MARCH 2021 QUARTERLY ACTIVITIES REPORT

HIGHLIGHTS

- **Test work confirms a range of Sparc graphene additive formulae added to coatings significantly improves anti-corrosive performance**
- **The use of Sparc graphene improves absorption of PFAS contaminants by up to 100% compared to industry standard granulated activated carbon (GAC)**
- **Technology demonstrates a major improvement on ability to remediate hazardous sites**
- **Sparc graphene based adsorbent testing demonstrates significant outperformance of commercially available adsorbents for gold (Au) and silver (Ag)**
- **Best Sparc results highlight 96.98% and 97.82% adsorption of gold and silver from solution into graphene based adsorbents**
- **Sparc targeting estimated US$1T worth of precious metals already extracted from the ground, sitting at historical mining sites globally[1]**
- **Results demonstrated the complete destruction of harmful bacteria using graphene in coatings**
- **$3.87m cash at bank as at 31 March 2021**

Sparc Technologies Limited (**ASX: SPN**) (**Sparc** or the **Company**) is pleased to provide its March 2021 Quarterly Activities Report.

Performance Improvement in Graphene Based Coatings

On 14 January 2021 Sparc announced further positive results from its ongoing coatings test work performed with the University of Adelaide. These results delivered another milestone in the development of a range of graphene based additives for use in Marine and Protective Coatings.

Using standardised ISO testing methodology, Sparc evaluated the performance of a range of graphene based additives produced using variations of raw material sources, processing methods and graphene quantities. The current test work addressed adhesion[#] and scribe corrosion creep[*^].

The work highlighted the performance benefits of graphene additives in general, with a number of the additives generating significant improvement in adhesion and/or scribe creep results at very low graphene additive levels. Improvement in adhesion of up to 19% was observed in single coat systems and reduction in scribe creep of up to 73% in three coat systems.

In the context of Sparc's targeted customer industries, these results represent a potential for substantial cost efficiencies and performance improvements.

Figure 1 below illustrates scribe corrosion creep performance. A lower value indicates better performance. Tests performed on coatings that had a Sparc Graphene additive, showed up to 73% performance improvement in scribe corrosion creep (i.e. less corrosion), when compared to a control coating that did not have graphene.

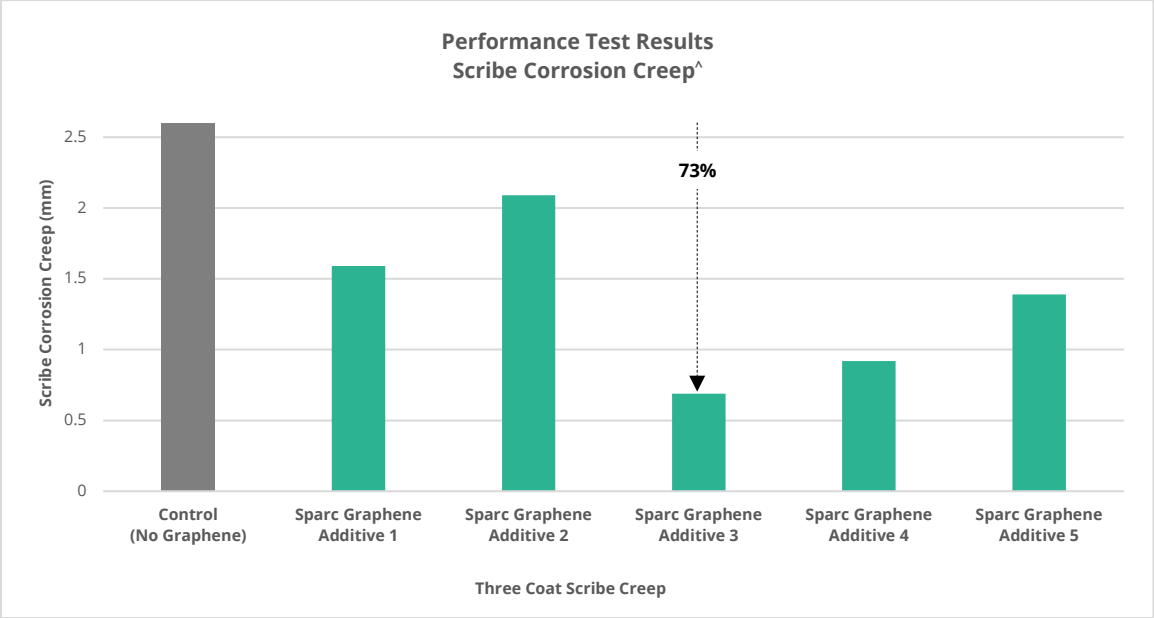


Figure 1: Test results showing anti-corrosion performance of coatings with a Sparc Graphene additive. Lower values demonstrate better performance

Figure 2 illustrates adhesion performance, where a higher value indicates better performance. Tests performed on coatings that had a Sparc Graphene additive, showed up to 19% performance improvement in adhesion, when compared to a control coating that did not have graphene.

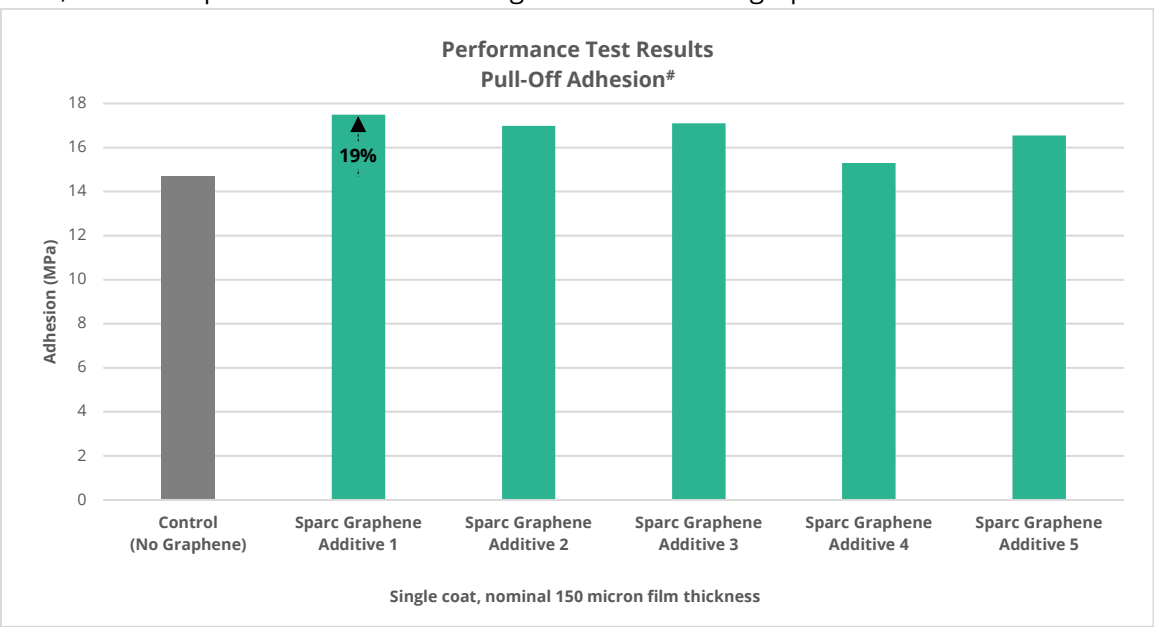


Figure 2: Test results showing adhesion performance of coatings with a Sparc Graphene additive. Higher values demonstrate better performance

Environmental Remediation in PFAS Removal

During the quarter the Company announced the completion of the first round of testing on the ability of graphene-based materials to remediate water contaminated with poly-fluorinated alkyl substances (**PFAS**). The testing included several PFAS compounds including perfluorooctanesulfonic acid (**PFOS**) and perfluorooctanoic acid (**PFOA**) (Figure 3).

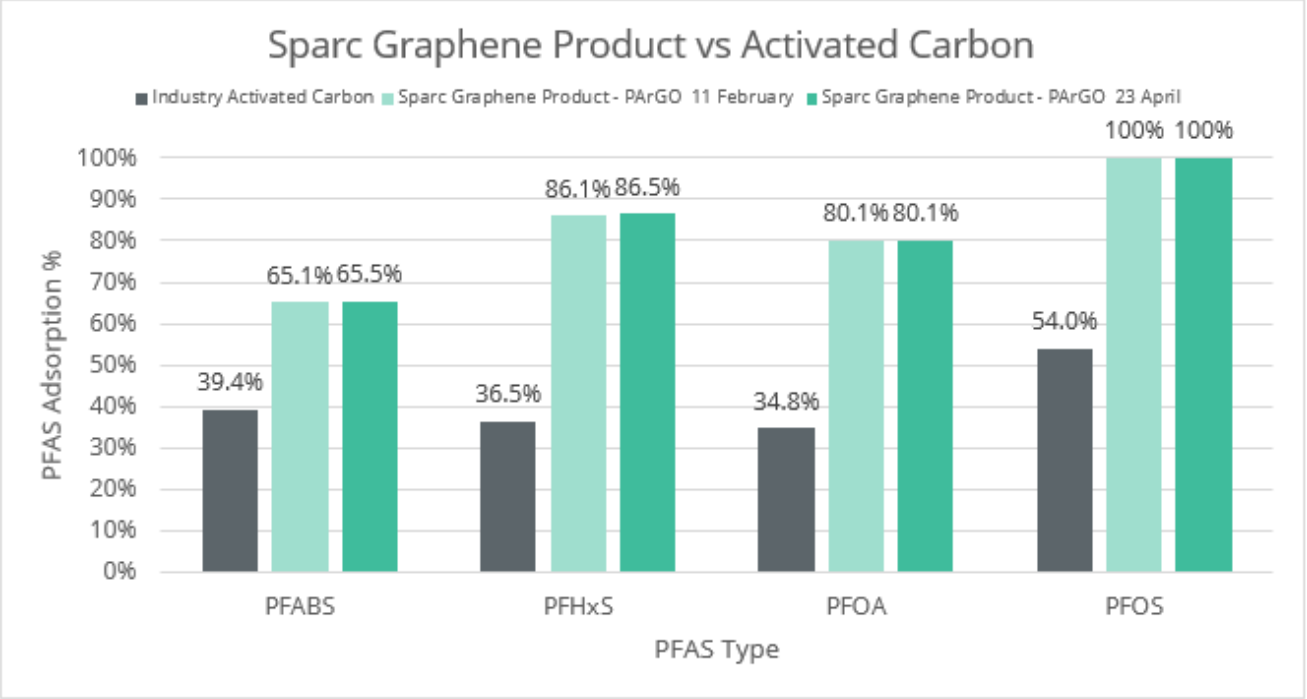
Post the end of the quarter the company announced the completion of further testwork in relation to PFAS adsorption testing technologies using the proprietary PArGO adsorbent. PArGO again demonstrated consistently higher performance than an industry-leading activated carbon (GAC) water treatment for all tested PFAS materials.

These additional test results (Figure 3) are very similar to the successful earlier round of results previously released and as such demonstrated repeatability of the process methodology which gives Sparc significant confidence with which to progress commercial negotiations. Testing will now commence on remediation of PFAS-contaminated water and immobilisation of PFAS in soil samples.

A number of technologies have the potential to remove PFAS. Activated carbon is the most commonly used technology to remove PFAS, which works to remove PFAS from drinking water and is used in water treatment systems at significant cost. Other technologies including ion exchange or existing membrane technologies also have potential application, with each having various limitations.

The results of Sparc's graphene laboratory testing (Figure 3) showed that a graphene-based adsorbent material (Polyamine modified reduced Graphene Oxide or **PArGO**) was up to twice as effective at absorbing PFAS as the current industry standard absorbent, granulated activated carbon (GAC), which was used as the control in the testing.

Figure 3 – Absorption rates of various forms of PFAS with Sparc graphene product versus Granulated Activated Carbon



An industry standard granulated activated carbon (**GAC**) product was used as the control sorbent. This GAC is a well-known and high-performing grade of GAC, often used for PFAS removal and is certified for use in municipal and drinking water systems expressly for this purpose.

The results of Sparc's trials are very encouraging and will now be augmented by follow up testing that will focus on development of a viable graphene-based absorbent including:

- Reusability
- Biofilm build up
- Speed of extraction and its relationship to the amount of graphene required
- Testing the sorbent in contaminated water collected from contaminated sites
- Testing the efficiency of sorbents in immobilising PFASs in contaminated soils
- Methods of removal of PFAS from the absorbent and PFAS destruction

This data will be used to scope the economics of a graphene-based adsorbent, at which point Sparc will look to engage with an industry partner on a commercial basis.

PFAS is a group of man-made chemicals that have been available since the 1940s, which have been used historically in a variety of industries around the globe. PFAS has become a major worldwide environmental issue, whereby soil and water, including ground and drinking water, become contaminated through the use of fire retardants and other industrial applications. PFAS remains highly persistent in the environment long after use and will accumulate in the human body for long periods of time. As exposure continues, PFAS can cause significant health effects in humans and animals, including reproductive and developmental issues, liver and kidney and immunological problems. Studies have also shown PFAS can contribute to decreased infant birth weight, effects on the immune system, cancer and tumours and thyroid hormone disruption.

The United States Environmental Protection Agency (**EPA**) and the Australian Government have conducted extensive studies on the environmental and health effects of PFAS and have found its impact to be widespread. For example, the US Department of Defence, in a report to the House Armed Services Committee, identified at least 126 military installations containing potentially harmful levels of PFAS, the remediation cost of which exceeds US$2 billion.[1] Investigations at Australian Defence installations have found similar issues given historical firefighting use.

Similarly, US based The Environmental Working Group (**EWG**) has found more than 110 million Americans are exposed to toxic PFAS levels in drinking water that exceed the EWG limits, with almost every city sampled having contamination above EWG limit levels.[2]

The Company has now entered discussions with remediation companies and organisations with PFAS issues, with the aim of jointly developing graphene based solutions to adsorb PFAS from contaminated sites.

Adsorbent Testing In Recovery of Precious Metals

On 22nd February SPARC announced that the results of its test work on the recovery of gold (Au) and silver (Ag) in solution demonstrates that Sparc graphene enhanced adsorption material substantially outperforms commercially available adsorbents, which represents a key milestone in the application of its graphene technology in tailings treatment.

[1] Copp, Tara. DoD: At least 126 bases report water contaminants linked to cancer, birth defects. Military Times, April 2018

[2] https://www.ewg.org/research/national-pfas-testing/

Functionalised graphene composite-based adsorbents for the removal of precious metals, oils and PFAS contaminants have been explored and developed by the Sparc team as part of its drive to develop technologies that can enhance large scale industrial markets and provide a solution for previously uneconomic or environmentally hazardous scenarios. This new class of composite material has many potential benefits over currently available adsorbents, which are primarily based on activated carbon, by providing higher adsorption capacity and recovery rates.

Given the high demand for precious metals globally, the development of new recovery and recycling technologies is in high demand worldwide and has the potential for significant implications for sustainability and enhanced recoveries in the mining industry. Australia is a considerable global exporter of precious metals and Sparc is hopeful that this technology will improve the economics of existing mineral extraction practices, whilst improving mine life and reducing environmental and carbon footprints relative to the amount of metal produced.

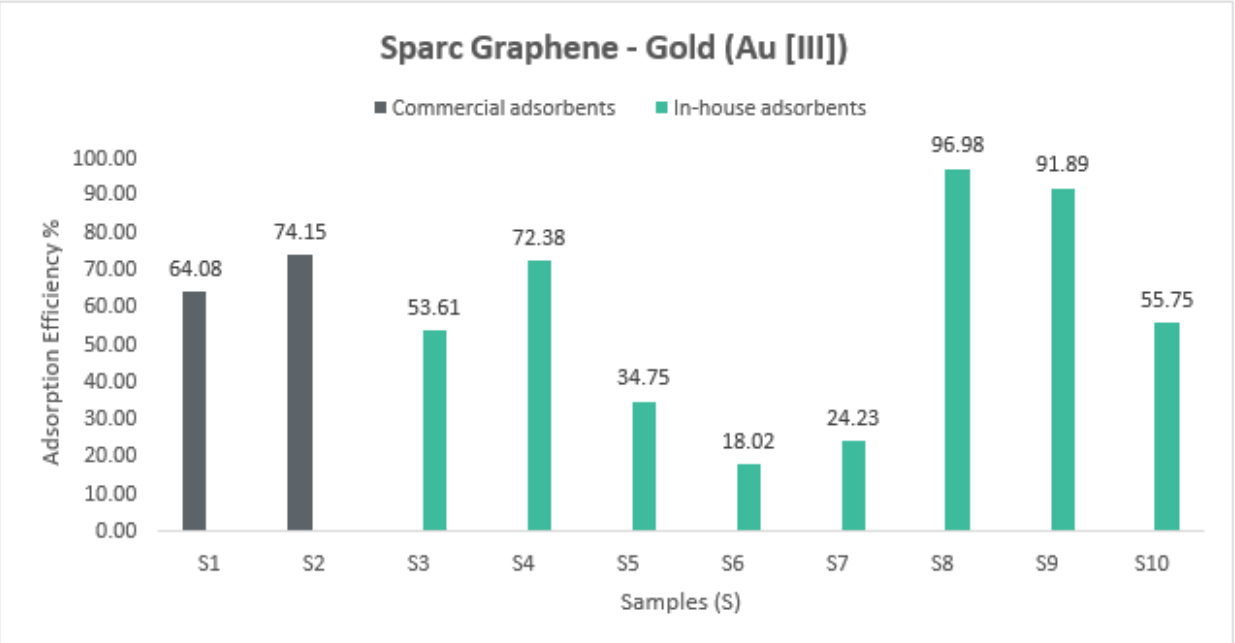


Figure 4– Adsorption efficiency of different commercial and in-house adsorbents for Gold (Au [III]) ions. Adsorption conditions: Volume 20 mL; sample dosage: ~20 mg; pH (Au3) = 4.20; Au3+ i = 1.2 mg L-1, T= 21.0-22.0 °C; equilibration time: 5 hours at 200 rpm.

The preliminary study was undertaken in conjunction with Sparc's strategic partners and cornerstone shareholder, The University of Adelaide (UA). For this initial screening study, eight (8) available adsorbents were selected based on graphene-based composites designed and developed for adsorption of heavy metals and their applicability for precious metals Au, Ag and rare metals. Two (2) different types of industry standard commercial adsorbents (activated carbon and biochar) were used as control adsorbents to compare efficiency and enhancements.

The adsorption study for removal of precious metals was performed using model water solutions with known concentration of Au (III) 1.2 mg L-1 (1.2 ppm) and Ag (I) 4.4 mg L-1 (4.4 pm) using common adsorption conditions for these metals and room temperature. Ag (I) and Au (III) ions were prepared from their stock solutions, silver (I) nitrate and chloroauric acid, respectively.

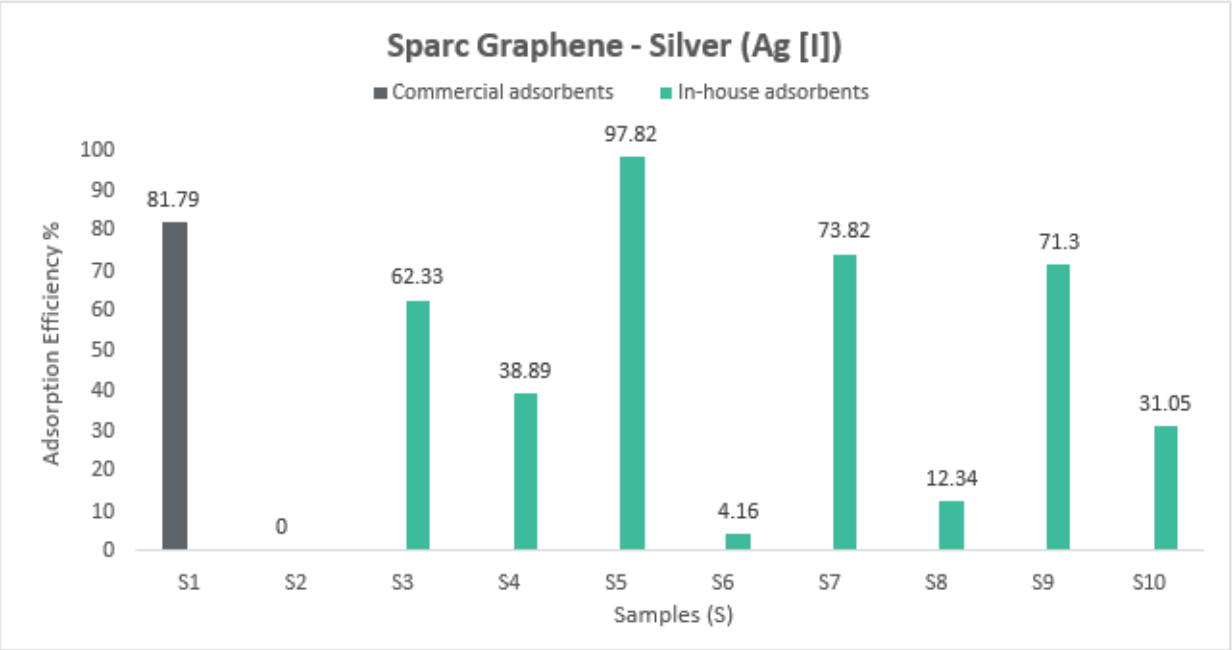


Figure 5 – Adsorption efficiency of different commercial and in-house adsorbents for Gold (Ag [I])) ions. Adsorption conditions: Volume 20 mL; sample dosage: ~20 mg; pH (Au3) = 6.82; Ag3+ i = 4.4 mg L-1, T= 21.0-22.0 °C; equilibration time: 5 hours at 200 rpm.

Among the in-house developed adsorbents, proprietary testing samples S8 and S9 outperformed all the tested adsorbents including the commercial adsorbents with 96.98% and 91.89% removal efficiency attained for Au (III) ions adsorption respectively.

In terms of Ag (I) ion adsorption, sample S5 outperformed all the adsorbents with 97.82 % adsorption efficiency attained.

The next stages of the test work includes testing Sparc graphene adsorbents against a wider range of commercially available adsorbents, progressing to live field trials targeting the extraction of actual gold (Au) and silver (Ag) metals in tailings from mine sites.

Anti-Microbial Coatings Testwork

Sparc evaluated the antibacterial properties of it's graphene based additives in an epoxy coating system using the methodology described in the international standard ISO 22196. The test work was undertaken by Flinders University, Adelaide.

The results indicate bactericidal activity in relation to Escherichia Coli (E-Coli is a common and harmful bacteria), with the activity of an epoxy coating being significantly improved by the inclusion of a range of graphene based additives.

In the case of one of the graphene additives evaluated, complete destruction of the E-Coli bacteria was observed when compared to the same coating type containing no graphene. Further work is being undertaken to confirm and optimise the results.

This graphene enhanced coating has potential applications in areas where control of bacterial growth on surfaces is important, such as; hospitals, public areas, food preparation facilities, drinking water systems, antifouling for shipping and coating for wastewater systems.

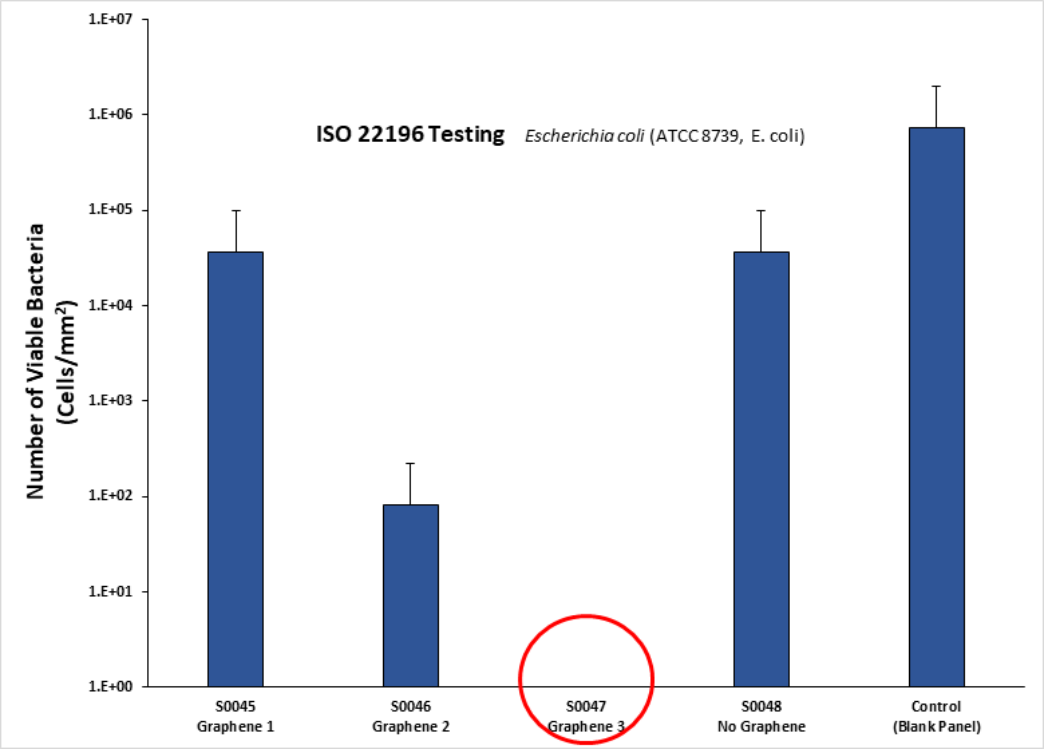


Figure 6: Testwork included multiple coatings containing proprieatery graphene formulations. Coating with Graphene 3 formulation, Sample S0047, demonstrated the most significant improvement to the destruction of E-Coli.

Corporate

Mr Mike Bartels joined as Chief Executive Officer (CEO) effective 1 March 2021. Mike holds a Bachelor of Science in Applied Chemistry and has a wealth of experience in sales and marketing with major multinational coatings companies in Australia and internationally, including Sherwin Williams (NYSE: SHW) and AkzoNobel (AKZA.AS). Mike is an expert at developing strategy, setting vision and executing plans to deliver growth. Mike brings a vast depth of experience to Sparc given his previous roles as global head of marketing, business development manager and sales director for paint, protective coatings and insulation products for major multinational coatings companies.

As part of the change to the Senior Executive team, Mr Tom Spurling stood aside as Managing Director. Tom will remain on the Board as a Non-Executive Director and the Company looks forward to his continued input and support in this capacity.

The Company also advised on 7 January 2021 its registered office and principal place of business changed to:

- Registered Office: Level 2 480 Collins Street Melbourne Victoria 3000
- Principal Place of Business: 51 Rundle Street Kent Town South Australia 5067

Mr Ben Donovan ceased his role as Joint Company Secretary effective 7 January 2021. The Board would like to thank Mr Donovan for his services and wishes him well for the future. Mr Adrien Wing will remain as Sole Company Secretary

Statement of Commitments

The current quarter is covered by the Statement of Commitments[1] outlined in the Prospectus dated 5 October 2020. A summary of expenditure to date is outlined below:

	Expenditure for the Qtr to 31 March 2021 ($)	Expenditure described in Use of Funds in prospectus ($)
Cost of offer	(406,000)	(470,000)
Corporate administration	(381,000)	(1,000,000)
Research and development	(911,000)	(1,300,000)
Graphene plant construction	(235,000)	(1,900,000)
Marketing and business development	(153,000)	(730,000)
Working capital	(64,000)	(900,000)
Total	**(2,150,000)**	**(6,300,000)**

[1] The above table is a statement of current intentions. Investors should note that the allocation of funds set out in the above table may change depending on a number of factors. In light of this the Board reserves the right to alter the way the funds are applied

Cash

As at 31 March 2021, the Company had a reported cash position of $3.87m

Total cash spend was $993,000 for the quarter. Of this, during the quarter the Company paid $153,000 related to residual costs of the equity offering in November 2020. This closes all costs related to the equity offering. In addition the company made payments to the University of Adelaide that totalled $195,000 for research and development work conducted during the six months ended 31 December 2020. Such research and development work will continue in the future but at a lower cost per quarter.

Related Party Payments

In line with its obligations under ASX Listing Rule 4.7C.3, Sparc Technologies Limited notes that the only payments to related parties of the Company, as advised in the Appendix 4C for the period ended 31 March 2021, pertain to payments to directors for reimbursement of arrears of Directors Fees and Travel Expenses totalling $65,426.

* Scribe Creep describes the scribing of coated samples through the coating layer and into steel panels using a scribe tool and the resultant corrosion. The less corrosion creep on either side of the scribe, the higher the corrosion resistance performance.

^ ISO12944 test regime 2 involves a weekly cycle under hot UV, condensing moisture, neutral salt spray and freezing. The 10-week (1680 hour) cycle employed in this test program is intended as indicator of long term coating performance in highly corrosive environments (C4 and C5).

Adhesion Testing ISO4624:2016
Measures the force required to remove a "dolly" glued to the coating surface.
Calculation based on surface are of the dolly face gives a pressure result expressed as Megapascals (MPa).
Samples tested in a single coat of 150 microns thickness applied over abrasive blast cleaned steel. 6 mm thick panels required.

[1] Mining [DOT] COM, Ana Komnenic - : Access to markets is subject to the Company being able to successfully develop and commercialise the graphene technologies. Sparc does not have any distribution or offtake agreements in place at this stage.

-ENDS-

Authorised for release by: Mike Bartels, CEO.

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About Sparc Technologies

Sparc Technologies Limited (ASX: SPN) is a South Australian based company that is focussing on the development of innovative technology solutions using the unique properties of graphene. Graphene, which can be extracted from graphite, is a 2-dimensional nano material made of carbon atoms arranged in a hexagonal pattern, giving it unique and powerful properties that, with the right technology, can be imparted on products to improve performance. Sparc Technologies has licenced graphene-based technologies from the University of Adelaide, a leading institution in the field of graphene research, and will focus on commercialising graphene-based technologies for large industrial markets for marine and protective coatings, environmental remediation and bio-medical applications.

Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity	
Sparc Technologies Ltd	
ABN	**Quarter ended ("current quarter")**
13 009 092 068	31 March 2021

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) research and development	(320)	(817)
	(b) product manufacturing and operating costs		
	(c) advertising and marketing	(14)	(30)
	(d) leased assets		
	(e) staff costs	(157)	(185)
	(f) administration and corporate costs	(178)	(518)
	(g) exploration and evaluation (if expensed)		(3)
1.3	Dividends received (see note 3)		
1.4	Interest received	2	12
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (provide details if material)	(34)	(69)
1.9	**Net cash from / (used in) operating activities**	**(701)**	**(1,610)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities		(201)
	(b) businesses		
	(c) property, plant and equipment	(140)	(155)
	(d) investments		
	(e) intellectual property		

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
	(f) other non-current assets		
2.2	Proceeds from disposal of:		
	(a) entities		
	(b) businesses		
	(c) property, plant and equipment		
	(d) investments		
	(e) intellectual property		
	(f) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		(3)
2.6	**Net cash from / (used in) investing activities**	**(140)**	**(359)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)		4,000
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(153)	(406)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	**Net cash from / (used in) financing activities**	**(153)**	**3,594**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	4,865	2,246
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(701)	(1,610)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(140)	(359)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(153)	3,594
4.5	Effect of movement in exchange rates on cash held		
4.6	**Cash and cash equivalents at end of period**	**3,871**	**3,871**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter $A'000	Previous quarter $A'000
5.1	Bank balances	3,871	4,865
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**3,871**	**4,865**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	65
6.2	Aggregate amount of payments to related parties and their associates included in item 2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	**Total financing facilities**		

7.5	**Unused financing facilities available at quarter end**	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(701)
8.2	Cash and cash equivalents at quarter end (item 4.6)	3,871
8.3	Unused finance facilities available at quarter end (item 7.5)	
8.4	Total available funding (item 8.2 + item 8.3)	3,871
8.5	**Estimated quarters of funding available (item 8.4 divided by item 8.1)**	5.52

Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.

8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:

8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer:

8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer:

8.6.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer:	

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: ...28 April 2021.....

Authorised by: ..... With the authority of the Board.....

(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.