Q2 2022

Management’s Discussion & Analysis

Nanalysis Scientific Corp.

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READER ADVISORY

The Management's Discussion and Analysis ("MD&A") for the three- and six-month periods ended June 30, 2022, of the financial condition and results of operations of Nanalysis Scientific Corp. ("the "Company"), is prepared as at August 25, 2022. This discussion should be read in conjunction with the Company's unaudited Interim Condensed Consolidated Financial Statements for the three- and six-month periods ended June 30, 2022, and notes thereto. Other information on Nanalysis is available on SEDAR at www.sedar.com and on the Company's website at www.nanalysis.com.

This discussion should not be considered all-inclusive as it does not include all changes regarding general economic, political, governmental and environmental events. This MD&A contains certain statements that constitute forward-looking statements under the meaning of applicable securities laws. Please see "Forward-Looking Statement Advisory" on page 23 for a discussion regarding Nanalysis' use of such information.

This MD&A and the consolidated interim financial statements were reviewed by the Audit Committee of the Company's Board of Directors and approved by Nanalysis' Board of Directors on August 25, 2022. All dollar figures are in thousands of Canadian dollars, except per share amounts or unless otherwise stated.

OVERVIEW OF BUSINESS
Nanalysis Scientific Corp. is the ultimate parent in the group. In June 2019, the Company completed a reverse takeover (“RTO”) and obtained a listing on the TSX-V as Nanalysis Scientific Corp (“NSCI”). The Company is headquartered in Calgary, Alberta, Canada and performs product development and manufacturing in its Calgary and Strasbourg facilities.

The Company’s executive leadership is responsible for strategic decision making, resource allocation, and assessing financial performance and, as a group, is identified as our chief operating decision maker for the purposes of reporting segment information under International Financial Reporting Standards ("IFRS").

The Company is focused on the proliferation of magnetic resonance (“MR”) technology into industrial, research and teaching markets through the release of accessible, affordable and automatable MR systems. By focusing on innovation in both method development and magnet and electronic design, the Company’s product line addresses unmet needs of customers in a variety of applications, including pharmaceutical, academic, mining, oil and gas, cannabis etc. The Company has a focused, direct sales force in the United States, Germany, France and Canada and works through a channel of distributors and dealers in other geographical areas to ensure penetration in the current market. In 2022, the Company acquired K’(Prime) Technologies Inc. (“K’Prime”), a North American sales and service company, with a particular focus on scientific instrumentation for pharma, food, chemical and oil & gas customers, as well as imaging systems for security applications.

The Company’s activities are carried out through four reportable segments: Nanalysis, RS2D, K’Prime and Corporate:

Nanalysis Corp. (“Nanalysis”): a subsidiary of the Company was founded in 2009 with the specific intent of developing the world’s first portable magnetic resonance (“MR”) spectrometer to address the three main limitations of this powerful magnetic resonance technique – affordability, accessibility and automatability. After approximately four years of development, Nanalysis began shipping its first commercial product in 2012. Since this time Nanalysis has expanded the functionality of this platform and launched the highest performing instrument available in the market to address the industrial market demands for increased performance metrics. Nanalysis is a provider of cutting edge, patent-protected magnetic resonance (“MR”) technology to facilitate simple and rapid unknown chemical identification, quantification and diagnostics in a number of end markets including pharmaceutical, biotechnology, chemical, security, food, oil & gas and educational industries. Customers include Eli Lilly, Johnson & Johnson, Takeda Pharmaceutical, BASF, Hitachi Chemical, US Department of Agriculture, Lubrizol, Aramco Services, SABIC, Oxford University, Harvard University and many other Fortune 500 organizations.

RS2D S.A.S. (“RS2D”): In March 2020, the Company acquired all outstanding shares of RS2D, a complementary technology company based in Strasbourg France that specializes in the development of cutting-edge MR electronics. Based on a single electronic board, RS2D has developed MR product lines in high-field (“HF”) Nuclear Magnetic Resonance (“NMR”) and Magnetic Resonance Imaging (“MRI”) that can further advance Nanalysis’ existing product line, while rounding out the Company’s magnetic resonance technology portfolio.

K’Prime Technologies Inc. (“K’Prime”): In January 2022, the Company acquired all outstanding shares of K’Prime. Founded in 1997, K’Prime has two primary business lines made up of sales and service of chemical analysis laboratory instrumentation and sales and service of a complete spectrum of security equipment, including security cameras, access controls, and screening systems including millimeter wave and X-Ray technology.

Corporate: This segment is the corporate entity of the company; included in Corporate is executive, legal, and other administrative costs.

BUSINESS ACQUSITION
As noted above, on January 10, 2022, the Company acquired all of the outstanding shares of K’Prime. The Company acquired K’Prime to leverage their sales and service organization to complement existing product lines.

The base consideration paid for K’Prime was $3,000K in cash, $2,418K working capital adjustment and the issuance of 2.76 million Company common shares, which are subject to a two-year lock-up period. As at June 30, 2022, the payment related to working capital adjustment remains outstanding. The former shareholders of K'Prime may also receive two separate earn-outs over the next two years. The first earnout is up to a maximum of $1.0 million based on revenue targets over the two years. The second earn-out is based on a percentage of revenue tied to a key contract entered into subsequent to the acquisition. These earnouts have been valued at $1,520K, based on probability of these targets being achieved. Transaction costs for the acquisition were $101K.

The acquisition was accounted for as a business combination. The Company determined the purchase consideration to be $10,092K, comprised of the following:

Purchase Price Allocation:

($000's)	
Cash	5,418
Share consideration	3,154
Contingent consideration	1,520
Purchase consideration	10,092

The assets acquired and liabilities assumed are recorded at their fair value. The fair values allocated to assets acquired and liabilities assumed are preliminary and are subject to adjustment based on further analysis and evaluation over the course of the measurement period, which will not exceed twelve months from the acquisition date. The Company will continue to evaluate new information about the facts and circumstances that existed as of the acquisition date pertaining to the fair value of the intangible assets acquired and the value of future earn out considerations.

($000's)		Fair value recognized on acquisition
ASSETS		
	Accounts receivable	885
	Other receivables	2,598
	Inventory	557
	Prepaid expenses and deposit	24
	Property and equipment	264
	Right of use assets	306
	Intangible assets	24
Total assets		4,658
LIABILITIES		
	Accounts payable and accrued liabilities	572
	Deferred income tax liability	272
	Unearned revenue	354
	Lease liabilities	306
	Debt and repayable contributions	2,490
Total liabilities		3,994
Net assets before cash		664
Acquired cash		2,525
Net assets		3,189
Intangible assets		2,081
Goodwill		4,822
Purchase consideration		10,092

On March 11, 2022, the Company funded an initial equity investment in Quad Systems AG ("Quad"), acquiring 40% ownership and an option to purchase the remaining shares. Quad is a Zurich-based Nuclear Magnetic Resonance ("NMR") company focused on high-field NMR for pharmaceutical and other vertical markets. The acquisition provides numerous synergies to the Company's existing NMR business.

Pursuant to the subscription agreement entered into between the Company and Quad, the Company has been issued 260,000 Quad ordinary shares for a subscription price of CHF 6,500,000 and a second representative of the Company has been appointed to Quad's Board of Directors. Additionally, until July 1, 2023, (the "Option Period"), the Company has an option to acquire 100% of the issued and outstanding shares of Quad at a pre-set valuation formula in a combination of cash and common shares of the Company (the "Option"). During the Option Period, the Company has a right of first refusal on all debt and equity offerings of Quad. Transaction costs for the acquisition were $146K.

The Company has assessed IFRS 10 and has determined that due to the Option and the criteria outlined in the standard, the Company has the power to govern the financial and operating policies of Quad. Therefore, the acquisition was accounted for as a business combination. For each business combination, the Company elects to measure any non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets on a historical cost basis. The Company has elected to use the proportionate share of the acquiree's identifiable net assets on a historical basis. The Company determined the purchase consideration to be $9,031K, comprised of the following:

Purchase Price Allocation:

($000's)	
Cash	9,031
Purchase consideration	9,031

The assets acquired and liabilities assumed are recorded at their fair value. The fair values allocated to assets acquired and liabilities assumed are preliminary and are subject to adjustment based on further analysis and evaluation over the course of the measurement period, which will not exceed twelve months from the acquisition date. The Company will continue to evaluate new information about the facts and circumstances that existed as of the acquisition date pertaining to the fair value of the intangible assets acquired and the value of future earn out considerations. Measurement adjustments made to the initial purchase price allocation resulted in a change to net assets and goodwill of $240k.

($000's)	Fair value recognized on acquisition
ASSETS	
Accounts and subscription receivable	8,837
Other receivables	85
Prepaids	81
Right of use assets	636
Property and equipment	288
Total assets	9,927
LIABILITIES	
Accounts payable and accrued liabilities	621
Lease liabilities	636
Deferred taxes	1,425
Debt and repayable contributions	1,903
Total liabilities	4,585
Net assets before cash	5,342
Acquired cash	61
Net assets	5,403
Intangible assets	8,394
Goodwill	8,490
Non-controlling interest	(13,256)
Purchase consideration	9,031

As part of the subscription agreement, the Company had provided Quad with a CHF 1,000,000 loan, which was convertible into 40,000 shares in the capital of Quad. The loan was converted on June 22, 2022, increasing the Company's ownership in Quad from 40% to 43%.

Magnetic Resonance Test, Measure and Dianostic Systems

The Company's line of magnetic resonance imaging and spectroscopy systems are designed to offer accessible and affordable options to proliferate the use of this powerful technique in underserved markets (e.g., academia, SME chemical production, etc.), industrial QA/QC assays (e.g., pharma/biotechnology, materials/polymers, cannabis, food, etc.), process control (e.g., crude refining, chemical production), and point-of-need diagnostics (*e.g.*, ski hills, doctor's offices etc.).

By powering the entire range of magnetic resonance products on one electronic platform, the Cameleon 4 or Cam4^{TM}, and building tailored software layers from the ground up, Nanalysis can optimize data acquisition, processing, analysis, and integrity. Additionally, it provides the flexibility to provide automated software layers to ensure that these products can be placed with non-experts without compromising repeatability or reliability of the results.

Bridging the Gap in MR Accessibility

MRI and nuclear magnetic resonance ("NMR") spectroscopy have long been workhorses of medical diagnostics and chemical analysis. Given the capital and operating expenditures of these instruments, however, they are often limited by accessibility and other, often lesser techniques, are used to supplement the need. To address this issue, in 2009, Nanalysis Scientific Corp.'s first focus was on developing powerful, extremely uniform, permanent magnet-based systems that were more affordable and require little to no maintenance.

Launching its first platform, the 60 MHz in 2012, and the market-leading 100MHz in 2019, Nanalysis decided to expand its magnetic resonance portfolio to offer high-field NMR electronics and accessories and MRI for pre-clinical and OEM applications.

Hardware Technlogy Portfolio

			Underserved Traditional MR Markets				
			Teaching	Research	Industrial QA/QC	Process	Diagnostics
Benchtop NMR	60 MHz		✓		✓	✓	
	100 MHz		✓	✓			
	Accessories	Flow		✓		✓	
		AUTOSample		✓	✓		
HF-NMR	Pulse NMR Console		✓	✓	✓		
	Gecho			✓			
MRI	Cam 4 Console		✓	✓			✓
Software	NMRGUi		✓	✓	✓		
	SPINit		✓	✓			✓
	OneMoon		✓	✓	✓	✓	✓

Benchtop NMR 60 MHz

60 MHz Platform

The initial flagship product of Nanalysis Scientific Corp., this 60 MHz is the most compact, high-performance model in its class. Shipping commercially since 2012, there are almost 1000 instruments in the field in a variety of applications including academia and industrial QA/QC assay and process chemistry innovator and early adopter adopters.

To grow the market of the 60 MHz product line, Nanalysis is actively working with collaborators in method development to provide the necessary software layers to simplify and automate data analysis and maintain data integrity in several fields (e.g., cannabinoid detection, lithium quantification in brine).

Benchtop NMR 100MHz 	100 MHz Platform With market-leading, unparalleled resolution, the 100 MHz platform was announced to meet the high-end requirements of customers needing higher sensitivity and resolution than the 60 MHz platform can provide. It's easy-to-use, ergonomic touchscreen, and unparalleled data has been well received in the market since it began shipping in late 2020.
High-field NMR 	Pulse NMR Console Aimed as an OEM console for magnet manufacturers, this compact electronics platform can be incorporated on existing super conducting systems ranging from 200-600 MHz. By combining the benchtop NMR with the Pulse NMR Console, Nanalysis is posed to offer full analytical solutions to a variety of laboratories ranging from academia, government, and industrial research through industrial QA/QC.
High-field NMR 	Gecho NMR is largely considered to be the most information rich analytical technique available to chemists. NMR, however, is limited in sensitivity when compared to ultra-sensitive characterization techniques such as Mass Spectrometry ("MS")). A breakthrough in this field has come with the discovery of hyperpolarization methods that allow for significant sensitivity enhancements. The Gecho is Nanalysis' answer to this important research field and is aimed at improving industrial QA/QC.
MRI 	Cameleon 4 Console The Cam 4 console provides a compact and affordable alternative to facilitate adoption of MRI in teaching and to springboard MRI innovations to provide safer high-resolution instruments and develop necessary software for earlier identification with key OEM partners.

Software Portfolio

NMRGui

The onboard Nanalysis user interface enables one-click data acquisition and processing for the benchtop NMR product line. The interface was designed to simplify usage for non-experts while still providing more advanced users with the flexibility to modify acquisition parameters, or experiment sequences as required. This python-based software operates on a Linux operating system to allow users to write their own applications while also ensuring with data integrity and automation.

SPINit

SPINit is an all-in-one MR software platform to facilitate data acquisition, processing and high-level pulse programming for the Company's High-field NMR and MRI product lines. While competitive software packages require coding knowledge and expertise to develop experiments, the SPINit design philosophy is focused on transparency and usability to generate experiments directly from a graphical interface without requiring coding. There are several optional plug-ins to SPINit which allow for tailored workflow and automation to the user. These include SPINplanner (to control an autosampler) and Driver (to launch acquisition from any software).

NMRFx

The newest component to Nanalysis' MR offerings, the One Moon Scientific Platform offers a suite of premium software tools to streamline and automate MR data analysis and management. Originally developed in a leading pharmaceutical company, this advanced software platform was designed to be a powerful platform to provide routine, high-performance data processing and fill niches in MR data analysis including machine learning and database construction and search algorithms.

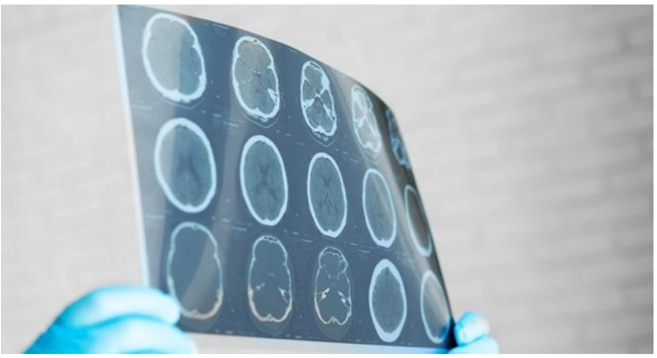
By combining these premium data analysis tools with the NMRGui software interface, Nanalysis offers analysis and application of MR solutions it has been validating.

Sales and Service

K'Prime

K'Prime is a prominent science analytical instrumentation sales and service organization that places a top priority on customer satisfaction. Headquartered in both the USA and Canada, K'Prime has a wide customer base and provides primary service lines in the sale and service of chemical laboratory instruments and the installation and maintenance of a variety of security solutions, specializing the maintenance of a variety of airport security systems. Through its chemical laboratory service line, K'Prime offers Nanalysis the opportunity to bundle total laboratory solution packages, offer premium training and servicing packages and better target specific market verticals where K'Prime has developed a significant user base. Further, in the second quarter of 2022 K'Prime was awarded a six-year $160 million contract to service and maintain airport security equipment for the Canadian Air Transportation Security Authority, significantly expanding its presence in the airport security market. The Company has begun the gradual phase in period of the contract and anticipates service coverage to be completed before the end of Q1, 2023. Contracts such as this are commonly renewed for an additional five-year term, allowing for a potential 11-year recurring revenue opportunity with inflation-based contractual price increases.

TECHNOLOGY UNDER DEVELOPMENT



Permanent magnet Based MRI

By combining the Cam4™ console with Nanalysis' innovative core competencies of making unique, highly homogenous, permanent magnet arrays, the Company is working to make a series of portable MRIs that can be located at point of need to accelerate diagnostics of sprains and facilitate the early detection of tumors.

Robust Industrial Detector

The unique magnet designs at Nanalysis enable the development of an industrial-hardened spectrometer capable of being incorporated directly into chemical production and refinery type applications. With high-pressure and high-temperature sampling as well as explosion proof requirements, Nanalysis is working to use their existing benchtop NMR platforms to develop an online sensor that can improve safety, limit by-product formation and improve yields in a completely automated manner.

Full High-Field NMR Systems

To offer traditional NMR users improved performance and innovative MR components, as well as improved product scalability, Nanalysis acquired Quad Systems and their team of experienced MR specialists who have made significant contributions to the manufacture, integration, and development of NMR methods and components. In addition to the Cam4™ based consoles, Quad Systems manufacturers magnets, shim systems, probes, and sample changers for both MR system upgrades and new installations in the academic, pharmaceutical, and chemical industry market. With a focus on MR innovation, Quad looks to uniquely address throughput limitations in MR, with improved sensitivity probes and reduced overhead (e.g., shimming, tuning and sample changes). Additionally, they look to increase sustainability of superconducting magnets with patented sample containers to slow cryogen boil off.

SELECTED FINANCIAL INFORMATION

	Three months ended June 30			Six months ended June 30		
($000's)	2022	2021	($) Change	2022	2021	($) Change
Revenue	5,187	4,343	844	10,741	7,612	3,129
Cost of products sold	1,955	1,421	534	4,164	2,575	1,589
Gross profit	3,232	2,922	310	6,577	5,037	1,540
Expenses						
Sales and marketing	1,248	829	419	2,430	1,866	564
General and administration	2,333	696	1,637	3,998	1,391	2,607
Research and development	598	163	435	887	282	605
Income (loss) before other items	(947)	1,234	(2,181)	(738)	1,498	(2,236)
Other Items						
Acquisition transaction costs	36	-	36	185	-	185
Depreciation and amortization expense	1,174	634	540	2,249	1,265	984
Finance expense (income)	92	33	59	194	(202)	396
Stock-based compensation	434	114	320	676	243	433
Foreign exchange (gain) loss	(43)	8	(51)	(6)	45	(51)
RS2D earn-out	-	-	-	-	177	(177)
Income (loss) before tax	(2,640)	445	(3,085)	(4,036)	(30)	(4,006)
Current income tax expense	160	-	160	206	-	206
Deferred income tax expense (recovery)	(268)	223	(491)	(218)	223	(441)
Net income (loss)	**(2,532)**	**222**	**(2,754)**	**(4,024)**	**(253)**	**(3,771)**
Other comprehensive income (loss)	(57)	(2)	(55)	(56)	47	(103)
Total comprehensive income (loss)	**(2,589)**	**220**	**(2,809)**	**(4,080)**	**(206)**	**(3,874)**
Share Information						
(Loss) income per share (basic and diluted)	(0.02)	0.00	(0.02)	(0.04)	(0.00)	(0.04)
Share price (June 30)	0.90	1.24	(0.34)	0.90	1.24	(0.34)
Other Information						
Capitalized property plant and equipment	1,304	98	1,206	1,616	146	1,470
Capitalized development expenditures	1,094	614	480	2,726	1,138	1,588

($ 000's)	June 30, 2022	December 31, 2021	$ Change
Financial Position			
Total assets	73,330	37,793	35,537
Total loans and borrowings (includes current portion)	5,914	4,215	1,699
Total liabilities	22,250	13,832	8,418
Shareholders' equity	51,080	23,961	27,119

OVERALL PERFORMANCE

Gross profit for the six months ended June 30, 2022, was $6,577K (a margin of 61%) compared to gross profit of $5,037K (a margin of 66%) for the six months ended June 30, 2021.The Company's net loss for the six months ended was $4,024K, as compared to the six-month loss June 30, 2021, of $253K. The increased loss was due to higher costs, specifically sales and marketing expenses, increased general and administration expenses and increased research and development expenses, both in the Nanalysis segment and from the new acquisitions. In addition, there were business acquisition costs from the two transactions completed, increased depreciation and amortization expense, increased finance expense partially offset by no RS2D earnout in the quarter and increased revenues.

Significant transactions in the six months ended June 30, 2022, included:

- The acquisitions of 100% of the outstanding shares of K'Prime and the subscription for shares of Quad, as well as the advancement and eventual exercise of the CHF 1,000,000 convertible loan to Quad resulting in the Company holding 43% of the outstanding shares of Quad, as discussed above.
- February 11, 2022, the Company closed an upsized public offering and a non brokered private placement for gross proceeds of $15,224K.
- March 17, 2022, the Company received interest free repayable funding commitment of $4,985K to expand manufacturing operations from the Canadian government.

The funds on hand will be used to accelerate organic growth, continue product development and expansion of manufacturing facilities and to continue the Company's acquisition strategy.

DISCUSSION OF OPERATIONS

Revenue

The Company derives revenue from three operating segments, Nanalysis, RS2D and K'Prime. Nanalysis has been involved in the development, manufacturing, and sale of MR spectrometers from inception in 2009. As such, all revenue is related to product sales and extended warranties. Nanalysis does not engage in consulting services or any other revenue generating activity unrelated to product sales. RS2D is a technology company based in Strasbourg, France, which specializes in the manufacturing of cutting-edge electronics components for precision MR technologies. Its revenue is derived from product sales, licenses, consulting services and contracted installation services of these products. K'Prime is a sales and service company, located in Canada and the United States of America with a particular focus on the selling of scientific instrumentation for pharma, food, chemical and oil & gas customers and servicing imaging systems for security applications.

For the three-month period ended June 30, 2022, the Company reported consolidated revenue of $5,187K, a 19% increase from the comparable period ended June 30, 2021. The increase in revenue is due to revenue added via acquisition of the K'Prime operating segment, offset by slightly lower revenue in Nanalysis and RS2D due to restructuring in our direct sales force.

For the six months ended June 30, 2022, the company reported consolidated revenue of $10,741K, an increase of $3,129K or 41% from the comparative period in 2021. The increase for the six months ended June 30, 2022, compared to the six months ended June 30, 2021, is due to increased shipments of the flagship 100MHz product in the Nanalysis segment, added revenue from the acquisition of K'Prime, offset by lower revenue in RS2D.

Cost of products sold

Cost of sales for the Company includes the costs of manufacturing its products as well as the costs of servicing those products. The cost of sales for products comprises of raw materials, direct costs, direct labor, an allocation of overhead, freight charges, warranty and depreciation. The Company has consolidated manufacturing for both RS2D and Nanalysis in its facility in Calgary, Alberta.

Cost of products sold for the three months ended June 30, 2022, was $1,955K or 38% of revenue as compared to $1,421K or 33% of revenue for the same period of the prior year. For the six months ended June 30, 2022, costs of products sold were $4,164K or 39% of revenue as compared to $2,575K or 34% of revenue for the same period of the prior year. On a dollar basis, cost of product sold has increased in both the three and six months ended due to the addition of the K'Prime operating segment as well as increased costs of manufacturing due to inflation and worldwide supply constraints. These same constraints and inflationary pressures have also compressed gross margins 2022.

Sales and marketing ("S&M")

S&M expenses include the salaries, benefits, commissions, advertising, marketing expenses, and all related selling costs.

S&M for the three months ended June 30, 2022, was $1,248K as compared to $829K for the same period of the prior year. The quarter over quarter increase is due to higher sales activities and the acquisition of K'Prime, offset by a decline in sales for Nanalysis and RS2D in the quarter. For the six months ended June 30, 2022, S&M expenses were $2,430K as compared to $1,866K for the same period of the prior year. For the six months ended the primary driver was the acquisition of the K'Prime segment as well as increased sales in Nanalysis, offset by a decline in RS2D sales.

General and administrative expenses ("G&A")

G&A includes the cost of maintaining a corporate office, all publicly traded company-related expenses as well as administration costs incurred with respect to the day-to-day operations of each segment of Company.

For the three months ended June 30, 2022, G&A was $2,333K as compared to $696K for the same period of the prior year. The increase for the three months ended because of increased salaries and wages due to overall increased head count stemming from the two new acquisitions.

For the six months ended June 30, 2022, G&A was $3,998K as compared to $1,391K for the same period of the prior year. The increase for the six months ended because of increased salaries and wages due to overall increased head count stemming from the two new acquisitions, increased investor relations expenses, and increased expenditures related to the multitude of transactions in the period.

Research and development expenses ("R&D")

Research and development expenses are costs that do not meet the criteria to be capitalized to intangibles. These costs currently stem from both RS2D and Nanalysis research, they are expensed in the period they occur.

For the three months ended June 30, 2022, R&D was $598K as compared to $163K for the same period of the prior year and for the six months ended June 30, 2022, R&D was $887K as compared to $282K for the same period of the prior year. The overall increase in R&D for the three and six months ended is the result of certain projects in Nanalysis not meeting the criteria for capitalization under IFRS, as well as additional R&D costs due to the acquisition of Quad.

Amortization of property, plant, equipment and intangibles

For the three and six months ended June 30, 2022, amortization was $1,174K and $2,249K as compared to $634K and $1,265K for the respective periods in the prior year. The increase is due primarily to the amortization of intangible assets acquired on the acquisition of One Moon Scientific, Quad and K'Prime.

Finance expense (income)

For the three and six months ended June 30, 2022, finance expense was $92K and $194K, respectively, as compared to expense of $33K and income of ($202K) from the comparable periods in 2021. The increased finance expense is a result of non-cash interest accretion on interest free loans, and as there were no drawings in the quarter, there was no finance income offset.

Foreign exchange

Foreign exchange gains or losses typically occur when the exchange rate changes between the time revenue or expenses are recognized and when the resulting receivable is collected, or invoice is paid. Nanalysis conducts the vast majority of its business in US dollars and Euros resulting in exposure to foreign exchange gains and losses.

SUMMARY OF QUARTERLY RESULTS

The following table highlights revenue, cash used in operating activities, net earnings (loss) and earnings (loss) per share for the eight most recently completed quarters ended June 30, 2022.

	2022		2021				2020	
($000's) (except per share information)	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenue	5,187	5,554	5,077	3,336	4,343	3,277	2,680	1,700
Cash (used in) generated from operating activities	(696)	(959)	(1,511)	312	(367)	823	(1,141)	518
Net income (loss) for the period	(2,532)	(1,492)	(658)	(857)	222	(910)	(1,225)	(1,099)
Income (loss) per share basic and diluted	(0.02)	(0.02)	(0.01)	(0.01)	-	(0.01)	(0.02)	(0.02)

- In Q2 2022, net losses increased despite revenue growth over prior year, as the Company continued to execute on its growth plans. Losses also increased due to increased stock-based compensation, increased depreciation and amortization and compressed margins in 2022. During the quarter, the Company also invested $1,304K in property, plant and equipment, primarily related to expanding manufacturing capacity for MR product lines.
- Q1 2022 saw increased revenue quarter over quarter, net loss increased due to increased costs stemming from acquisitions, specifically increased stock-based compensation, increased depreciation and amortization and compressed margins.
- Q4 2021 continued to see a significant increase to revenue and led to a strong YTD revenue. Results were slightly hindered due to severance costs, increased stock-based compensation, increased depreciation and amortization and slightly reduced margins.
- Q3 2021 continued to trend with previous quarters, showing a 96% increase in revenue compared to the three months ended of Q3 2020. The increased revenue also resulted in increased income before other items and overall decreased net loss.
- Q2 2021 continued to see a significant increase to revenue and overall operating results stemming from strong demand for the 100MHz product.
- Q1 2021 saw increased results in all aspects of the business. Q1 2021 was the second quarter of shipping the new 100MHz product. These shipments, coupled with the completion of outstanding RS2D contracts, resulted in 115% period over period growth in revenue.
- Q4 2020 marked the first quarter that that had revenue generated from the shipment of Nanalysis' new product, the 100MHz. The Company shipped four systems at the end of Q4. Coupled with performance of RS2D on contract work, Q4 2020 had a 26% increase compared to Q4 2019.
- Q3 2020 continued to be impacted by COVID-19, as RS2D employees were unable to travel to complete installations. In addition, Nanalysis saw lower sales due to customers' capital budgets being impacted by COVID-19. While macro forces negatively impacted sales in both the Nanalysis and RS2D segments, the acquisition of RS2D earlier in 2020 and the inclusion of its revenue in Q3 2020 (versus none in 2019) resulted in a 4% increase overall.
- Q2 2020 was impacted by COVID-19 as borders and businesses shut down. The Company's revenues were impacted significantly, but Nanalysis was able continue to take pre-orders for the new 100MHz product.
- Q1 2020 saw the completion of the acquisition of RS2D, though operating results were impacted by COVID-19 as borders and businesses became shut down in early March.
- Q4 2019 saw a reduction in revenue compared to Q4 2018 as customers awaited the release of the new 100MHz device.
- Q3 2019 experienced a slight reduction in revenue compared to Q3 2018. Despite this, the Company saw improved net comprehensive income due to recovery on previously expensed inventory.

INVESTMENT IN INTANGIBLES AND DEVELOPMENT COSTS

	Three months ended June 30		Six months ended June 30	
($000'S)	2022	2021	2022	2021
Gross research and development costs	1,748	1020	3,750	1906
Less: research expenses	(598)	(119)	(887)	(282)
Development costs	1,150	901	2,863	1,624
Less: government grants	(115)	(338)	(261)	(594)
Development costs capitalized to intangibles	1,035	563	2,602	1,030

The Company is engaged in research and development activities and has internally generated intangible assets. Total development costs that meet the criteria for capitalization are reduced by government grants with the net difference being capitalized. Government grants consist of federal grants received under the Industrial Research Assistance Program ("IRAP") and scientific research and experimental development ("SRED") tax credits, as well as provincial assistance through the Alberta Innovates ("AI") Voucher Program and the Alberta Economic Development and Trade ("AEDT") Alberta-Germany Collaboration Fund for Product Development and Commercialization, the Alberta-Canada-France Joint Industrial R&D Projects Program and, in the prior year, CEWS for businesses affected by COVID-19.

LIQUIDITY & CAPITAL RESOURCES

Long Term Debt

($000's)	June 30, 2022	December 31, 2021
Western Economic Diversification Canada (WINN #1) interest free loan $496K repayable in monthly installments of $8K commencing June 30, 2017, and maturing February 28, 2023. Any amounts in default will incur interest at the Bank of Canada's interest rate plus 3% compounded monthly. The obligation is recorded at its present value using a 7.04% discount rate. This loan is unsecured.	64	111
Western Economic Diversification Canada (WINN #2) interest free loan, repayable in monthly installments of $46K commencing February 1, 2022, and maturing January 31, 2027. Total available under this loan is $2,773K. Any amounts in default will incur interest at the Bank of Canada's interest rate plus 3% compounded monthly. The obligation is recorded at its present value using a 6.0% discount rate. This loan is unsecured.	2,218	2,379
The Canada Emergency Business Account (CEBA) interest-free loan of $40K repayable on or before December 31, 2022. The obligation is recorded at its present value using a 6.0% discount rate. The loan is unsecured.	40	40
Prêt garanti par l'état – (PGE) is a Euro denominated loan granted by the French state to RS2D. The loan bears interest at 0.7% Interest and is repayable in monthly installements of $2.5K commencing on July 20, 2021 and maturing June 20, 2026. The obligation is recorded as its present value using a 2.5% discount rate. This loan is unsecured.	108	130
Procedure de sauvegarde, interest free Euro denominated loan repayable in annual payments due in March, payments are $221K, $265K, $265K, respectively, with the final payment maturing March 2024. The obligation is recorded as its present value using a 2.5% discount rate. This loan is unsecured.	485	695
Regional Recovery Relief Fund (RRRF) interest-free loan of $1.0 million loan repayable in 35 consecutive monthly installments of $28K commencing January 1, 2023. The obligation is recorded as its present value using a 6.0% discount rate. Any amounts in default will incur interest at the Bank of Canada's interest rate plus 3% compounded monthly. The loan is unsecured. This liability is recorded as current as the Company does not have unconditional right to defer payment.	886	860
Kprime USA credit facility prime plus 0.40 percent, repayable on demand. (see below)	1,317	-
Kprime Canadian credit facility prime plus 0.65 percent, repayable on demand. (see below)	796	-
Loans and borrowings	5,914	4,215
Add: Promissory note on acquisition of One Moon Scientific	339	466
Total long-term debt	6,253	4,681
Less: current portion	3,966	1,936
Non-current portion of loans and borrowings	2,287	2,745

Credit Facility
The Company has an undrawn line of credit agreement with a major Canadian financial institution, pursuant to which it may borrow up to maximum of $2,000K (the "Credit Facility"). Borrowings under the Credit Facility bear interest at prime plus 0.75%. Under the terms of the Credit Facility, the Company is required to comply with the following financial covenants:

- Current Ratio must be at least 1.10 to 1. As at June 30, 2022, the Company's current ratio is 1.94 to 1.

The borrowing base is calculated using the aggregate of 75% of eligible USD receivables, 85% of eligible CAD investment grade receivables, and 50% of eligible inventory.

K'Prime
K'Prime has a line of credit agreement with a major Canadian financial institution, pursuant to which it may borrow up to a maximum of $4,000K (the "K'Prime Credit Facility"), repayable on demand. Borrowings under the K'Prime Credit Facility bear interest at prime plus 0.65%. Under the terms of the K'Prime Credit Facility, the Company is required to comply with the following financial covenant:

- Maintain debt to tangible net worth less than or equal to 2.5:1. As at June 30, 2022, it is 1.5:1.

The borrowing base is calculated using the aggregate of 75% of eligible CAD and USD receivable (including sales lease receivables), 90% of eligible CAD investment grade receivable, 50% of eligible inventory (to a maximum of $500K), and 75% of the valuation of equipment under operating lease.

K'Prime also has a line of credit with a major US financial institution, pursuant to which it may borrow up to maximum of USD $2,000K ("USD Credit Facility"), repayable on demand. Borrowing under the USD Credit Facility bears interest at prime plus 0.40%. The USD Credit Facility is guaranteed by the former shareholders of K'Prime, and cross guaranteed with other K'Prime legal entities. Under the terms of the USD Credit Facility, the Company is required to comply with the following financial covenants:

- Maintain minimum debt service coverage ratio of not less than 1.25.
- Maintain minimum adjusted tangible net worth of not less than USD $1.0 million.
- Maintain minimum liquidity of USD $300K.

The borrowing base is calculated using the aggregate of 75% of eligible receivables (including sales lease receivables) and 50% of eligible inventory (to a maximum of $500K).

The Company has undrawn credit facilities totalling $6,465K (December 31, 2021 - $2,000K). As at June 30, 2022, all covenants were in compliance.

Lease Liabilities

($000's)	Six months ended June 30, 2022	Twelve months ended December 31, 2021
Balance beginning of the period	1,304	752
Additions	-	784
Additions from K'Prime acquisition	306	-
Additions from Quad acquisition	636	-
Interest expense	56	51
Lease payments	(404)	(218)
Foreign exchange	(52)	(14)
Balance, end of the period	**1,790**	1,304
Current portion	495	262
Long-term portion	1,295	1,042

WORKING CAPITAL

($000's)	June 30, 2022	December 31, 2021	$ Change
Cash	12,278	10,405	1,873
Loans and leases	7,704	5,519	2,185
Working capital (1)	13,476	12,116	1,360

(1) Working capital is calculated as current assets less current liabilities.

At June 30, 2022, the Company had $13,476K of working capital (December 31, 2021 – $12,116K), which included $12,278K of cash (December 31, 2021 - $10,405K). The increase to working capital is mostly due to higher cash and inventory balances, offset by increases in accounts payable and the inclusion of line of credit from K'Prime.

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern and manage capital so that it can continue to provide returns for shareholders and benefits for other stakeholders through the development, maintenance and expansion of its operating segments. The Company attempts to maximize return to shareholders.

The Company defines its capital as share capital, debt and contributed surplus. The company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. The Company's liquidity needs in the short and long term can be addressed in multiple ways including with funds from operations, available cash balances, new debt instruments, equity issuances and government funding. The Company monitors its financing requirements through regular forecasting of its cash position. Financing decisions are based on the timing and extent of expected operating and capital outlays. The Company has financed its capital requirements primarily through loans and share issuances since inception. The Company may issue new securities. The Company is not subject to any externally imposed capital requirements.

FINANCIAL MANAGEMENT

	Six months ended June 30,		
($000's)	2022	2021	$ Change
Cash generated provided by (used in):			
Operating activities	(1,655)	456	(2,111)
Investing activities	(8,644)	(1,284)	(7,360)
Financing activities	12,172	1,535	10,637
Increase (decrease) in cash	1,873	707	1,166

Cash flows from operating activities has decreased for the six months ended June 30, 2022, from the same period in 2021 by $2,111K. The decrease is due to decreased operating results period over period.

Cash flows used in investing activities increased for the six months ended June 30, 2022, from the same period in 2021 by $7,360K. The increase is due to the acquisition of K'Prime and Quad, coupled with increased investment in intangible asset development and investment in property, plant and equipment.

Cash flows provided by financing activities increased for the six months ended June 30, 2022, from the same period in 2021 by $10,637K. The increase is due primarily to the closing of a best efforts deal public offering and a non-brokered private placement in for net proceeds of $13,886K.

Below is a reconciliation of the manner in which the net proceeds from the Company's best efforts public offering were used by the Company compared to the disclosure in the Company's final short form prospectus dated February 7, 2022. The table reflects the actual use of net proceeds as of June 30, 2022.

($000's)

Principal Purpose	***Estimated Allocation of Net Proceeds ($)***	***Actual Use of Net Proceeds ($)***	***Explanation of variances and the impact, if any, on your company's ability to achieve its business objectives and milestones***
Expenses relating to the Offering (Underwriters' Fee and estimated Offering expenses)	*1,126K*	*1,339K*	*The expenses related to the offering were higher than what was estimated.*
Sales and marketing	*250K*	*250K*	*The Company has applied $250,000 of the net proceeds for sales and marketing.*
Research and development	*500K*	*Nil*	*The Company has not applied any of the $500,000 of the net proceeds for activities undertaken by the Company's scientists and engineers to create new nuclear magnetic resonance ("NMR") products or improve existing NMR products.*
Quad Systems acquisition	*4,534K*	*4,534K*	*The Company funded the initial equity investment in Quad Systems AG, acquiring a 40% ownership stake and an option to purchase the remaining shares. Cash used was $9,031K.*
Working capital	*2,115K*	*Nil*	*As at June 30, 2022, the Company had sufficient working capital for future acquisitions. The remaining $2,115K is expected to be used for working capital and general corporate purposes in the next 18-month period.*
Acquisitions	*2,000K*	*2,000K*	*The Company funded the initial equity investment in Quad Systems AG, acquiring 40% ownership and an option to purchase the remaining shares, the cash used was $9,031K.*

SHARE CAPITAL

[a] Authorized

Unlimited number of common shares, without nominal or par value
Unlimited number of Class A voting preferred shares without par value
Unlimited number of Class B non-voting preferred shares without par value

[b] Issued

Common shares

At June 30, 2022, the Corporation had 94,191,526 common shares outstanding. There are 3.8 million shares under lock-up issued for the acquisition of RS2D. These common shares are scheduled for release as follows:

- 159,667 on January 31, 2023
- 870,000 on March 3, 2023
- 2,760,000 on January 11, 2024

During the six-month period ended June 30, 2022, the Company issued the following common shares:

- 425,026 shares upon the exercise of options and RSUs for cash consideration of $227K
- 2,760,000 shares issued for the purchase of K'Prime
- 13,840,637 shares issued through issuance of common shares for cash in conjunction with the public offering and non-brokered private placement discussed above.

[c] Loss per share

($000's) except for number of shares	Three months ended June 30 2022	Three months ended June 30 2021	Six months ended June 30 2022	Six months ended June 30 2021
Numerator				
Income (loss) attributable to common shares ($)	(2,296)	222	(3,746)	(253)
Denominator				
Weighted average number of shares for basic earning per share calculation (000's)	94,127	66,958	90,687	66,575
Weighted average number of shares for diluted earning per share calculation (000's)	94,127	68,583	90,687	66,575
Basic income (loss) per common share ($/share)	(0.02)	0.00	(0.04)	(0.00)
Diluted income (loss) per common share ($/share)	(0.02)	0.00	(0.04)	(0.00)

[d] Stock options

The Company has a stock option plan that provides for the issuance of options to eligible persons. The option price under each option granted must be no less than the discount market price defined by the TSX-V. The term of the options must be no longer than 5 years and the directors determine the vesting period, which is typically 3 years. The maximum number of outstanding options must be no more than 10% of the issued and outstanding common shares at any point in time, the 10% includes both stock options and restricted share units in aggregate. The maximum number of outstanding options issued for investor relations must be no more than 2% of the issued and outstanding shares and the options issued to investor relations must vest in stages over a 12-month period with no more than one quarter of the options vesting in any three-month period.

	Number	Weighted Average Exercise Price $
Balance, December 31, 2020	**4,687,250**	**0.53**
Granted	1,598,000	0.84
Exercised	(1,255,499)	(0.37)
Forfeitures	(136,417)	0.45
Balance, December 31, 2021	**4,893,334**	**0.62**
Granted	2,461,500	1.33
Exercised	(425,026)	(0.54)
Balance, June 30, 2022	**6,929,808**	**0.96**

During the three- and six-month periods ended June 30, 2022, and 2021, the Company recorded stock-based compensation of $413K and $638K, respectively, for stock options granted (three and six months ended June 30, 2021 - $114K and $243K).

The fair values of stock options granted were estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

	2022	2021
Risk-free interest rate	1.39% - 3.18%	0.9% - 1.6%
Estimated annualized volatility based on historical performance	73% - 74%	70% - 75%
Expected life	5.0 years	5.0 years
Expected dividend yield	0%	0%
Exercise price	$1.20 - $1.50	$0.60 - $1.70
Fair value	$0.56 - $0.83	$0.27 - $0.81

As at June 30, 2022, the Company had the following stock options outstanding and exercisable:

Exercise Price ($)		Number of Options Outstanding	Weighted Average Life	Number of Options Exercisable
$	0.45	93,500	0.41	93,500
$	0.60	3,724,808	2.79	2,149,482
$	0.75	200,000	2.03	133,333
$	1.20	35,000	4.99	-
$	1.24	50,000	4.29	-
$	1.30	100,000	4.01	-
$	1.32	2,276,500	4.49	-
$	1.50	350,000	4.47	-
$	1.70	100,000	2.22	75,000
		6,929,808	**3.41**	**2,451,315**

[e] Restricted Share Units ("RSU")
On February 28, 2022, the Company granted 60,000 RSU's. These RSUs vest in two stages; one half 18 months from the date of grant and one half 36 months from the date of grant. Each vested RSU entitles the holder to receive one common share of the Company. For the three- and six-months periods ended June 30, 2022, the Company recorded stock-based compensation expense related to RSU's of $21K and $38K respectively (three and six months ended June 30, 2021 - $20K and $52K).

Total RSU's outstanding as of June 30, 2022, was 340,000 (December 31, 2021 – 280,000).

[f] Warrants
On August 25, 2021, the Company completed a public offering and a concurrent private placement of units. The combined offering resulted in the Company issuing 5,119,038 warrants that expire on August 25, 2023. As at June 30, 2022, all 5,119,038 outstanding warrants were vested and exercisable at a price of $1.70. The Company has adopted a residual value method with respect to the measurement of shares and warrants issued as units. The residual value method first allocates value to the more easily measurable component based on fair value and then the residual value, if any, to the less easily measurable component. The Company considers the fair value of common shares issued in these types of transactions to be the more easily measurable component, fair value being determined by the closing quoted bid price on the announcement date. The balance, if any, is allocated to the attached warrants. Any fair value attributed to the warrants is recorded to share purchase warrant reserve. The fair value of the warrants was determined based on the residual value method to be $0.08 per warrant.

On February 11, 2022, the Company completed a public offering and a concurrent private placement of common shares. The combined offering resulted in the Company issuing 784,875 broker warrants that expire on February 11, 2024. As at June 30, 2022, all 784,875 outstanding warrants were vested and exercisable at a price of $1.70.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company has exposure to the following risks from its use of financial instruments:
- Credit risk;
- Liquidity risk;
- Market risk; and
- Interest rate risk

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk.

Risk management framework
The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

Credit risk
Credit risk is the risk of a financial loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. The Company is exposed to credit risk in the event of non-performance by counterparties in connection with its cash, accounts

receivable, and other receivables. The Company’s maximum exposure to credit risk at June 30, 2022, is the carrying amount of cash, accounts receivable, and other receivables on the consolidated statements of financial position. The Company mitigates this risk by holding its cash in major Canadian financial institutions and performing credit enquiries on its customers.

Management regularly assesses the Company’s exposure to credit risk and provides allowances for potentially uncollectible accounts receivable as they become known. Although collection of these receivables could be influenced by economic factors, management considers the risk of significant loss to be mitigated by the number, reputation and nature of the companies with which the Company does business. Trade accounts receivable are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of the counterparty to engage in a repayment plan with the Company and a failure to make contractual payments for a period of greater than 180 days past due. During the six months ended June 30, 2022, a bad debt of $45K was recognized as an expense (2021 - $3K).

Liquidity risk
Liquidity risk is the risk that the Company will not be able to meet its obligations as they come due. As of June 30, 2022, the Company had working capital of $13,476K (December 31, 2021 - $12,116K). The Company’s exposure to liquidity risk is dependent on its ability to capitalize on its research and development, ability to manufacture and deploy new products, sale of inventory, collection of accounts receivable and other receivables, and the raising of funds to meet commitments, sustain operations, and continue research and development. The Company manages liquidity risk by management of working capital, cash flows, availability of borrowing facilities and share issuances.

Market risk
Market risk is the risk of loss that results from changes in market prices. Market risk is comprised of foreign currency risk and interest rate risk. The level of market risk to which the Company is exposed to depends on market condition, expectations of future price or market rate movements and the composition of the Company’s financial assets and liabilities. The Company regularly monitors market risk exposure, tolerance and control processes in order to manage the exposure related to changes in market risk and to stay within acceptable market risk limits.

[i] Currency risk
The Company is exposed to the financial risk related to the fluctuation of foreign exchanges rates. The majority of the Company’s sales are in U.S. dollars. The Company has not entered into foreign exchange derivative contracts.

The Company had the following assets and liabilities denominated in U.S. dollars at the end of period:

	June 30, 2022	December 31, 2021
($000's)	US$	US$
Cash	2,052	424
Accounts receivable	3,038	2,481
Prepaid	48	-
Lease receivable	1,487	-
Inventory	207	-
Accounts payable & accrued liability	(1,759)	(409)
Unearned revenue	(86)	-
Line of credit	(1,022)	-
Total	3,965	2,496

The above assets and liabilities were translated using an exchange rate of 1.29 at June 30, 2022 (December 31, 2021 – 1.27). Based on the above net exposure as at June 30, 2022, and December 31, 2021, assuming all other variables remain constant, a 10% appreciation or deterioration of the Canadian dollar against the U.S. dollar would result in a change of approximately $511K (December 31, 2021 - $317K) in the Company’s net earnings/loss. Total sales in U.S. dollars for the six months ended June 30, 2022, were $5,111K (2021 - $2,399K). A 10% appreciation or deterioration of the Canadian dollar against the U.S. dollar would result in a change of approximately $650K (2021 - $298K).

The Company had the following assets and liabilities denominated in Euros at the end of the period:

($000's)	March 31, 2022 Euro (€)	December 31, 2021 Euro (€)
Cash	321	415
Accounts receivable	918	1,294
Inventory	229	127
Prepaids	152	154
Unearned revenue	(744)	(981)
Debt and lease liabilities	(644)	(835)
Accounts payable and accrued liabilities	(684)	(1,450)
Total	(452)	(1,276)

The above assets and liabilities were translated at 1.35 at June 30, 2022 (December 31, 2021 - 1.44). Based on the above net exposure, as at June 30, 2022, and December 31, 2021, assuming that all other variables remain constant, a 10% appreciation or deterioration of the Canadian dollar against the Euro would result in a change of approximately $61K (December 31, 2021 - $184K) in the Company's other comprehensive income. Total sales in Euros for the six months ended June 30, 2022, was €1,193 (2021 - €1,658). A 10% appreciation or deterioration of the Canadian dollar against the Euro would result in a change of approximately $166K (2021 - $244K).

The Company had the following assets and liabilities denominated in Swiss Francs at the end of the period:

($000's)	June 30, 2022 CHf	December 31, 2021 CHf
Cash	4,022	-
Accounts receivable	31	-
Accounts payable and accrued liabilities	(29)	-
Total	4,024	-

The above assets and liabilities were translated at 1.35 at June 30, 2022. Based on the above net exposure as at June 30, 2022, assuming that all other variables remain constant, a 10% appreciation or deterioration of the Canadian dollar against the Swiss Franc would result in a change of approximately $543K (December 31, 2021 -$Nil) in the Company's other comprehensive income. Total sales in Swiss Francs for the six months ended June 30, 2022, were CHF $100K (2021 – CHF $Nil). A 10% appreciation or deterioration of the Canadian dollar against the Swiss Franc would result in a change of approximately $14K (2021 - $Nil).

[ii] Interest rate risk
Interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in the market interest rates. During the six months ended June 30, 2022, and 2021, fluctuations in the market interest rates had no significant impact on its interest expense.

A more detailed description of the business risks is set forth in the Annual Information Form, which is dated April 27, 2022, and is available on SEDAR at www.sedar.com

REVENUE AND SEGMENT INFORMATION

($000's)

Three months ended June 30, 2022	Nanalysis	RS2D	K'Prime	Corporate	Total
Revenue	2,890	341	1,956	-	5,187
Operating (loss) earnings	(648)	(42)	490	(747)	(947)
Net (loss) earnings	(1,943)	125	437	(1,151)	(2,532)
Depreciation and amortization expense	999	48	127	-	1,174
Capital expenditures	2,231	10	11	-	2,252
Total assets as at June 30, 2022	23,910	1,863	3,374	44,183	73,330

($000's)

Three months ended June 30, 2021	Nanalysis	RS2D	Corporate	Total
Revenue	3,229	1,114	-	4,343
Income (loss) before other items	1,340	206	(312)	1,234
Net income (loss)	640	7	(425)	222
Depreciation and amortization expense	445	189	-	634
Capital expenditures	659	53	-	712
Total assets as at June 30, 2021	15,801	7,644	2,269	25,714

($000's)

Six months ended June 30, 2022	Nanalysis	RS2D	K'Prime	Corporate	Total
Revenue	5,951	1,282	3,508	-	10,741
Operating (loss) earnings	(423)	123	813	(1,251)	(738)
Net (loss) earnings	(2,518)	(25)	541	(2,022)	(4,024)
Depreciation and amortization expense	1,916	99	234	-	2,249
Capital expenditures	4,284	36	22	-	4,342
Total assets as at June 30, 2022	23,910	1,863	3,374	44,183	73,330

($000's)

Six months ended June 30, 2021	Nanalysis	RS2D	Corporate	Total
Revenue	4,862	2,750	-	7,612
Income (loss) before other items	1,350	763	(615)	1,498
Net income (loss)	424	360	(1,037)	(253)
Depreciation and amortization expense	876	389	-	1,265
Capital expenditures	1,231	53	-	1,284
Total assets as at June 30, 2021	15,801	7,644	2,269	25,714

GEOGRAPHIC LOCATION

During the six months ended June 30, 2022, the Company was not economically dependent on any customers accounting for more than 10% of revenue (2021 – Nil). The Company's revenues are allocated to geographic segments as follows:

	Three months ended June 30		Six months ended June 30	
($000's)	2022	2021	2022	2021
United States of America	3,297	2,008	6,172	2,975
Canada	1,219	467	2,318	680
Europe	294	989	1,207	2,492
Asia	-	133	258	190
Other (Brazil, Chile, India, Mexico, Morocco, Nigeria)	377	746	786	1,275
	5,187	4,343	10,741	7,612

OFF-BALANCE SHEET ARRANGMENTS

The Company does not have any off-balance sheet financing arrangements.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of interim condensed consolidated financial statements requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the interim condensed consolidated financial statements and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. The impacts of such estimates are pervasive throughout these interim condensed consolidated financial statements and may require accounting adjustments based on future occurrences. Revisions to accounting estimates are recognized in the period in which the estimate is revised and future periods if the revision affects both current and future periods. These estimates are based on historical experience, current and future economic conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Notes 2 and 3 to the Company's audited consolidated financial statements as at and for the year ended December 31, 2021 contain a description of the accounting policies, judgements, estimates and assumptions that are considered significant.

ADDITIONAL CORPORATE INFORMATION

The Company is a publicly traded Corporation listed on the TSX Venture Exchange under the symbol "NSCI".

Forward Looking Statement Advisory

This Management's Discussion and Analysis ("MD&A") contains certain forward-looking statements and forward-looking information (collectively referred to herein as "forward-looking statements") within the meaning of applicable Canadian securities laws. All statements other than statements of present or historical fact are forward-looking statements. Forward-looking information is often, but not always, identified by the use of words such as "could", "should", "can", "anticipate", "expect", "believe", "will", "may", "projected", "sustain", "continues", "strategy", "potential", "projects", "grow", "take advantage", "estimate", "well positioned" or similar words suggesting future outcomes. In particular, this MD&A may contain forward-looking statements relating to future opportunities, business strategies, development and production plans and competitive advantages.

The forward-looking statements regarding the Company are based on certain key expectations and assumptions of the Company concerning anticipated financial performance, business prospects, strategies, regulatory developments, exchange rates, tax laws, the sufficiency of budgeted capital expenditures in carrying out planned activities, the availability and cost of labour and services and the ability to obtain financing on acceptable terms and future costs and expenses being based on historical costs and expenses, adjusted for inflation, all of which are subject to change based on market conditions and potential timing delays. Although management of the Company consider these assumptions to be reasonable based on information currently available to them, they may prove to be incorrect.

By their very nature, forward-looking statements involve inherent risks and uncertainties (both general and specific) and risks that forward-looking statements will not be achieved. Undue reliance should not be placed on forward-looking statements, as a number of important factors could cause the actual results to differ materially from the beliefs, plans, objectives, expectations and anticipations, estimates and intentions expressed in the forward-looking statements, including among other things: general economic and market factors, including business competition, changes in government regulations or in tax laws; component prices; technology development or operational activities; inability to scale manufacturing; changes in market demand; changes in international trade regulations, affecting the Company; timing and availability of external financing on acceptable terms; and lack of qualified, skilled labour or loss of key individuals; as well as those factors detailed from time to time in the Company's interim and annual financial statements and management's discussion and analysis of those statements. Readers are cautioned that the foregoing list is not exhaustive.

The forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement. The forward-looking statements included in this MD&A are made as of the date of this MD&A and the Company does not undertake and is not obligated to publicly update such forward-looking statements to reflect new information, subsequent events or otherwise unless so required by applicable securities laws.