of options during the six months ended June 30, 2021. We do not anticipate the exercise of options to be a significant source of cash flow during the remainder of 2022.

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. During the six months ended June 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. During the six months ended June 30, 2021, we sold an aggregate of 150,400 shares of common stock under the ATM Program at an average price of $1.21 per share of common stock for net proceeds after commissions and expenses of approximately $177,000. During the six months ended June 30, 2021, Solitario recorded $144,000 as a charge to additional paid-in-capital for one-time expenses related to entering into the ATM Agreement.

(d) Cash Flows

Net cash used in operations during the six months ended June 30, 2022 increased to $1,272,000 compared to $730,000 of net cash used in operations for the six months ended June 30, 2021 primarily as a result of (i) an increase in exploration expense to $1,177,000 during the six months ended June 30, 2022 compared to exploration expense of $384,000 during the six months ended June 30, 2021; and (ii) an increase in non-stock option general and administrative expense to $638,000 during the six months ended June 30, 2022 compared to $463,000 during the six months ended June 30, 2021, discussed above. These uses of cash were partially offset by (i) the provision of cash from a reduction in prepaid expenses and other assets of $222,000, which was primarily due to the use of a prepaid balance of $221,000 due from Teck at December 31, 2021 during the six months ended June 30, 2022 compared to the provision of cash from a reduction in prepaid expenses and other assets of $5,000 during the six months ended June 30, 2021; and (ii) the provision of cash of $234,000 from an increase in accounts payable and other current liabilities as a result of increased exploration activity at Golden Crest during the six months ended June 30, 2022 compared to the provision of cash from an increase in accounts payable and other current liabilities of $27,000 during the six months ended June 30, 2021. Based upon projected expenditures in our 2022 budget, we anticipate continued use of funds from operations through the remainder of 2022, 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 six months ended June 30, 2022, we used $887,000 in cash from investing activities compared to $349,000 of cash provided from investing activities during the six months ended June 30, 2021. The primary use of cash during the six months ended June 30, 2022 was the net purchase of short-term investments of $881,000 primarily related to investment in USTS from a portion of the proceeds from ATM sale of shares discussed above compared to the source of cash from the net sale of short-term investments during the six months ended June 30, 2021. We also used $10,000 of our cash to acquire additional mineral claims at our Golden Crest project during the six months ended June 30, 2022, compared to the use of cash of $201,000 during the six months ended June 30, 2021 when we acquired the Golden Crest project, discussed above in Note 2, "Mineral Properties" for $374,000, of which $173,000 were accrued costs in accounts payable at June 30, 2021. We acquired other assets of $49,000 and $39,000, respectively, during the six months ended June 30, 2022 and 2021. In addition, during the six months ended June 30, 2022 and 2021 we sold marketable equity securities for proceeds of $53,000 and $88,000, respectively, as discussed above in Note 3, "Marketable Equity Securities." We may sell additional marketable equity securities during the remainder of 2022, as discussed above. However, we do not anticipate the sale of marketable equity securities will be a significant source of cash during the remainder of 2022. 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 2022. Any potential mineral property acquisition or strategic corporate investment during the remainder of 2022, discussed above, could involve a significant change in our cash provided or used for investing activities, depending on the structure of any potential transaction.

During the six months ended June 30, 2022, and 2021 we received net cash of $2,023,000 and $98,000, respectively, from the issuance of common stock under the ATM Program, discussed above. In addition, during the six months ended June 30, 2022 and 2021 we received $20,000 and $83,000, respectively, from the issuance of common stock from the exercise of stock options, discussed above in Note 9, "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 ("NI 43-101") 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 June 30, 2022 and December 31, 2021 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 June 30, 2022. As of June 30, 2022, there have been no 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 Annual Report on Form 10-K for the year ended December 31, 2021.

(h) Discontinued Projects

We did not record any mineral property write-downs during the three and six months ended June 30, 2022 and 2021.

(i) Significant Accounting Policies and Critical Accounting Estimates

See Note 1 to the Consolidated Financial Statements included in our Annual Report on Form 10-K for the year ended December 31, 2021 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 six months ended June 30, 2022.

(j) Related Party Transactions

As of June 30, 2022, and for the three and six months ended June 30, 2022, we have no related party transactions or balances.

(k) Recent Accounting Pronouncements

See Note 1, "Business and Summary of Significant Accounting Policies," to the unaudited condensed consolidated financial statements under *Recent Accounting Pronouncements"* above for a discussion of our significant accounting policies.

(l) 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 under the heading "Risk Factors" included in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2020. 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 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;
- Effects of volatile economic conditions, including financial market volatility, the effects of 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 pandemics, including the COVID-19 pandemic.

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 June 30, 2022, 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 June 30, 2022.

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 June 30, 2022 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 June 30, 2022, 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, 2021.

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

None

Item 3. Defaults upon Senior Securities

None

Item 4. Mine Safety Disclosures

None

Item 5. Other Information

None

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 ZINC CORP.

August 10, 2022	By:	/s/ James R. Maronick
Date		James R. Maronick
		Chief Financial Officer

EXHIBIT INDEX

3.1	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)
3.1.1	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)
3.2	Amended and Restated By-laws of Solitario Zinc Corp. (incorporated by reference to Exhibit 3.1 to Solitario's Form 8-K filed on April 23, 2021)
4.1	Form of Common Stock Certificate of Solitario Zinc Corp. (incorporated by reference to Exhibit 4.1 to Solitario's Form 10-Q filed on November 8, 2017)
31.1*	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
31.2*	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
32.1*	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 financial statements, formatted in XBRL: (i) Condensed Consolidated Balance Sheets as of June 30, 2022 and December 31, 2021, (ii) Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2022 and 2021, (iii) Condensed Consolidated Statements of Cash Flows for the three and six months ended June 30, 2022 and 2021; and (iv) Notes to the Condensed Unaudited Consolidated Financial Statements, tagged as blocks of text.
*	Filed herewith