



PYROGENESIS CANADA INC.
MANAGEMENT'S DISCUSSION AND ANALYSIS

For the three and six months ended June 30, 2014

(All figures expressed in Canadian dollars unless otherwise noted.)

August 29, 2014

This management's discussion and analysis (MD&A) of PyroGenesis Canada Inc. ("PCI" or the "Company") has been prepared by management and should be read in conjunction with the unaudited financial statements and related notes thereto of the Company for the three and six months ended June 30, 2014 which were prepared in accordance with International Financial Reporting Standards ("IFRS"). The Company's Audit Committee has reviewed and approved this MD&A.

The MD&A was prepared as of August 29, 2014. Additional information regarding the Company is available on SEDAR (www.sedar.com).

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements. All statements other than statements of historical fact contained in this MD&A are forward-looking statements, including, without limitation, the Company's: statements regarding its products and services; relations with suppliers and customers; future financial position; business strategies; potential acquisitions; potential business partnering; litigation; and plans and objectives. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" and similar words or the negative thereof. Although management of the Company believes that the expectations represented in such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct.

In particular, this MD&A contains forward-looking statements that relate, but are not limited, to:

- the business strategies of the Company;
- the capital resources of the Company;
- the ability of the Company to increase sales, including the results of the successful completion of the Company's current projects;



- management's expectation that the Company will achieve sustained annual growth and profitability, and that gross margins will increase resulting in a decrease in cost of sales as a percentage of revenue; and
- the Company's overall financial performance.

By their nature, forward-looking statements require assumptions and are subject to inherent risks and uncertainties including those discussed herein. In particular, forward-looking statements relating to future sales, growth and profitability are based on the assumption that current projects will be completed and the Company will be awarded certain anticipated contracts pursuant to recent negotiations with, and statements made by, third parties. There is significant risk that predictions and other forward-looking statements will not prove to be accurate. Readers are cautioned to not place undue reliance on forward-looking statements made herein because a number of factors could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed in the forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including, but not limited to, the strength of the Canadian and US economy; operational, funding, and liquidity risks; unforeseen engineering and environmental problems; delays or inability to obtain required financing and/or anticipated contracts; risks associated with licenses, permits and regulatory approvals; supply interruptions or labor disputes; foreign exchange fluctuations and collection risk; competition from other suppliers or alternate less capital intensive energy solutions; and the risk factors described under the heading "Risk Factors" in the Company's annual information form for the financial year ended December 31, 2013. We caution that the foregoing list of factors is not exhaustive, and that, when relying on forward-looking statements to make decisions with respect to the Company, investors and others should carefully consider these factors, as well as other uncertainties and potential events, and the inherent uncertainty of forward-looking statements.

Although the Company has attempted to identify significant factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Forward-looking statements are provided as of the date of this MD&A, and the Company assumes no obligation to update or revise such forward-looking statements to reflect new events or circumstances except as required under applicable securities laws.

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 or such other date specified herein.



OVERVIEW

PyroGenesis Canada, a TSX Venture 50[®] company, is the world leader in the design, development, manufacturing and commercialization of advanced plasma processes. The company provides engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working from its Montreal office and its 3,800 m² production facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. PyroGenesis' core competencies allows the Company to be a leader in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. PyroGenesis' operations are ISO 9001:2008 certified, and have been since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol PYR.V).

SELECTED FINANCIAL INFORMATION

	Three months ended June 30,			Six months ended June 30,		
	2014	2013	% Change	2014	2013	% Change
Revenue	\$ 1,958,534	\$ 1,341,818	46%	\$ 2,764,959	\$ 2,482,961	11%
Cost of sales and services before amortization of intangible assets	833,700	797,129		1,316,841	1,427,712	
Gross margin before amortization of intangible assets	1,124,834	544,689		1,448,118	1,055,249	
Amortization of intangible assets	349,268	349,268		698,537	698,537	
Gross margin	775,566	195,421		749,581	356,712	
Selling, general and administrative	1,079,641	1,005,746		2,026,559	2,008,568	
Research and development	29,099	76,429		128,700	93,822	
Financing charges	85,045	90,140		177,304	185,355	
	1,193,785	1,172,315		2,332,563	2,287,745	
Loss from operations	(418,219)	(976,894)	-57%	(1,582,982)	(1,931,033)	-18%
Other income	1,066	1,421		1,101	1,421	
Comprehensive loss	\$ (417,153)	\$ (975,473)	-57%	\$ (1,581,881)	\$ (1,929,612)	-18%
Basic and diluted loss per share	\$ (0.01)	\$ (0.02)		\$ (0.02)	\$ (0.03)	
Adjusted EBITDA (loss)	\$ 138,262	\$ (340,819)	141%	\$ (493,031)	\$ (656,301)	25% ⁽¹⁾

⁽¹⁾ Reductions in Adjusted EBITDA between the periods is disclosed as a positive variance as the EBITDA result improved during the period.

Extract from Statement of Financial Position at :

	June 30, 2014	Dec 31, 2013
Current assets	2,745,446	2,247,261
Non-current assets	4,181,061	4,923,611
Total assets	\$ 6,926,507	\$ 7,170,872
Current liabilities	3,141,993	3,621,024
Non-current liabilities	757,212	8,159,862
Total Liabilities	\$ 3,899,205	\$ 11,780,886
Shareholders' equity (deficiency)	\$ 3,027,302	\$ (4,610,014)



RESULTS OF OPERATIONS

Revenues

Revenues for the second quarter of fiscal 2014, ending June 30, 2014 “2014-Q2”, were \$1,958,534 an increase of 46% over revenues of \$1,341,818 reported during the same period in fiscal year 2013. Revenues in 2014-Q2 are positively impacted by the work achieved on the reorder of the plasma waste destruction system to be installed on the CVN-79, the next US Navy Ford-class aircraft carrier, by work completed under phase 1 of the tactical mobile plasma system for destruction of chemical warfare agents, by the ongoing R&D projects incorporating novel plasma based technologies in the oil and gas industrial sector, and on the commencement of work on the Company’s latest project to manufacture ten plasma based powder production systems for 3D printing. Additionally revenues in 2014-Q2 were favorably impacted by the recognition in revenues of \$620,000 that was included in billings in excess of costs and profits on an uncompleted contract as at December 31, 2013 relating to a project that the Company terminated due to the customer’s breach of contract.

Revenues for the first six months of fiscal 2014 were \$2,764,959, an increase of 11% over revenues of \$2,482,961 reported during the same period in fiscal year 2013.

Revenues are now derived from a broader client, technology and industry base, which is a result of the increased identification and acceptance of PyroGenesis’ novel plasma solutions in various industries.

Year-to-date revenues were negatively impacted by certain customer-originated delays with respect to the commencement of the deployment of the European 10 TPD Plasma Waste to Energy system, the cancellation of the second phase of the Asian Plasma Torch project, and the short-term postponement of activities related to the CVN-79 project, on which activity has since resumed. Management expects the deployment of the European plasma system to commence shortly.



Cost of Sales and Services and Gross Margin

	Three months ended Jun 30,		%	Six months ended June,		%
	2014	2013	Change	2014	2013	Change
Employee Compensation	\$ 313,410	\$ 186,984	68%	\$ 527,157	\$ 411,058	28%
Subcontracting	8,949	5,135	74%	12,151	14,988	-19%
Direct materials	389,446	566,205	-31%	552,502	885,947	-38%
Manufacturing overhead & other	139,058	46,505	199%	260,350	135,419	92%
Investment tax credits	(17,163)	(7,700)	123%	(35,319)	(19,700)	79%
Sub-total before amortization of intangible assets	833,700	797,129	5%	1,316,841	1,427,712	-8%
Amortization of intangible assets	349,268	349,268	0%	698,537	698,537	0%
Total Cost of Sales and Services	\$ 1,182,968	\$ 1,146,397	3%	\$ 2,015,378	\$ 2,126,249	-5%

Gross Margin

	Three months ended June 30,		Six months ended June 30,	
	2014	2013	2014	2013
Revenue	\$ 1,958,534	\$ 1,341,818	\$ 2,764,959	\$ 2,482,961
Cost of Sales and Services before amortization of intangible assets	833,700	797,129	1,316,841	1,427,712
Gross Margin before amortization of intangible assets	1,124,834	544,689	1,448,118	1,055,249
Gross Margin % before amortization of intangible assets	57.4%	40.6%	52.4%	42.5%
Amortization of intangible assets	349,268	349,268	698,537	698,537
Gross Margin after amortization of intangible assets	\$ 775,566	\$ 195,421	\$ 749,581	\$ 356,712
Gross Margin % after amortization of intangible assets	39.6%	14.6%	27.1%	14.4%

Cost of Sales before the cost of amortization of intangible assets for the second quarter of fiscal 2014, ending June 30, 2014, was \$833,700, an increase of 5% compared to costs of \$797,129 reported during the same period in the prior fiscal year. On a year-to-date basis, the cost of sales and services before amortization of intangible assets was \$1,316,841 as compared to \$1,427,712 for the same period in the prior year; a decrease of 8%.

During 2014-Q2, employee compensation increased by 68%, predominately as a result of resumption of work on the CVN-79 project, new projects commenced in the oil and gas sector, the commencement of the tactical mobile plasma system and preparatory work on the manufacturing of the first of ten powder production systems for 3D printing and other new projects. Direct materials decreased versus the same period the prior year, which is a result of the procurement phase of the related projects. Manufacturing overhead and other costs increased by 199% due to shipping and brokerage costs associated with delivery of the first two systems of the Asian Plasma Torch project.

The type of contracts and the nature of project activity that are being executed during any given quarter will have a significant impact on both the overall level of cost of sales and services reported in a period as well as the composition of the cost of sales and service (mix between labor and materials and equipment).

In 2013, management implemented stringent and effective project management methods with respect to project execution which have resulted in a more efficient use of labor resources in engineering, procurement and manufacturing. In-house labor costs recorded on projects are consistently at or below targeted budget levels. Also in 2013, management undertook to invest more heavily in the development of internally funded



R&D projects, and as such these costs are now reflected as a separate line item on the Statement of Comprehensive Loss. The investment tax credits recorded against Cost of Sales are related to external client funded projects that qualify for tax credits.

The number of projects the company is executing and has under development is increasing significantly. Due to ongoing efforts to reduce fixed manufacturing costs and streamlining its operating procedures the Company is well positioned to address the higher business volumes. The Company is better positioned, and has become more competitive, as the majority of these cost containment measures are permanent and as such will have a long term impact on the company's profitability. All manufacturing overhead costs are fully applied against Cost of Sales and Services.

The amortization of intangible assets of \$349,268 in 2014 Q2 relates to the licenses and know-how purchased in 2011 from a company under common control. This expense is a non-cash item and the underlying asset will be fully amortized by the end of 2016.

Building on the improvements in gross margins (before amortization of intangible assets) started in 2012, 2014-Q2 posted exceptional strong gross margins of 57.4%, which, exceeded the Company's business plan for the period. Gross margin for 2014-Q2 before amortization of intangible assets was \$1,124,834 (57.4% of revenues), versus a gross margin of \$544,689 (40.6% of revenues) for 2013-Q2. This strong level of gross margin was achieved through an increased control over project management and technical resources as well as improved buying techniques. Of note, is that the 2014-Q2 gross margins were also positively impacted by the one-time event wherein the termination of a project due to a customer's breach of contract. Management notes that it continues to target gross margins of approximately 40% which are consistent with the average gross margins it has been realizing.

With the increased focus on operations and project execution, PyroGenesis expects to continue to post favorable gross margins despite the fact that margins will naturally fluctuate quarter to quarter depending on the types of projects under execution and the completion stage of the projects.



Selling, General and Administrative Expenses

	Three months ended June 30, 2014	2013	% Change	Six months ended June 30, 2014	2013	% Change
Employee compensation	\$ 565,174	\$ 528,744	7%	\$ 1,084,845	\$ 1,076,122	1%
Professional fees	215,959	162,720	33%	381,394	254,394	50%
Office and general	78,886	80,240	-2%	159,076	172,179	-8%
Travel	42,138	26,035	62%	81,503	64,608	26%
Depreciation on property and equipment	42,602	45,461	-6%	84,509	93,794	-10%
Other expenses	56,382	12,761	342%	106,732	51,846	106%
Sub-total before Share-based payments	1,001,141	855,961	17%	1,898,059	1,712,943	11%
Share-based payments	78,500	149,785	-48%	128,500	295,625	-57%
Total selling, general and administrative	\$ 1,079,641	\$ 1,005,746	7%	\$ 2,026,559	\$ 2,008,568	1%

Selling, general and administrative expenses for the second quarter of fiscal 2014, ending June 30, 2014, were \$1,079,641, an increase of 7% versus \$1,005,746, reported during the same period in fiscal year 2013. 2014-Q2, includes share based compensation of \$78,500, (\$149,785 in 2013-Q2). The costs associated with share-based compensation (a non-cash item on which options vest over a four year period) commenced in 2011-Q3 when a stock option plan was put in place. Selling, general and administrative before share based payments increased by 17% in 2014-Q2 over the same period in the prior year, and 11% on a year-to-date basis for the six months ended June 30, 2014.

Within SG&A are costs associated with Corporate Administration, Business Development, Proposals, Operations Administration, Investor Relations and Employee Training.

Of note is that during 2013, management took the strategic decision to increase its commitment to business development, proposal development and the general management thereof. It is expected that there is a natural delay between the expenses incurred of such items and the related increase in revenues derived therefrom. Management is happy to report that this commitment has already started to produce results as has been evidenced by the reported increased levels of new business volumes as recorded in the record backlog.

2014-Q2 major variances versus same period in of prior year (2013) are as follows:

- Employee compensation increased by 7%, due to the largest business development push in the Company's history.
- Professional fees increased by 33% due to increased level of patent registration and maintenance costs.
- Travel costs increased by 62%, due to increased Business Development and Investor Relations travel. Travel costs were incurred to complete the finalization of the new contract for the manufacturing of the Powder Production Systems for 3D printing (contract value of \$12,500,000).



-Other expenses increased by 342%, resulted mainly due to reclassification of expenses in 2013-Q2 which decreased the period costs. 2014-Q2 costs were negatively affected by increased insurance costs relating to increased business volumes.

-Share based payments decreased by 48% as a result of the vesting structure of the stock option plan. The majority of the stock options will be fully vested by December 31, 2014.

Research and Development (“R&D”) Costs

Given the fact that in 2013, management determined that internally funded R&D projects were going to be a critical component to further improve its product lines, and as such made the strategic decision to increase the level of such funding, the Company decided, going forward, to account and disclose, the net costs incurred on internally funded R&D projects as a separate line item in the Statement of Comprehensive Loss thereby better reflecting the level of spending in, what management believes will become an increasingly significant area of its business. Prior to 2013, all of the Company’s R&D work was done as part of their contract research services and with externally client funded projects some of which were R&D tax credit expenditure eligible.

Internal R&D Project Costs	Three months ended June 30,					
	2014	2013	% Change	2014	2013	% Change
Employee compensation	\$ 29,978	\$ 81,169	-63%	\$ 152,398	\$ 126,147	21%
Subcontracting	7,610	14,364	-47%	16,110	24,947	-35%
Materials and equipment	3,101	17,461	-82%	18,787	18,435	2%
Other expenses	726	138	426%	1,788	295	506%
Sub-total before government grants	41,415	113,132	-63%	189,083	169,824	11%
Government grants	(12,316)	(36,703)	-66%	(60,383)	(76,002)	-21%
Total net R&D costs	\$ 29,099	\$ 76,429	-62%	\$ 128,700	\$ 93,822	37%

During 2014-Q2, the Company incurred \$29,099 of costs net of grants on internal R&D projects versus \$76,429 the same period for the prior year. For the six months ended June 30, 2014, net spending on internal R&D projects was \$128,700 versus \$98,822 during the same period in 2013.

In addition to internally funded R&D projects, the company incurred R&D eligible expenditures on the execution of external client funded projects. R&D tax credits on external client funded projects are applied against Cost of Sales and Services (see below).



Research and Development Tax Credits

	Three months ended June 30,		%	Six months ended June 30,		%
	2014	2013	Change	2014	2013	Change
Research tax credits	\$ 17,163	\$ 7,700	123%	\$ 35,319	\$ 19,700	79%

Research and development (“R&D”) tax credits of \$17,163 were accrued in 2014-Q2 as compared to \$7,700 during 2013-Q2. The increased level of R&D tax credits in 2014 is in line with the level of qualifying costs on external R&D projects.

Financing Charges

	Three months ended June 30,		%	Six months ended June 30,		%
	2014	2013	Change	2014	2013	Change
Financing charges	\$ 85,045	\$ 90,140	-6%	\$ 177,304	\$ 185,355	-4%

Financing charges for 2014-Q2 were \$85,045 versus \$90,140 for the same period in the prior year. Financing charges relate solely to the interest component of the current portion of the long-term debt that came due during the period. Financing charges will decrease significantly as of 2014-Q3 due to the conversion of \$6,000,000 of debt to equity which took place on May 23, 2014 (see note 12 of the 2014-Q2 financial statements).

Depreciation on Property and Equipment

	Three months ended June 30,		%	Six months ended June 30,		%
	2014	2013	Change	2014	2013	Change
Amortization on property and equipment	\$ 42,602	\$ 45,461	-6%	\$ 84,509	\$ 93,794	-10%

Depreciation on property and equipment decreased by 6% to \$42,602 in 2014-Q2, versus \$45,461 for 2013-Q2, and decreased by 10% on a year-to date basis. This decrease is primarily as a result of decreased investments in machinery and equipment since 2010 when major acquisitions were made.



Comprehensive loss

	Three months ended June 30,		%	Six months ended June 30,		%
	2014	2013	Change	2014	2013	Change
Loss from operations	\$ (418,219)	\$ (976,894)	-57%	\$ (1,582,982)	\$ (1,931,033)	-18%
Comprehensive loss	\$ (417,153)	\$ (975,473)	-57%	\$ (1,581,881)	\$ (1,929,612)	-18%

Loss from operations and Comprehensive loss for the second quarter of fiscal 2014, ending June 30, 2014, was \$418,219 and \$417,153 respectively as compared to losses of \$976,894 and \$975,473 for the same period in 2013, a decrease of 57% in both categories. Year-to-date, Loss from operations and Comprehensive loss was \$1,582,982 and \$1,581,881 respectively as compared to comparable losses of \$1,931,033 and \$1,929,612 for the same period in 2013, a decrease of 18% in both categories.

The 57% decrease in the comprehensive loss in 2014-Q2 versus the comparable 2013 period, is predominately a result of a 46% increase in revenues, a 16.8% increase in gross margins offset in part by a 7% increase in SG&A costs. The Company continues to maintain strong control over its spending while increasing resources allocated to business development, proposals, investor relations and research and development.

EBITDA

	Three months ended June 30,		%	Six months ended June 30,		%
	2014	2013	Change	2014	2013	Change
Comprehensive loss	\$ (417,153)	\$ (975,473)	-57%	\$ (1,581,881)	\$ (1,929,612)	-18%
Amortization on property and equipment	42,602	45,461		84,509	93,794	
Amortization of intellectual property	349,268	349,268		698,537	698,537	
Financing charges	85,045	90,140		177,304	185,355	
EBITDA (loss)	\$ 59,762	\$ (490,604)	112%	\$ (621,531)	\$ (951,926)	35% ⁽¹⁾
Other non-cash items:						
Share-based payments	78,500	149,785		128,500	295,625	
Adjusted EBITDA (loss)	\$ 138,262	\$ (340,819)	141%	\$ (493,031)	\$ (656,301)	25% ⁽¹⁾

(1) Reductions in the EBITDA and Adjusted EBITDA between the periods are disclosed as positive changes as the EBITDA results improved during the period.

The Company reports on its EBITDA (Earnings from operations before interest, taxes, depreciation and amortization) and Adjusted EBITDA (Earnings from operations before interest, taxes, depreciation, amortization and other non-cash items including share-based payments costs).

EBITDA and Adjusted EBITDA are not performance measures defined under IFRS and they are not considered an alternative to income (loss) from operations or Comprehensive earnings (loss) in the context of measuring Company's performance. Management believes that providing certain non-GAAP performance measures, in addition to IFRS measures provides users of our financial statements with enhanced understanding of our results and related trends and increases transparency and clarity into the core results of the business. We believe Adjusted EBITDA is an important measure of operating



performance because it allows management, investors and other to evaluate and compare our core operating results, including our return on capital and operating efficiencies, from period to period by removing the impact of our capital structure (interest expense from outstanding debt), asset base (depreciation and amortization), tax consequences, and other non-operating items not requiring cash outlays including share-based compensation.

Other companies may calculate Adjusted EBITDA differently, and therefore our Adjusted EBITDA may not be comparable to similarly titled measures of other companies.

Adjusted EBITDA for 2014-Q2 was \$138,262 as compared to a loss of \$340,819 for the same period last year, an improvement of 141%. For the six months ended June 30, 2014, Adjusted EBITDA loss was \$493,031 as compared to a loss of \$656,301 for the same period last year, an improvement of 25%.

The 141% improvement in Adjusted EBITDA during 2014-Q2 over the same period in the prior year is a result of increased revenues (which are computed on a percentage of completion basis), improvements on already strong gross margins, and a controlled increase in SG&A.

SUMMARY OF QUARTERLY RESULTS

	2014		2013				2012	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenues	\$ 1,958,534	\$ 806,425	\$ 1,878,793	\$ 1,394,255	\$ 1,341,818	\$ 1,141,143	\$ 1,221,501	\$ 516,595
Gross margin before amortization of intangible assets GM%	1,124,834 57.4%	323,284 40.1%	991,486 52.8%	575,462 41.3%	544,689 40.6%	510,560 44.7%	381,574 31.2%	(255,413) -49.4%
Loss from operations	(418,219)	(1,164,763)	(561,696)	(916,604)	(976,894)	(954,139)	(840,167)	(1,742,758)
Comprehensive loss	(417,153)	(1,164,728)	(1,143,309)	(915,156)	(975,473)	(954,139)	(840,142)	(1,742,581)
Net loss per share - basic and diluted	(0.01)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.03)

As illustrated above, although the revenues and losses from operations have varied from quarter to quarter, the trend has been towards increasing revenues, improved gross margins, and lower losses, with results having become much more consistent since 2013-Q1. The decrease in revenues in 2014-Q1 was a temporary variation due to delays in commencement and continuation of previously reported projects. Revenues are recognized based on a percentage of completion basis, and is dependent timing of project engineering, manufacturing, and testing.



LIQUIDITY AND CAPITAL RESSOURCES

During 2014-Q2, the primary sources of funding for PyroGenesis have been cash generated from projects and the third private placement completed on May 22, 2014.

At June 30, 2014, PyroGenesis had cash on hand of \$752,997 and negative working capital of \$396,547 (negative \$1,373,763 at December 31, 2013). The negative working capital decreased significantly in 2014 due to the cash generated from the private placement where net proceeds of \$3,120,697 were raised, and decrease in billing in excess of costs and profits on uncompleted contracts of \$1,796,758 as revenues were recognized based on percentage of completion basis.

Concurrently with the May 2014 private equity placement, a major shareholders of, and creditor of the Company, agreed to a debt-for-share exchange whereby \$6,000,000 of debt was converted to equity. This transaction has strengthened the balance sheet of the Company with a much improved debt to equity ratio, with interest costs relating to the remaining debt decreasing by approximately \$70,000 per month or \$210,000 per quarter. After the debt for share conversion, the total debt (loans) outstanding to related parties at June 30, 2014 was \$2,225,856 as compared to \$8,153,723 at December 31, 2013.

There is no debt owing to unrelated third parties.

Since the Company went public in July 2011, the primary source of funding has been the issuance of shares via public offerings. The Company's ability to raise additional funds from the equity markets will largely depend upon general market conditions and the Company's ability to secure contracts.

The Company recently announced that it has signed a \$12.5 million contract with a major international manufacturer to supply ten plasma-based, powder productions systems for 3D printing. This contract will be executed over the next 18 months. The Company is currently completing the final phase of the \$5.6 million reorder from Newport News Shipbuilding for a plasma waste destruction system to be installed in a new US Navy air craft carrier. The Company is also working on several other strategic mandates in the oil and gas industry as well as on military related contracts. These orders provide the Company with a solid foundation of contracted backlog throughout 2014 and into 2015. At June 30, 2014, the current backlog of signed contracts stands at \$17,600,000 most of which is anticipated to be recognized as revenue in 2014 or 2015.

Cash collections during 2014 have been strong with the exception of an outstanding receivable of \$250,000 relating to the invoiced deposit on a contracted project.

Despite the May 2014 private placement and the increase in project backlog, cash flow remains challenging as management invests in increased business development, proposal structuring, investor relations, and on execution of key project milestones.



Summary of Cash Flows

	Three months ended June 30,		Six months ended June 30,	
	2014	2013	2014	2013
Cash provided by (used in) operating activities	\$ (2,381,566)	\$ 73,470	\$ (3,550,754)	\$ (1,503,037)
Cash provided by (used in) investing activities	(17,549)	(59,059)	(40,496)	(59,059)
Cash provided by (used in) financing activities	3,099,859	30,716	3,161,412	(24,689)
Increase (decrease) in cash	700,744	45,127	(429,838)	(1,586,785)
Cash - end of period	752,997	608,786	752,997	608,786

For the three months ended June 30, 2014, cash flow from operating activities resulted in a net use of cash of \$2,381,566 compared to a net source of cash from operating activities of \$73,470 for the same period during the prior year. The largest variance in the cash used in operating activities is a reduction in the change in non-cash operating working capital items which are disclosed in note 14(i) of the financial statements, where billings in excess of costs and profits on uncompleted contracts decreased by \$1,404,941 as projects are executed and revenues recognized.

Investing activities in 2014-Q2 resulted in use of cash of \$17,549 and \$59,059 for the same period in 2013. Cash used in investment activities in 2014 was for property and equipment to make required upgrades to computer hardware and software used in the operations of the Company.

Financing activities in 2014-Q2 resulted in a source of funds of \$3,099,859 as compared to \$30,716 in 2013-Q2. As mentioned in the preceding section, the Company completed a private equity placement on May 22, 2014 which resulted in net proceeds of \$3,120,697. The net proceeds will be used for general corporate purposes, working capital and development projects relating to recent business development efforts.

On December 16, 2013, the Company signed an amending agreement to amend the terms and conditions of the balance of sale with a company under common control. Based on the amending agreement payments starting on October 1, 2013 and ending May 1, 2014 plus other past due payments were deferred until April 1, 2015. As per the terms of the amending agreement, as the Company concluded a financing in excess of \$3,000,000 before April 1, 2015, all deferred amounts have become immediately due and payable on the closing date of the financing. As at June 30th, 2014 the total of these deferred amounts that are included as part of “Loans other – current portion” on the Statement of Financial Position is \$648,416.

On June 1, 2014, the Company signed an amending agreement to further amend the terms and conditions of the balance of sale with a company under common control. Based on the amending agreement, each installment due on June 1, 2014 and thereafter shall resume at \$40,000 per month. Furthermore starting on November 1, 2014, the Company



shall commencement payments of \$100,000 per month against the deferred payments until said debt is fully paid.

In addition, an amount payable to a trust beneficially owned by a shareholder of \$393,572 is included under “Loans other –current portion”. On June 1, 2014, the Company signed an amending agreement to amend the previous amending agreement to defer the debt owed. Based on the new agreement, starting January 1, 2015, the Company shall make payments of \$75,000 per month until the debt has been fully paid.

For the three months period ended June 30, 2014, the net cash position of the Company increased by \$700,744 as compared to a net increase of \$45,127 for the same period in the prior year.

GOING CONCERN

Cash generated from projects has historically not been sufficient to meet the overall cash requirements of the Company to cover operating costs. For the Company to generate sufficient positive cash-flow from operations and meet current cash requirements, the level of business must exceed that recorded to date. Management expects that the benefits of previously announced steps to reduce fixed operating expenses, increase revenues and improve gross margins, will continue to be evidenced, and as a result the recent surge in backlog.

In the future, it may be necessary for the Company to raise additional capital to fund its operations and the continued development and introduction of new lines to its family of products. To date, the Company has raised financing through successive issuances of equity. There is no certainty that the Company will continue to be able to raise additional financing or expand its sales to fund its operations, although management is confident that it will be able to do so.

The June 30, 2014 financial statements have been prepared using International Financial Reporting Standards (“IFRS”) applicable to a going concern, which contemplates the realization of assets and settlement of liabilities in the normal course of business as they become due.

RELATED PARTY TRANSACTION

Details of related party transactions are disclosed in note 16 of the financial statements for the period ended June 30, 2014.

There are no material changes during the quarter ended June 30, 2014 in the nature or extent of the related party transactions from those conducted in the 2013 fiscal year.



SUBSEQUENT EVENTS

On July 16, 2014, the Company received a first down payment of \$440,000 on a \$12.5 million contract for the supply of ten plasma-based, powder production systems for 3D printing. The contract will be executed over an 18 month period.

OUTLOOK

2014 continues to prove itself to be the “tipping point year” for PyroGenesis as the full effects of the Company’s strategic plan to position itself in new high margin niche markets are being realized.

6 month Revenues-to-date, although only 11% higher than the same period last year, are supported by a record backlog of signed contracts which are already more than 300% of 2013 revenues (which already were a 175% increase over 2012 revenues) and which are all expected to be completed over the next 18 months. Despite recent delays associated with certain project commencements, management still expects to post strong year over year revenues while maintaining its historic strong gross margins.

This progress has largely been due to the Company’s successful repositioning itself in answer to the fiscal crisis confronting its largest client at the time; the US military. Under the direction of the Board, the Company has successfully transitioned from being a company predominately supplying waste management plasma processes to the US military to one that is supplying plasma processes to not only the military but also to the Oil and Gas as well as the Mining & Metallurgical and 3D Printing industries. In each case the Company has targeted high margin niche businesses with the potential for significant repeat orders. PyroGenesis’ recent success within the 3D printing industry wherein the Company announced that they had signed a \$12.5 MM contract to provide 10 plasma based systems to produce the smallest, and most uniform spherical Titanium powders to the industry, is just one of the many successes of this repositioning strategy. The Company expects many more of such contracts to be signed over the near term.

The Company continues to implement measures to strengthen and focus its business development department, which includes, amongst other measures, hiring additional strategically focused professionals. The professionals focusing exclusively on business development has increased from 1.5 employees 18 months ago to 7 today.

The Company continues to de-risk its business model by starting to require recurring revenue features within sales agreements. Management has targeted 2016-2017 as the time frame in which the Company will be profitable from recurring revenues alone.

In conclusion, Management is confident that the strategic plan adopted by the Board which has given effect to the repositioning of the Company’s business, has proven to be a



success and Management expects that this success will continue and be improved upon into the foreseeable future.

Additional information regarding the Company can be found on SEDAR at www.sedar.com.