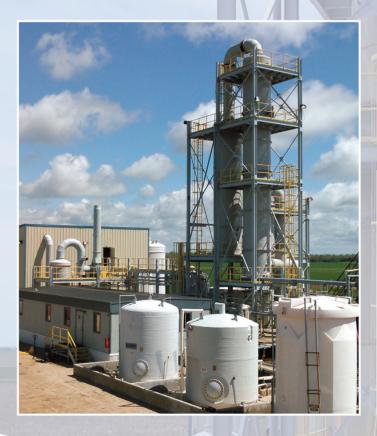




# Iofina plc

# Annual Report & Accounts 2018











## 2018: Record Iodine Production

2017

#### **Highlights:**

- Group was EBITDA positive
- CGross profit improved YOY C7H7CINO2SNa3H2O HI3 KI NaI C8H12INO2 C3H
- Produced 503 metric tonnes of crystalline IOflo® iodine from Oklahoma based IOsorb® plants
- Began construction of IO#7 in September to execute new focus on growth of iodine production
- Hodine prices increased ~20% from start of 2017 until the start of 2018 NaIO<sub>3</sub> Ca(IO<sub>3</sub>)<sub>2</sub> C<sub>7</sub>H<sub>7</sub>CIN

2018

#### **Highlights:**

- Record crystalline iodine production of 589MT
- EBITDA continues to rise and more than double 2017
- IO#7 completed in February 2018 4CINO2 CF31 H5IO6
- lodine market is strong and prices continue to rise N6Cl3 C6H6FN CH2l2 CH3F NH4l CH2Brl C2H
- IOflo® iodine sales received well by the global market
- Iofina Chemical sales of iodine and non-iodine products robust

2019

#### First Quarter 2019:

- Debt restructured and extended to 1 July 2020 with convertibility removed
- 134.4MT of crystalline iodine produced, a 14% increase YOY

## Expectations: alO<sub>3</sub> Ca(IO<sub>3</sub>)<sub>2</sub> C<sub>7</sub>H<sub>7</sub>CINO<sub>2</sub>SNa<sub>3</sub>H<sub>2</sub>O HI<sub>3</sub> KI NaI C<sub>8</sub>H1<sub>2</sub>INO<sub>2</sub> C<sub>3</sub>H<sub>3</sub>N<sub>6</sub>CI<sub>3</sub> NaIO<sub>4</sub> C<sub>6</sub>H<sub>6</sub>FN

- Record iodine production year C<sub>2</sub>H<sub>5</sub>| |C| C<sub>4</sub>H<sub>9</sub>| C<sub>3</sub>H<sub>7</sub>| Li| C<sub>4</sub>H<sub>4</sub>CINO<sub>2</sub> CF<sub>3</sub>| H<sub>5</sub>|O<sub>6</sub> K|O<sub>3</sub> |KO<sub>4</sub>|
- /- Increase in profits HI3 KI NaI C8H12INO2 C3H3N6CI3 NaIO4 C6H6FN CH3I C3H3N6CI3 C6H6FN
- Hodine prices continue to strengthen NO2 CF31 H51O6 KIO3 IKO4 Ag1 NaIO3 Ca(1O3)2 C7H7CINC
- Expansion plans executed 104 C6H6FN CH31 C3H3N6Cl3 C6H6FN CH212 NaI C8H12INO2 C3H3N
- Research and evaluate new product lines H2BrI C2H5I ICI C4H9I C3H7I LiI C4H4C





## Contents

COMPANY INFORMATION	. 2
CHAIRMAN'S STATEMENT	. 3
FINANCIAL REVIEW	. 7
DIRECTORS' BIOGRAPHIES	. 9
STRATEGIC REPORT	. 11
CORPORATE GOVERNANCE	17
DIRECTORS' REPORT	. 18
CORPORATE GOVERNANCE STATEMENT	. 20
INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF IOFINA PLC	. 27
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	. 35
CONSOLIDATED BALANCE SHEET	. 36
CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY	. 37
CONSOLIDATED CASH FLOW STATEMENT	. 38
COMPANY BALANCE SHEET	. 39
COMPANY STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY	. 40
COMPANY CASH FLOW STATEMENT	. 41
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	. 42



#### **COMPANY INFORMATION**

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Secretary Simon Holden Company number 05393357

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#### **CHAIRMAN'S STATEMENT**

#### Introduction

In the period under review, I am delighted to report that the Group produced 588.8 Metric Tonnes (MT) of crystallized iodine, a record production in the company's history. This, along with continuing increases in the iodine price, further development of key specialty chemicals sales and ongoing cost control, resulted in the largest ever EBITDA recorded by the Group of \$2.6 million. This success was achieved along with the repurposing of IO#3 and commissioning of IO#7 while also lowering the Group average production cost. IO#7 has proved to be the Group's most efficient plant to date and design improvements will be utilized on new plants going forward.

#### **Iofina Resources**

In 2018, Iofina Resources ("IR") saw crystalline IOflo® iodine production climb by 17% from 503 MT to 588.8 MT. Despite the loss of production from IO#5, this increase was a result of the improved efficiencies and the commissioning of the new IO#7 plant. In the second half of the year the Group achieved record lodine production of 324.7 MT, which was an increase of 23% over the first half. Plant level production costs improved in 2018 with chemical and labour being the highest elements of production cost. Raw material cost remained flat for the year on cost per kilo basis. Overall water quality has improved across all plants due to better controlled fracking and drilling by our partners. Injection volumes at each individual disposal well site is no longer an indicator of the available brine volume a plant can process to extract iodine. Our largest iodine producing plants are tied into the main brine line system instead of the individual injection well. We were pleased with the commissioning of IO#7, which was achieved on budget, and the site's quick progress to profitability. All the above were accomplished with improved overall safety policies, pre-job safety requirements, and industrial hygiene controls. Additional procedures have been implemented in the field to instil a culture of safety and to ensure a healthy and environmentally sustainable workplace. As in previous years, the second and third quarter generated the highest volume of iodine production due to improved weather conditions and better iodine recovery efficiencies. As of December 2018, IO#7 became IR's highest producing plant.

The Montana Atlantis Field has previously been impaired and efforts are under way to monetize the remaining physical assets and exit from the state of Montana. Property and equipment will either be repurposed and transferred to Oklahoma or Kentucky or sold. The Group is currently working on plans to permanently plug and abandon 34 wells in 2019, and believes the salvage value of the assets will cover the costs of these efforts.

lofina Resources' maintenance and repair costs also decreased and improved on a cost per kilogram basis, despite major unpredicted costs associated with water treatment sampling. Significant cost savings were due to better operating practices, selection of equipment, repair modes, and contractor support.

Litigation expense, associated with protecting Iofina Resources' intellectual property, was a relatively significant expense in 2017. Iofina Resources concluded these expenses in early 2018 when an agreement was reached and there was also a summary judgement in the Group's favour in another



case. The Group is focused on significantly reducing legal costs moving forward, and whilst not certain, believes this is achievable.

The Group continues to aggressively pursue additional locations for iodine rich brine streams for the addition of IO#8 plant. Our focus continues to be in Oklahoma and Texas although we also continue to explore other areas. Additionally, the Group is actively working with our existing partners to locate additional IOsorb® plants in our core area. As a result of our data gathering, the Group continues to investigate operating its own SWD wells, with the potential of drilling our own brine-only wells to tap into some of the more prospective areas where iodine levels remain high and we can control all aspects of our production.

#### **Iofina Chemical**

2018 was one of the most successful years in Iofina Chemical history. The continued strengthening of the iodine markets, coupled with robust sales, resulted in a very positive year. IC produced new and innovative compounds that it had not produced before, all while managing a setback due to alleged dumping of Hydriodic acid in China that resulted in a significant sales volume reduction in that product in H2 2018. IC continues to add testing equipment with the addition of a second Performance Liquid Chromatography (HPLC) and a second Gas Chromatography (GC) machine in order to have a higher productivity. IC has also expanded its labour capacity with certain product lines going to 24-hour production as sales continue to grow. An excellent sales mix along with coming in at budgeted operational expenses resulted in strong earnings. IC continued to expand its internal research and development through hiring new talent in 2018. IC's historical offering of iodine-based products showed mixed results with growth in some and declines in others, many from the China trade issues. New product offerings continue to gain strength with improved margins and more robust potential uses. A significant new product for IC was developed in 2018 and has come to the forefront in 2019 as IC scales up for this major project. Non-iodine products continue to grow along with diversification to the specialty chemical business. Overall, IC's robust performance in 2018 enabled the Group to achieve record EBITDA. Looking ahead, 2019 is expected to be an exceptional year for IC, due to the continued rising growth of the iodine market and predicted continued growth of niche products.

#### **Iodine Market**

lodine pricing continues to be well below historical levels but improved again throughout 2018. Typical pricing late in 2018 for large purchases of prilled iodine ended near \$26/kg. This is a significant increase in the past two years (~30%) as spot prices in early 2017 for iodine were approximately \$20/kg.

lodine and iodine derivatives are essential for life and industry. Human health applications are the largest consumers of iodine based products. The largest global use of iodine is in the area of X-ray contrast media formulations. This constitutes about one fourth of the total uptake of iodine and continues to grow as global health care improves. Other direct human health applications of iodine and iodine compounds include pharmaceuticals, human nutrition (thyroid control, goiter prevention), and antiseptics (PVPI). Iodine is also used in LCD screen polarizing films, animal health and nutrition, biocides, industrial catalyst applications, and in nylon as a heat stabilising agent.



lofina believes the worldwide market for 2018 was over 36,000 metric tons. Newer applications such as emission control industries and demand growth in related human health applications, as well as the LCD market, resulted in higher consumption of iodine products.

The Group believes that iodine prices are likely to rise further in 2019 as demand continues to grow at a modest pace. Iodine prices in Q1 2019 moved higher relative to late 2018 and this trend, of a modest increase in pricing, has continued in Q2 2019. There are market indications that global iodine supply remains tight relative to demand. Increased capacity initiatives at the world's largest iodine producer may have an impact on global supply in the future. However, the Board anticipates that prices will recover towards historic trends.

#### **Safety and Environmental**

lofina is committed to operating in a safe, efficient and environmentally friendly manner. The Group is committed to the highest standards of safety for our employees and our community. Iofina's iodine production utilizes a produced brine stream, which without lofina would simply dispose of the contained iodide. Isolation of this valued resource from a produce stream is accomplished in contrast to other major US based iodine production, which requires the drilling of new brine wells which serve no other purpose than iodine production and come at an additional environmental cost.

The Group is constantly striving towards continuous improvements in its EHS policies and programs. Iofina Chemical is a Chemstewards® certified facility which it recertified in 2018. Iofina Resources and Iofina Chemical each have an EHS manager to oversee our practices, and upper management personnel are regularly updated on EHS performance matrices.

#### **IofinaEX**

The Group has recently established a new division called IofinaEX with the sole focus of research and production of cannabidiol (CBD) and other cannabinoids from hemp. CBD is a naturally occurring compound. IofinaEX will focus on exploring and exploiting methods of extraction, distillation and isolation of these compounds on an industrial level. The Group is well placed as a leader in the extraction of iodine and a producer of specialty chemical compounds and uses many processes required for cannabinoid production in its current operations. The Group has operations in Montana, Colorado and Kentucky which are the top three agriculture growers of hemp in the USA. This evolution is a natural fit for Iofina as the cannabinoid market is expected to grow worldwide to \$22 billion per annum by 2022. In 2019, we see an abundance of supply as farmers replace growing corn, tobacco and wheat with growing cash rich hemp.

We believe the extraction and isolation of purified CBD products is underdeveloped in this growing market. Importantly, the 2018 United States Farm Bill was passed on December 20, 2018 and legalized the production of hemp as an agricultural commodity in the United States while removing it from the list of controlled substances. The 2018 bill also listed hemp as a covered commodity under crop insurance and directed the Federal Crop Insurance Corporation board to streamline the process for developing hemp policies. The bill also sets up a shared state and federal regulatory authority over the issue, outlining the steps a state must take to develop a plan to regulate hemp. IofinaEX recently applied for a Processor/Handler license for hemp and products produced from hemp in the state of Kentucky.



At this time, IofinaEx cannabinoid planning and research is in very early stages and the Company will evaluate the commercial viability of this product line along with other products under development at Iofina Chemical. We consider CBD products to be another potential product line for the Group and are excited for the coming years to diversify our specialty chemical product offerings.

#### Outlook

Following a strong operational start to the year, the Group looks forward to building on the successes of 2018. Iofina has been able to control costs of production in order to achieve stronger overall plant level profitability, which we believe is replicable in further plants. We are excited about building new iodine extraction plants and launching new compounds. 2019, we believe, will be an exceptional year for the Group as we grow our core iodine business and expand into new high margin products. These actions, coupled with the continuing improvement of iodine prices, positions lofina well for the future.

I would like to thank all our shareholders for their patience and support. This support we believe will be greatly rewarded over the coming years as we build new plants and grow our cash flow to record levels.

#### **Strong Board and Governance**

The Directors continue to acknowledge the importance of high standards of corporate governance and I would refer you to the Chairman's Corporate Governance Statement on page 20 of this report. Given the Group's size and the constitution of the Board, the Directors decided to adopt the principles set out in The QCA Corporate Governance Code published in April 2018 (the "QCA Code") in advance of the requirement to adopt a corporate governance code under AIM Rule 26 of the AIM Rules for Companies. In addition, we continue to operate a robust framework of systems and controls to maintain high standards throughout the Group; further details of which can be found in the Directors' Report. The Board believes that effective corporate governance assists us in the delivery of our corporate strategy, the sustainable generation of shareholder value and the safeguarding of our stakeholders' long-term interests.

Lance J Baller

Non-Executive Chairman

Jane V. Balla

Iofina plc

30 April 2019



#### **FINANCIAL REVIEW**

#### Summary

- Revenue increased by 15% from \$20.8m to \$24.0m
- Gross profit increased by \$1.4m from \$4.9m (23% of sales) to \$6.3m (26% of sales)
- EBITDA improved by \$1.2m (89%) from \$1.4m to \$2.6m
- Operating profit was \$1.1m compared to an operating loss of \$0.7m
- Impairment expenses of \$2.6m have been recognised, principally in respect of the cessation of operations at IO5 plant (\$1.7m) and redundant development expenditure on lease rights (\$0.7m)
- A revaluation credit of \$3.2m has been recognised in respect of share conversion rights relating to convertible notes (2017 charge of \$1.1m)
- Loss before tax decreased from \$9.8m to \$1.4m
- Cash balances increased from \$3.4m to \$4.5m
- Capital investment was \$0.9m (2017: \$2.1m)
- Debt balances totalling \$25.6m have been refinanced in March 2019

#### **Trading results**

Total revenue increased by 15% from \$20.8m to \$24.0m, and gross profit improved by \$1.4m from \$4.9m (23% of sales) to \$6.3m (26% of sales). This improvement was driven principally by an increase of approximately 14% in iodine prices along with a 14% increase in volumes sold, and there was also a reduction in unit production costs and a volume increase in non-iodine sales.

Crystallised iodine production increased by 17% overall from 503 MT (metric tonnes) to 589 MT, reflecting the new IO7 plant coming on stream from mid February 2018. Sales of crystallised iodine, both as raw iodine and in derivative compounds, increased by 14% from 476MT to 544MT. In light of increased production, and the cessation of sales of one high volume low margin product to China following an anti-dumping case, there was a rebalancing of sales with 50% of volume coming from raw iodine (2017 21%) and 50% from derivative compounds (2017 79%).

lodine spot prices rose by some 30% between the beginning of 2017 and the end of 2018, with increases of approximately 14% in each year. The average selling price achieved for raw iodine followed this trend with an increase of 14% in 2018 over 2017 which fed through into gross profits. Derivatives showed a similar \$ increase per kg of iodine sold, but costs increased as well, resulting in a lower gross profit increase. There was also a 4% reduction in 2018 in the production cost per kilogram of crystallised iodine at the losorb plants.

Sales of non-iodine products increased by 15% from \$8.0m to \$9.3m reflecting volume increases, with selling prices and margins in line with 2017.

EBITDA improved by \$1.2m from \$1.4m to \$2.6m. Administrative expenses excluding depreciation and



amortisation increased by \$0.2m from \$3.5m to \$3.7m, of which \$0.13m relates to the 2018 charge for share option costs.

Operating profit was \$1.1m compared to an operating loss of \$0.7m for 2017. As well as the factors mentioned above, there was a reduction in depreciation and amortisation from \$2.1m to \$1.6m, the major factor being the \$0.5m of depreciation charged in 2017 on Montana assets that were impaired in full as of the end of that year.

#### Impairment expenses

An impairment expense of \$1.7m has been recognised in respect of the cessation of operations at IO5 plant, based on construction costs relating to items that cannot be reused at a future new plant. An impairment expense of \$0.7m has been recognised in respect of leasehold acquisition costs capitalised in previous years relating to areas where it is no longer expected that further development will take place, along with an expense of \$0.2m in respect of obsolete capital equipment. Also included is a provision of \$0.3m for the costs of withdrawing from Montana, notably as regards the plugging of wells, matched by a credit amount of \$0.3m that is estimated to be recoverable from the sale of assets previously impaired. Further details of these impairments appear in notes 10 and 12 to the accounts.

#### **Working capital**

Operating cash inflow before changes in working capital was \$2.7m compared to \$1.4m in 2017. Working capital changes reduced this figure by \$0.7m to a net operating cash inflow of \$2.0m, the largest item being a \$1.4m increase in inventories. After capital expenditure of \$0.9m there was an overall net cash inflow of \$1.1m, which increased the cash balances from \$3.4m to \$4.5m.

#### **Capital investment**

The Group incurred \$0.9m of capital expenditure, of which \$0.4m relates to the completion of the construction of IO#7 plant and \$0.5m to improvements at the chemical processing facility.

#### **Funding**

Secured debt repayable at 31 December 2018 totalled \$25.63m, comprising \$21.55m Convertible Loan Notes and \$3.26m Term Loan (see Note 19), and was due for repayment by 1 June 2019. The debt was refinanced through revised arrangements with the lenders executed on 29 March 2019. The key differentiating features of the revised arrangements are that the repayment date is extended to 1 July 2020, the Loan Notes are no longer convertible into shares, the interest rate is to be 7.5% per annum for all debt rising to 12% per annum for the Term Loan from 1 July 2019, and interest is to be paid quarterly in arrears from 1 January 2019 with no option to defer and capitalise it. The Term Loan continues to be repayable in priority to the Loan Notes. Further details appear in Notes 19 and 20.

**Malcolm Lewin** 

Chief Financial Officer Iofina plc 30 April 2019

Malahin Lewin



#### **DIRECTORS' BIOGRAPHIES**

#### Lance J. Baller, Non-Executive Chairman

Mr. Baller was co-founder, CEO and President of Iofina Plc prior to his departure for health reasons in June 2013. Mr. Baller was the Group's Finance Director from 2007 until his appointment as CEO in 2010. Mr. Baller returned as Chairman in April 2014. Mr. Baller is the former managing partner of The Elevation Fund and Elevation Capital Management. Mr. Baller is the former managing partner of Shortline Equity Partners, Inc., a mid-market merger and acquisitions consulting and investment company in the United States. He has actively served on the investment, audit, corporate governance and compensation committees, while on the board of directors of companies in Asia and North America. Mr. Baller is also a former vice president of mergers and acquisitions, financing and corporate development at Integrated Biopharma, Inc., and prior to this a vice president of the investment banking firms UBS AG and Morgan Stanley. He has served as Chairman to various companies and has led successful restructurings. Mr. Baller is on the board of trustees of Index Funds and also serves as the chairman of the audit committee and as the audit committee financial expert under the Sarbanes-Oxley Act of the United States for Index Funds.

#### Dr. Thomas M. Becker, Chief Executive Officer

Dr. Becker has served as President/CEO of Iofina plc since 2014 and has led Iofina Chemical since March 2010. Previously, Dr. Becker was the Vice President of Research and Development at H&S/Iofina Chemical. Iofina bought H&S in July 2009. Dr. Becker has conducted extensive research in both inorganic and organic halogen based chemistry. Dr. Becker has written a magnitude of published technical papers in his career. Prior to H&S Dr. Becker worked as an Oak Ridge Scholar on behalf of the US EPA and for various other chemical manufacturing companies. Dr. Becker earned a BS in Chemistry from Indiana University, and a PhD in Chemistry from the University of Cincinnati. He has extensive experience in scale-up of chemical processes from laboratory to pilot to full scale production. Dr. Becker is a former member of the Board of Governors of the Society of Chemical Manufacturers and Affiliates ("SOCMA").

#### Dr. William D. Bellamy, Non-Executive Director

Dr. Bellamy is the former Senior Vice President of the Water Business Group at CH2M HILL, Inc. ("CH2M"), a company he has worked at for 30 years until his recent retirement. CH2M is one of the largest consulting engineering companies in the world, providing leadership and strategic direction for the water business and application of technologies worldwide. Dr. Bellamy has participated in energy and sustainability forums, including as a panellist at the World Future Energy Conference in Abu Dhabi, the World Bank Sustainable Cities Symposium and the Future of Water Economic Forum. Dr. Bellamy serves as Professor of Practice at the University of Wyoming, where he teaches graduate courses and is responsible for securing grants and research funding in the areas of water resources, water treatment and sustainable energy development. Dr. Bellamy has a PhD in Civil Engineering from Colorado State University, an MSc in Civil (Environmental) Engineering from the University of Wyoming and a BSc in Electrical (Bio-Medical) Engineering from the University of Wyoming.



#### Malcolm T. Lewin, Chief Financial Officer

Mr. Lewin was named CFO and a director of the Group in November 2016 after having joined Iofina as interim CFO in February 2016. Mr. Lewin is based in the UK and has over 30 years of experience in finance and accounting for both public and private companies. As well as being a partner in a chartered accounting firm for 11 years, he has acted for various companies listed on AIM and other exchanges. In particular, from 2000 to 2003 he was the Finance Director of Oxford Metrics plc, an AIM company supplying motion capture and visual geometry systems. From 2004 to 2006 he was the Finance Director of Real Estate Investors plc, an AIM property investment company with interests in quality commercial and industrial properties. From 2006 to 2011 he was a Director and CFO of Hunter Bay Minerals plc, a junior mining company listed on the Toronto Venture Exchange with interests in South America and Canada. From 2011 to 2014 he was CFO and Treasurer of VolitionRX Limited, an OTC life sciences company focused on developing blood tests for a broad range of cancer types and other conditions. Mr. Lewin has an MA in Classics from Oxford University and qualified as a chartered accountant with Coopers & Lybrand.

#### J. Frank Mermoud, Non-Executive Director

Mr. Mermoud has more than 30 years' experience in international business, facilitating trade and investment in both the public and private sectors. He has held senior international, economic and commercial policy positions within the United States Government having served as the Secretary of State's Special Representative for Commercial and Business Affairs at U.S. Department of State from 2002 to 2009. Mr. Mermoud is also a Non-Executive Director of Cub Energy Inc. an oil and gas company headquartered in Houston, Texas.



#### STRATEGIC REPORT

#### Principal activities and review of the business

Iofina plc ("Iofina" or the "Company") is the holding company of a group of companies (the "Group") involved in the exploration and isolation of iodine and the production of specialty chemicals. Iodide in brine water is sourced from partnerships with oil and gas operators in the United States and is used as a raw material for the production of iodine at the Group's multiple IOsorb® plants. The Group's unique model isolates a resource, iodine, from a produced waste stream that without Iofina's technology, would be lost. Iodine containing or other halogen based products are produced at and sold through the Company's wholly owned subsidiary Iofina Chemical, Inc., with the major raw material being the Group's produced iodine. Additionally, the Group's crystalline IOflo® iodine is sold directly to other iodine end-users.

lodine is a rare element that is produced only in a few countries in the world, with approximately 90 percent produced from Chile (~60 percent) and Japan (~30 percent, including recycled waste streams). Iodine is a unique element with numerous applications. Iodine and compounds made from iodine have many human health related applications including; x-ray contrast agents, manufacturing of pharmaceuticals, antiseptics, proper thyroid function, and others. Additional high volume uses of iodine include; LCD screen technology, animal feed additives, biocides, catalysts and more. The Group produces iodine in the United States where the overall global iodine production is only a small percentage of the world's total production, but where there is a large consumption of the world's iodine by various manufacturers.

Iofina Resources, Inc. is the Group's wholly owned subsidiary which uses proprietary Wellhead Extraction Technology® (WET®) and WET® IOsorb® methods for the production of iodine from brine. The Directors of the Company believe that Iofina's unique business model for the production of iodine by utilizing produced brine from third party oil and gas producers is advantageous for long term raw material sourcing and minimised production and expansion costs. The ability of the Group to expand its iodine production quickly, at low cost, differentiates Iofina from other iodine producers. Economically viable iodide rich brine is not common and the Group's proprietary geological model to locate and anticipate iodide rich sources is unique.

The main focus of lofina's current business model is the production of iodine from brine and the creation and sales of halogen derivatives through lofina Chemical. The Directors feel strongly that diversification of the business while focusing on our core expertise is important. Iofina Resources diversifies its iodine production through multiple IOsorb® production plants with different brine suppliers in our core area in NW Oklahoma. Continued expansion of the Group's geological model provides opportunities for Iofina outside of its current core area. Iofina Chemical produces many iodine based products with applications in various industries including agricultural, pharmaceutical, biocides and others. Additional diversification is realised by the production of non-iodine based products at Iofina Chemical. Markets for various products can change, and Iofina Chemical's ability to produce a variety of products allows the Group to take advantage of growing markets while not being as affected by temporarily depressed or declining markets. Research and Development remain a top focus at Iofina in order to improve on current systems, be at the forefront of new technologies, new halogen based products and applications in our core competencies.



lodine prices are a key consideration for the Group. Since 2011, iodine price fluctuations have been rather dramatic compared to iodine prices before 2011. Market supply and demand changes as well as manufacturing cost increases for iodine are the major factors influencing the price of iodine. In 2011, the combination of the Fukushima disaster in Japan and Chilean supply disruptions resulted in a shortage of iodine and a spike in iodine prices which resulted in iodine prices reaching all-time highs. Since that time, iodine prices have fallen dramatically from these highs as Chilean production increases caused an over-supply condition in the market for a time as iodine producers were aggressively competing for market share. Iodine prices hit a low near the end of 2016 and into early 2017. From the beginning of 2017 through the end of 2018 iodine spot prices have risen by over 30%. Iodine prices have continued this upward trend in early 2019 but are still below 2011 iodine prices before the Fukushima disaster. As an iodine manufacturer, iodine prices have a significant impact on the Group's gross profit margins. The Group believes that global iodine consumption continues to grow at rates of approximately 3-4% per year.

The Directors properly recognized that as the Company erected its IOsorb® plants, it was imperative for Iofina's iodine production costs to be amongst the lowest in the industry to be competitive. Between 2014 and 2017 major initiatives were successfully implemented to optimise Iofina's technology and lower iodine production costs. Once a majority of these process cost optimisation goals were achieved, and iodine market conditions were positive, the Directors executed the next phase of Iofina's business plan and began a growth strategy. In early 2018 the Group's iodine plant, IO#7, was completed. By expanding our operations and building IO#7, the Group has successfully lowered overall iodine production costs compared to costs before IO#7. The Directors expect that prudent expansion will remain a top expectation for the Group moving forward. Iofina Chemical continues to be recognised as a world renowned halogen specialty chemical producer. Vertical integration of the Group's iodine into iodine derivatives gives Iofina's customers stability of supply in addition to the long standing quality and technical support to Iofina's global customers for the goods sold to them. Additionally, the non-iodine based halogen derivatives produced by Iofina Chemical gives the Group further diversity.

#### **Key Performance Indicators**

The directors review a range of financial indicators to assess and manage the Group's performance, including the following relating to revenue and iodine production:

	Year ended 31 December 2018	Year ended 31 December 2017
Revenue from sales of iodine and iodine derivatives	\$14,794,238	\$12,814,677
Revenue from non-iodine products	\$9,164,051	\$8,013,486
Total revenue	\$23,958,289	\$20,828,163
Total pounds of product shipped	2,032,551	2,045,625
Metric tonnes of crystallised iodine produced	589	503
IOsorb® plants in operation (year-end)	4	4



Commentary on the above indicators is to be found in the Chairman's Statement on pages 3 to 6.

Further commentary on the results for the year and the financial position at the year-end is to be found in the Financial Review on pages 7 to 8.

#### **Objectives**

At the end of 2018 the Group had four operating iodine production facilities in the Group's core area in Oklahoma. While the theoretical capacity of these plants is very high, the practical capacity of the plants is somewhat lower. Practical capacity takes into account multiple causes of downtime, including weather, repairs and maintenance, inadequate brine (low parts per million of iodine, heavily contaminated brine or little to no supply), power outages and other conditions. As we have proven our technology and continue to improve operations at current facilities, more accurate practical capacity operating targets have been realised as well as improvements for maximising practical capacity.

lofina Resources' growth strategy was realised with the opening of IO#7 in February 2018. While technology and efficiency improvements at current facilities remain an ongoing priority, the Company continues to explore new iodine production opportunities. This objective of strategic expansion in 2018 and beyond is focused on sites that will continue to improve lofina's output with low production costs. Brine supply to our IOsorb® plants can be affected by regulatory changes and adjustments of our partner's salt water disposal systems and oil production programs. Iofina continues to work with its partners to implement plans to maximize brine input and iodine output at each of our existing sites. Continued efforts by our business development and geological teams have identified numerous other expansion opportunities that the Company will continue to evaluate and potentially execute, with current and other potential brine supply partners, when management determines proper timing for new sites.

Timing of future iodine production growth will be dependent on various factors including the stability or increase of iodine prices (which increased by over 30 percent from the beginning of 2017), availability and costs to produce iodine at new sites, partnership agreements, and the regulatory landscape with respect to brine injection. The Group is also exploring alternative brine sourcing opportunities which may allow the Group to better control brine supply at future sites. The Directors are focused on expansion in a prudent manner whilst properly managing the current debt of the organisation. Expansion in 2019 is likely and the Group is currently investigating various options including the future utilisation of assets from IO#1 and IO#5.

lofina Chemical has continued to invest in current products lines, safety improvements, and new product R&D. Capital investment projects completed in 2018 include the doubling of the capacity of one of the Group's largest iodine derivative production lines, investment in larger chemical reactors for other products, and purchasing laboratory instrumentation to ensure product quality and support research. The R&D and the sales groups continue to investigate and research new opportunities for and applications of our existing portfolio of products, as well as identify and produce new halogen based derivatives for the Group in order to grow our halogen derivatives business. As Iofina Resources has continued to increase iodine production, the sales team has developed new outlets for this increased production of iodine including direct sales of the Groups crystalline IOflo® iodine directly to



iodine consumers. Managing existing and developing new sales channels and relationships, as Iofina continues to grow, is a high priority for the sales force at Iofina Chemical.

#### Principal risks and uncertainties

lofina plc is subject to a number of risks and uncertainties, which could have a material effect on its business, operations or future performance, including but not limited to:

Raw Materials: Brine water produced from oil and gas operations is the raw material source for Iofina's iodine production. The Group continues to evaluate opportunities to integrate its IOsorb® process into produced brine water streams associated with hydrocarbon operations in the USA, as well as other brine stream sources throughout the world. However, there is significant risk and no guarantee as to the volume of commercial quantities of iodide rich brine available to our current and future IOsorb® plants. Iofina maintains good relationships with our partners who provide the brine water to our existing IOsorb® plants. Maintaining a positive, mutually beneficial relationship with our brine suppliers is a top priority for the Group. By continuing an aggressive water testing program and active exploration utilising geology and data analytics and incorporating reservoir and production engineering, we are constantly evaluating new potential locations for iodine extraction in our core area and in other locations.

lofina Chemical sources raw materials throughout the globe. Understanding the supply chain of these materials is important to minimise supply disruptions. Iofina Chemical has long term relationships with many of its suppliers. Additionally, when possible, Iofina Chemical sources materials from multiple suppliers to reduce risk. Increased regulations can adversely affect availability and cost of materials.

**Environmental:** The Group's operations are subject to the environmental risks inherent in the exploration and chemical industries. The Group is subject to environmental laws and regulations in connection with all of its operations. Although the Group intends to be in compliance in all material respects with all applicable environmental laws and regulations, there are certain risks inherent to its activities, such as accidental spills, leakages or other circumstances that could expose the Group to extensive liability. Accordingly, the Group promotes wherever possible environmental sustainability in its working practices and seeks to minimise, mitigate or remedy any harmful effects from the Group's operations on the environment at each of its operational sites. Regulations on brine injections in the state of Oklahoma into the Arbuckle geological formation in the Group's core area due to seismic activity were implemented mainly in late 2015 to early 2016 and have affected lofina's partners' brine disposal into this formation near some of our sites. This reduced some brine availability to Iofina at some sites. The Group and its partners have implemented and continue to implement strategies to minimise the effect on the availability of iodine rich brine to Iofina due to these regulations. Moving forward the Group and its partners will continue to monitor these risks and act accordingly. While the frequency and intensity of earthquakes have significantly reduced in Oklahoma, and this reduction is likely a result of regulated changes in brine disposal into the Arbuckle formation, there is still risk of additional earthquakes and regulation moving forward. The Group has a robust Environmental, Health and Safety program



and strives for continual improvement in this area. Additionally, Iofina Chemical is a certified Chemstewards® facility.

**Iodine Price volatility:** The demand for, and prices of, iodine are highly dependent on a variety of factors including international supply and demand, the level of consumer product demand, the price and availability of alternatives, actions taken by governments and global economic and political developments. International prices have fluctuated widely in recent years and may continue to fluctuate significantly in the future. Fluctuations in iodine prices and, in particular, a material decline in the price of iodine would have a material adverse effect on the Group's business, financial condition and operations. The over 30% increase of iodine prices from year-end 2016 to year-end 2018 is a positive sign for the Group but is not guaranteed to continue, although prices for iodine in early 2019 have continued to rise from year-end 2018 prices. The Group stands to benefit directly from increases in iodine prices.

**Key customers:** There are a limited number of potential customers who purchase many of the products of the Group's chemical business, which makes relationships with these customers, as well as the success of those customers' businesses, critical to the Group's success. The loss of one or more major customers could harm the business, operating results and financial condition of the Group. Iofina is continuing to diversify its customer base in its Chemical subsidiary. In addition, Iofina works closely with all of its customers to develop strong relationships, with a significant focus on ensuring that its products and services meet the needs of its customers and are of the highest quality. In 2018, 18 percent (2017: 11 percent) of revenue recognised was attributable to one long term customer. Relations with this customer are good.

**Key Partners:** Iofina partners with third party oil and gas producers to process iodine rich brine they extract with oil and gas production. Fluctuations of oil and gas prices in the US can affect the financial stability of oil and gas producers. Any changes in operator status is a risk to brine production and availability. The Group has agreements with our partners to reduce any risk of change in status.

**Regulation and Trade**: The businesses are subject to various significant international, federal, state and local regulations currently in effect and scheduled to become effective in the near future, including but not limited to environmental, health and safety and import/export regulations. These regulations are complex, change frequently, can vary from country to country, and have increased over time. Iofina may incur significant expense in order to comply with these regulations or to remedy violations of them.

Any failure by Iofina to comply with applicable government regulations could result in non-compliant portions of our operations being shut down, product recalls or impositions of civil and criminal penalties and, in some cases, prohibition from distributing our products or performing our services until the products and services are brought into compliance, which could significantly affect our operations.

The Group closely monitors regulations across its businesses to ensure that it complies with the relevant laws and regulations. While Iofina does not believe that it is non-compliant with



any laws or regulations, any instances of non-compliance would be brought to the attention of the appropriate authorities as soon as possible.

Recently, trade relationships between the USA and other areas of the world have become more unstable. Increased tariffs implemented by the USA and retaliatory tariffs imposed by other governments against the USA has the potential to adversely affect both raw material supply and final product sales for lofina in certain areas of the world.

#### **Going concern**

The Directors have successfully restructured the Group's debt in March 2019 as described in notes 19 and 20, and extended the due date to 1 July 2020. In 2018, the Group completed IO#7 which has improved iodine production costs of the Group. Iodine prices are have recovered from depressed levels and have continued to strengthen. The Group has prepared forecasts and projections on the foregoing basis that indicate there are adequate resources to continue in operational existence for the foreseeable future. For these reasons, the Directors consider it appropriate to continue to adopt the going concern basis in preparing the financial statements.

On behalf of the board

Lance J. Baller

Non-Executive Chairman Iofina plc 30 April 2019



#### **CORPORATE GOVERNANCE**

It is the Chairman's responsibility, working with Board colleagues, to ensure that good standards of corporate governance are embraced throughout the Group. As a Board, we set clear expectations concerning the Group's culture, values and behaviours.

The Directors acknowledge the importance of high standards of corporate governance. Given the Group's size and the constitution of the Board, we decided to adopt the principles set out in The QCA Corporate Governance Code published in April 2018 (the "QCA Code") in advance of the requirement under AIM Rule 26 of the AIM Rules for Companies to adopt a corporate governance code.

The Board comprises five Directors: the Non-Executive Chairman, two full time Executive Directors and two Non-Executive Directors (both of whom are considered by the Board to be independent), reflecting a blend of different experiences and backgrounds. The function of the Chairman is to supervise and manage the Board and to ensure its effective control of the business. The Board believes that the composition of the Board brings a desirable range of skills and experience given the Group's challenges and opportunities as a publicly quoted company, while at the same time ensuring that no individual (or group of individuals) can dominate the Board's decision-making.

The Board meets regularly to review, formulate and approve the Group's strategy, budgets, corporate actions and oversee the Group's progress towards its goals. The Board has established the following committees to fulfil specific functions, each with formally delegated duties and responsibilities (details of which can be found on our website; see: <a href="http://www.iofina.com/about/committees">http://www.iofina.com/about/committees</a>): the Audit Committee and the Remuneration Committee. These committees meet on a regular basis and at least two times a year. The Board has elected not to constitute a dedicated nomination committee, instead retaining such decision making with the Board as a whole. This approach is considered appropriate to enable all Board members to take an active involvement in the consideration of Board candidates and to support the Chair in matters of nomination and succession.

From time to time, separate committees may also be set up by the Board to consider specific issues when the need arises.



#### **DIRECTORS' REPORT**

The directors present their report and financial statements for the year ended 31 December 2018.

#### Strategic report

In accordance with S414C (11) of the Companies Act 2006: included in the Strategic Report on pages 11 to 16 is the review of the business and principal risks and uncertainties. This information would have otherwise been required by Schedule 7 of the Large and Medium sized Companies and Groups (Accounts and Reports) Regulations 2008 to be contained in the Directors' Report.

#### Post balance sheet events

Post balance sheet events are set out in note 28.

#### Directors' responsibilities for the preparation of the financial statements

The directors are responsible for preparing the Strategic Report and the Directors' Report and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare Group and Company financial statements for each financial year. The directors are required by the AIM Rules of the London Stock Exchange to prepare Group financial statements in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union ("EU") and have elected under company law to prepare the Company financial statements in accordance with IFRS as adopted by the EU.

The financial statements are required by law and IFRS adopted by the EU to present fairly the financial position of the Group and the Company and the financial performance of the Group. The Companies Act 2006 provides, in relation to such financial statements, that references in the relevant part of that Act to financial statements giving a true and fair view are references to their achieving a fair presentation.

Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Company and of the profit or loss of the Group for that period.

In preparing the Group and Company financial statements, the directors are required to:

- a. select suitable accounting policies and then apply them consistently;
- b. make judgements and accounting estimates that are reasonable and prudent;
- c. state whether they have been prepared in accordance with IFRSs adopted by the EU;
- d. Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the Company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.



The directors are responsible for the maintenance and integrity of the corporate and financial information included on the Iofina plc website.

Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

#### **Results and dividends**

The results for the year are set out in the consolidated statement of comprehensive income and detailed in the Financial Review.

The directors do not recommend payment of a dividend.

#### Financial instruments and risk management

Note 14 details the risk factors for the Group and how these risks are managed, including the degree to which it is appropriate to use financial instruments to mitigate risks.

#### **Directors**

The directors who served during the year and subsequently were as follows:

Lance J. Baller, Non-Executive Chairman

Dr. William D. Bellamy, Non-Executive Director

J. Frank Mermoud, Non-Executive Director (appointed 16 November 2018)

Dr. Thomas M. Becker, Chief Executive Officer and President

Malcolm T. Lewin, Chief Financial Officer

#### Statement as to disclosure of information to the auditor

The directors who were in office on the date of approval of these financial statements have confirmed that, as far as they are aware, there is no relevant audit information of which the auditor is unaware. Each of the directors has confirmed that they have taken all the steps that they ought to have taken as directors in order to make themselves aware of any relevant audit information and to establish that it has been communicated to the auditor.

#### **Auditor**

UHY Hacker Young were appointed as auditors to the Company and in accordance with Section 485 of the Companies Act 2006 a resolution proposing that they be reappointed will be put to the next Annual General Meeting.

On behalf of the Board

Dr. Thomas M. Becker

Chief Executive Officer and President

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30 April 2019



#### **CORPORATE GOVERNANCE STATEMENT**

The Board believes in the importance of corporate governance and is aware of its responsibility for overall corporate governance, and for supervising the general affairs and business of the Group.

The Company is listed on the AIM market of the London Stock Exchange ("AIM") and is subject to the continuing requirements of the AIM Rules for Companies. The Board has adopted the principles set out in The QCA Corporate Governance Code published by the Quoted Companies Alliance in April 2018 (the "QCA Code"). This section provides general information on the Group's adoption of the QCA Code.

#### Business model, strategy and approach to risk

The Group focuses on the exploration and production of iodine and halogen-based specialty chemical derivatives. We identify, develop, build, own and operate iodine extraction plants, currently focused in North America, based on Iofina's Wellhead Extraction Technology® (WET®) IOsorb® technology. The Group has complete vertical integration from the production of iodine in the field to the manufacture of the chemical end-products derived from iodine to the consumer, and the recycling of iodine using iodinated side-streams from waste chemical processes. We use patented processes throughout all business lines. Together these allow us to be the Technology Leaders in Iodine®. The Group's strategy is to continue to focus on the exploration and production of iodine and iodine specialty chemical derivatives, delivering growth throughout our operations. Growth is intended to be achieved with the continued upgrading and expanding of our plants, which in turn will boost the level of iodine production.

All of the Group's activities involve an ongoing assessment of risks and the Group seeks to mitigate such risks where possible. The Board has undertaken an assessment of the principal risks and uncertainties facing the Group, including those that would threaten its business model, future performance, solvency and liquidity. In addition, the Board has considered the longer-term viability of the Group including factors such as the prospects of the Group and its ability to continue in operation for the foreseeable future. The Board considers that the disclosures outlined in the Strategic Report on pages 11 to 16 are appropriate given the stage of development of the business. The Board considers that these disclosures provide the information necessary for shareholders and other stakeholders to assess the Group's future viability and potential requirements for further capital to fund its operations.

Having carried out a review of the level of risks that the Group is taking in pursuit of its strategy, the Board is satisfied that the level of retained risk is appropriate and commensurate with the financial rewards that should result from achievement of its strategy.

#### **Board of Directors**

During the financial period under review there was one change to the composition of the Board, namely the appointment of J. Frank Mermoud as set out on page 19.

As of the date of this Report the Board comprises five Directors in total: the Non-Executive Chairman, two Executive Directors (being the Chief Executive Officer ("CEO") and the Chief Financial Officer ("CFO")) and two Non-Executive Directors (both of whom are considered by the Board to be independent), reflecting a blend of different experiences and backgrounds. The skills and experience of the Board are set out in their biographical details on pages 9 and 10. The experience and knowledge



of each of the Directors give them the ability to challenge strategy constructively and to scrutinize performance.

The Board is responsible to the shareholders for the proper management of the Group. Both the Board and senior managers are responsible for reviewing and evaluating risk and the Executive Directors meet at least monthly to review ongoing trading performance, discuss budgets and forecasts, and new risks associated with ongoing trading. The entire Board typically meets quarterly to set the overall direction and strategy of the Group, to review operational and financial performance, and to advise on management appointments (if necessary). The Board has also convened, when necessary, by telephone conference during the year to review the strategy and activities of the business. All key operational and investment decisions are subject to Board approval. The Company Secretary is responsible for ensuring that Board procedures are followed and applicable rules and regulations are complied with. The number of meetings attended by each Director can be found on page 23.

There is a clear separation of the roles of CEO and Non-Executive Chairman. The Chairman is responsible for overseeing the running of the Board, ensuring that no individual or group dominates the Board's decision making and ensuring the Non-Executive Directors are properly briefed on matters. The CEO has the responsibility for implementing the strategy of the Board and managing the day-to-day business activities of the Group.

#### Time commitment

On joining the Board, Non-Executive Directors receive a formal appointment letter, which identifies the terms and conditions of their appointment and, in particular, the time commitment expected of them. A potential Director candidate (whether an Executive Director or Non-Executive Director) is required to disclose all significant outside commitments prior to their appointment. The Board is satisfied that both the Chairman and the other Non-Executive Directors are able to devote sufficient time to the Group's business.

#### **Independence of Directors**

The Directors acknowledge the importance of the principles of the QCA Code which recommends that a company should have at least two independent Non-Executive Directors. The Board considers it has sufficient independence on the Board and that all the Non-Executive Directors are of sufficient competence and calibre to add strength and objectivity to the Board, and bring considerable experience in industry, operational and financial development of chemical products and companies. Specifically, the Board has considered and determined that since the date of their respective appointments William Bellamy and J. Frank Mermoud are independent in character and judgement, specifically that they:

- have not been employees of the Company within the last five years;
- do not have a material business relationship with the Group;
- have no close family ties with any of the Group's advisers, Directors or senior employees;
- do not hold cross-directorships or have significant links with other Directors through involvement in other companies or bodies; and



• do not represent any shareholder.

The Company Secretary maintains a register of outside interests and any potential conflicts of interest are reported to the Board.

If they so wish, the Non-Executive Directors have opportunities to meet without Executive Directors being present (including after Board and Committee meetings). Because the Board is spread out geographically, the majority of communications between Directors is conducted by telephone. However, the Board does convene in person at least once a year, and this presents an opportunity (before, after and between management and operational meetings) for the Non-Executive Directors to meet in person without the Executive Directors being present.

#### **Professional development**

Throughout their period in office, the Directors are continually updated on the Group's business, the competitive and regulatory environments in which it operates, corporate social responsibility matters and other changes affecting the Group and the industry it operates in as whole. The updates are usually provided by way of written briefings and meetings with senior management. Directors are also advised on appointment of their legal and other duties and obligations as a director of an AIM-quoted company both in writing and in communications (being face-to-face meetings whenever possible) with the Company's Nomad. The Directors also have recourse to the Company Secretary, a qualified and practising solicitor, who is a recognised practitioner within the AIM community.

All of the Directors are subject to election by shareholders at the first Annual General Meeting of the Company ("AGM") after their appointment to the Board. Non-Executive Directors will continue to seek re-election at least once every three years.

#### **Board Committees**

There are two committees – the Audit Committee and the Remuneration Committee. Their full terms of reference are published on the Company's website at http://www.iofina.com/about/committees.

#### **Audit Committee**

During the financial period under review, the members of the Audit Committee were Lance Baller, Dr William Bellamy and J. Frank Mermoud (who became a member on his appointment to the Board). Mr Baller is the Chairman of the Audit Committee. The responsibilities of the committee include the following:

- ensuring that the financial performance of the Group is properly monitored, controlled and reported on;
- reviewing accounting policies, accounting treatment and disclosures in the financial reports;
- meeting the auditors and reviewing reports from the auditors relating to accounts and internal control systems; and
- overseeing the Group's relationship with external auditors, including making recommendations to the Board as to the appointment or re-appointment of the external



auditors, reviewing their terms of engagement, and monitoring the external auditors' independence, objectivity and effectiveness.

During the year, the committee met to review audit planning and findings with regard to the Annual Report. In addition, it reviewed the appointment of auditors, and agreed unanimously to re-elect UHY Hacker Young LLP.

#### **Remuneration Committee**

During the financial period under review, the members of the Remuneration Committee were Lance Baller, Dr William Bellamy and J. Frank Mermoud (who became a member on his appointment to the Board). Dr Bellamy is the Chairman of the Remuneration Committee. The responsibilities of the committee include the following:

- reviewing the performance of the Executive Directors and setting the scale and structure of their remuneration with due regard to the interest of shareholders;
- overseeing the evaluation of the Executive Directors; and
- determining the vesting of awards, including the setting of any performance criteria in relation to the exercise of share options, granted under the Company's share option plan.

During the year, the committee met to discuss staff remuneration, options packages, bonus schemes and remuneration packages for its new Non-Executive Director.

The Directors' remuneration information is presented on page 25.

#### Attendance at meetings

The Board meets regularly on a quarterly basis, together with further meetings as required. The Audit and Remuneration Committees meet as required, and try to hold a minimum of two meetings each year.

The Directors attended the following meetings during the year:

	Board	Audit	Remuneration
Lance Baller	4	2	2
Dr Thomas Becker	4	-	-
Malcolm Lewin	4	-	-
Dr William Bellamy	3	2	2
J. Frank Mermoud (appointed			
16 November 2018)	-	-	-

#### Risk management and internal control

The Board is responsible for the systems of internal controls and for reviewing their effectiveness. The internal controls are designed to manage rather than eliminate risk and provide reasonable but not absolute assurance against material misstatement or loss. The Board reviews the effectiveness of these systems annually by considering the risks potentially affecting the Group.



lofina employs strong financial and management controls within the business. Examples of control procedures include:

- an annual budget set by the Board with regular review of progress;
- regular meetings of Executive Directors and senior management to review management information and follow up on operational issues or investigate any exceptional circumstances;
- clear levels of authority, delegation and management structure; and
- Board review and approval of significant contracts and overall project spend.

The Company's system of internal control is designed to safeguard the Company's assets and to ensure the reliability of information used within the business. The system of controls manages appropriately, rather than eliminates, the risk of failure to achieve business objectives and provides reasonable, but not absolute, assurance against material misstatement or loss. The Group does not consider it necessary to have an internal audit function due to the small size of the administrative function. Instead, there is a detailed monthly review and authorisation of transactions by the CFO and the CEO.

The independent auditors do not perform a comprehensive review of internal control procedures, but do report to the Audit Committee on the outcomes of its annual audit process. The Board confirms that the effectiveness of the system of internal control, covering all material controls including financial, operational and compliance controls and risk management systems, has been reviewed during the year under review and up to the date of approval of the Annual Report.

The Group maintains appropriate insurance cover in respect of actions taken against the Directors because of their roles, as well as against material loss or claims against the Group. The insured values and type of cover are comprehensively reviewed on a periodic basis.

#### Board effectiveness and performance evaluation

The Board is mindful that it needs to continually monitor and identify ways in which it might improve its performance and recognises that board evaluation is useful for enhancing a board's effectiveness.

The individual contributions of each of the members of the Board are regularly assessed to ensure that: (i) their contribution is relevant and effective; (ii) that they are committed; and (iii) where relevant, they have maintained their independence. The Board intends to review the performance of the team as a unit to ensure that the members of the Board collectively function in an efficient and productive manner. One-third of the Directors must stand for re-election by shareholders annually in rotation and all Directors must stand for re-election at least once every three years

The Company considers that the Board and its individual members continue to perform effectively, that the Chairman performs his role appropriately and that the process for evaluation of his performance has been conducted in a professional and rigorous manner.

#### **Corporate Social Responsibility**

The Board recognises the growing awareness of social, environmental and ethical matters and it endeavours to take into account the interest of the Group's stakeholders, including its investors, employees, suppliers and business partners, when operating the business.



#### **Employment**

The Group endeavours to appoint employees with appropriate skills, knowledge and experience for the roles they undertake and thereafter to develop and incentivise staff. The Board recognises its legal responsibility to ensure the wellbeing, safety and welfare of its employees and maintain a safe and healthy working environment for them and for its visitors.

#### **Relations with shareholders**

The Board recognises the importance of communication with the Company's shareholders to ensure that its strategy and performance is understood and that it remains accountable to shareholders. Our website has a section dedicated to investor matters and provides useful information for the Company's shareholders (see: <a href="http://iofina.com/investors/">http://iofina.com/investors/</a>). The Board as a whole is responsible for ensuring that a satisfactory dialogue with shareholders takes place, while the Chairman and the CEO ensure that the views of the shareholders are communicated to the Board as a whole. The Board ensures that the Group's strategic plans have been carefully reviewed in terms of their ability to deliver long-term shareholder value. Fully audited Annual Reports are published, and Interim Results statements notified via Regulatory Information Service announcements. All financial reports and statements are available on the Company's website (see: <a href="http://iofina.com/investors/financial-results">http://iofina.com/investors/financial-results</a>).

During the period under review the Board believes that the communication with shareholders has been effective in that Lance Baller and/or Dr Thomas Becker have had meetings and/or calls with the Company's largest shareholders. Shareholders are welcome to attend the Group's AGM, where they have the opportunity to meet the Board and ask questions during an open Q&A session. Shareholders have at least 21 days' notice of the AGM at which the Directors discuss aspects of the Group's performance, following which the shareholders are free to question management in more detail. The Board is committed to continued engagement with its shareholders.

The Board believes that the Group has a strong governance culture and this has been reinforced by the adoption of the QCA Code and recognition of the 10 principles of corporate governance set out in the QCA Code, which the Board continually considers in a manner appropriate for a company of its size.

#### **Directors' remuneration**

Remuneration provided to each director was as follows:

		2018	
	Salary	Bonus	Total \$
Lance Baller	109,320	-	109,320
Dr. Thomas Becker	210,800	40,000	250,800
Malcolm Lewin	145,000	30,000	175,000
William Bellamy	30,000	-	30,000
Frank Mermoud	3,781	-	3,781
Total	\$498,901	\$70,000	\$568,901

2017		
Salary	Bonus	Total \$
108,755	-	108,755
208,000	70,000	278,000
145,000	30,000	175,000
30,000	-	30,000
-	-	-
\$491,755	\$100,000	\$591,755

No pension contributions were paid on behalf of the directors in 2017 or 2018.



Directors' and officers' insurance is in place as regards the directors.

The interests of the directors in office as at 31 December 2018 in the shares of the Company at the end of the financial year and the beginning of the financial year or date of appointment, if later, were as follows:

	31 December 2018	1 January 2018
L J Baller (1)	4,500,000	4,500,000
Dr. T M Becker	-	-
W D Bellamy	-	-
M T Lewin	-	-
J F Mermoud	-	_

#### (1) Comprised of beneficial ownership of shares.

Certain of the Directors were granted options over shares on 13 June 2018 with an exercise price of 16.2 pence. These were in addition to options that were granted to certain of the Directors in 2008 with an exercise price of 30 pence. The options granted to Directors are set out in the table below. No Directors exercised options in 2018.

Name	2008 Options granted	Exercise price per 2008 Option	Lapse date	2018 Options granted	Exercise price per 2018 Option	Lapse date
Dr T Becker	250,000	30p	02/07/21	660,000	16.2p	13/06/28
M Lewin	-	-	-	330,000	16.2p	13/06/28
L Baller	-	-	-	220,000	16.2p	13/06/28
Dr W Bellamy	-	-	-	110,000	16.2p	13/06/28

On behalf of the Board

Dr. Thomas M. Becker

Chief Executive Officer and President

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30 April 2019



# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF IOFINA PLC FOR THE YEAR ENDED 31 DECEMBER 2018

#### **Opinion**

We have audited the financial statements of Iofina Plc for the year ended 31 December 2018 which comprise the Consolidated Statement of Comprehensive Income, the Consolidated and Parent Company Balance Sheet, the Consolidated and Parent Company Statements of Changes in Equity, the Consolidated and Parent Company Cash Flow Statement, and the related notes, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

In our opinion, the financial statements:

- give a true and fair view of the state of the Group and Parent Company's affairs as at 31 December 2018 and of the Group's loss and cash flows for the year then ended;
- have been properly prepared in accordance with IFRSs as adopted by the European Union;
   and
- have been prepared in accordance with the requirements of the Companies Act 2006.

#### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material
  uncertainties that may cast significant doubt about the Group and Company's ability to
  continue to adopt the going concern basis of accounting for a period of at least twelve
  months from the date when the financial statements are authorised for issue.



#### **Key audit matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

#### Our assessment of risks of material misstatements

We identified the following risks of material misstatement that we believe had the greatest impact on our overall audit strategy and scope, the allocation of resources in the audit and directing the efforts of the engagement team. This is not a complete list of all risks identified by our audit.

Key audit matter
------------------

#### Revenue Recognition

IFRS 15 has replaced IAS 18 for the recognition of revenue and applies for the annual reporting periods beginning on or after 1 January 2018.

The core principle of IFRS 15 is that the entity shall recognise revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

Consideration needs to be given to whether there is any impact on the comparative figures following the implementation of IFRS 15.

The revenue stream for the group is derived from sales of iodine derivatives, iodine chemicals and ancillary products. All are fundamental to the financial statements and a systematic error in the calculation could lead to a material error.

#### How our audit addressed the key audit matter

We reviewed the transition from IAS 18 to IFRS 15 in relation to the Group it was noted that it had no impact on the opening balances. Accordingly there is no requirement for the comparative figures to be restated within the accounts.

We tested the completeness of sales by selecting a sample of items from outside of the Group's accounting system. Whilst performing our audit testing we ensured that the treatment of revenue was in accordance with the correct recognition criteria as per the Group accounting policy.

We audited revenue for cut-off by testing pre and post year-end sales by the Group to ensure that sales are accounted for in the correct period.

We have not found any material issues or errors involving sales and are therefore satisfied we have assurance over sales recognition and treatment.



Auditing standards set out a rebuttable risk of fraudulent revenue recognition and consider that this risk should be treated as a significant risk.

In this regard, we consider that there is a risk over the existence and completeness assertions relating to revenue recognition.

## Valuation and Impairment review of property plant and equipment

Property, plant and equipment are a significant balance in the financial statements. IAS 36 Impairment of Assets must be considered, with a robust review of all assets held.

The directors are required to conduct impairment tests where there is an indication of impairment of the asset.

During the audit we were provided with an impairment review of the property plant and equipment assets held by the Group at the year end. We reviewed and tested this taking into consideration the repurposing of Equipment and Machinery from IO3 to IO7 in the year.

We performed a sensitivity analysis on key inputs - iodine prices, growth and inflation. Even with a significant adverse movement in iodine prices we did not identify a potential impairment.

We tested the transfer of assets from IO3 to IO7, addressing whether the assets were correctly transferred to the new plant and the remaining unutilised assets. The directors identified an impairment of \$1,698,069 in relation to the operations of IO5 ceasing in the year. The remaining carrying value relates to property, plant and equipment that can be repurposed in to another plant.

We are satisfied that no further impairments are required.

# Valuation and Impairment review of investments in subsidiaries and intercompany balances

Due to the material size of the investments in, and loans to, the subsidiaries the directors should critically consider if any indicators of impairment exist in relation to the balances.

Where indicators of impairment have been identified a robust review of the investments held by the parent company

We discussed with the directors their approach for identifying indicators of impairment within the investments in subsidiaries and intercompany balances We performed analysis on the impairment review provided by the Directors, challenging the rationale for no impairment being required in the year.

Our audit work included, but was not restricted to, the following:

• We performed a sensitivity analysis on the key inputs such as a decline in iodine prices



and any amounts due from subsidiaries to the parent company should be undertaken by the directors to confirm the value in use of these amounts and that there are no indications, or requirements for, impairments of the amounts. and sales growth and concluded that even with an adverse movement in the Group's key assumptions, no potential impairment was identified.

- We obtained and reviewed the director's assessment of impairment with regards to investment and loans due from its subsidiaries to ensure the treatment of the balances was in line with IAS 36.
- We reviewed the 2018 forecasts against actuals to determine the Directors historic forecasting accuracy.

We are satisfied that no impairments are required.

#### Valuation of Inventory

Inventory primarily consists of iodine and iodine derivatives. Inventory should be held at the lower of cost and net realisable value.

The net realisable value is the estimated selling price in the ordinary course of business less any applicable selling expenses. There is a risk that the carrying value in the Group accounts is higher than the recoverable amount and it is therefore materially misstated.

#### Convertible Loan notes/derivative liability

The Group has entered into a convertible loan arrangement. This is deemed to be a complex financial instrument; as such there is a risk that the valuation and disclosure within the financial statements is not in line with IFRS.

We attended a stocktake at two of the Group's plant locations at the year end, where we observed an inventory count and performed sample testing on inventory held.

We discussed, understood and tested the Group's process for calculating the cost of the product based on the absorption cost. A sample of products was then tested to ensure the product was held at the lower of cost and Net Realisable Value.

We did not find any material issues or errors in respect of the valuation of inventory.

We reviewed the contractual documentation of the convertible loan notes and the conditions attached.

The liability element of the convertible loan note was recalculated to ensure completeness of the liability at the year end.

The residual embedded derivative was recalculated using the Black-Scholes model. This was compared to an average net present value taking into account the equity price of company and the impact of foreign exchange. The Group's valuation fell within our acceptable range for the option given the judgments used within the calculation.



The disclosures regarding convertible loan notes
have been reviewed. We are satisfied that the note
in the financial statement is in line with IFRS.

#### Our application of materiality

The scope and focus of our audit was influenced by our assessment and application of materiality. We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements on our audit and on the financial statements.

We define financial statement materiality as the magnitude by which misstatements, including omissions, could reasonably be expected to influence the economic decisions taken on the basis of the financial statements by reasonable users.

We also determine a level of performance materiality which we use to determine the extent of testing needed to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole.

Overall materiality	We determined materiality for the financial statements as a whole to be \$240,000.
How we determine it	Based on the main key indicator, being turnover of the Group.
Rationale for benchmarks applied	We believe turnover to be the most appropriate benchmark due to the size and the nature of the Company and Group.
Performance materiality	On the basis of our risk assessment, together with our assessment of the Company's control environment, our judgement is that performance materiality for the financial

We agreed with the Audit Committee that we would report to them all misstatements over \$12,000 identified during the audit, as well as differences below that threshold that, in our view, warrant reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

statements should be 75% of materality at \$180,000.

#### An overview of the scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account an understanding of the structure of the Company and the Group, their activities, the accounting processes and controls, and the



industry in which they operate. Our planned audit testing was directed accordingly and was focused on areas where we assessed there to be the highest risk of material misstatement.

Our Group audit scope includes all of the Group companies. At the parent company level, we also tested the consolidation procedures. The audit team met and communicated regularly throughout the audit with the CFO in order to ensure we had a good knowledge of the business of the Group. During the audit we reassessed and re-evaluated audit risks and tailored our approach accordingly.

The audit testing included substantive testing on significant transactions, balances and disclosures, the extent of which was based on various factors such as our overall assessment of the control environment, the effectiveness of controls and the management of specific risk.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant findings, including any significant deficiencies in internal control that we identify during the audit.

#### Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditors' report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.



#### Matters on which we are required to report by exception

In the light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns;
- certain disclosures of directors' remuneration specified by law are not made; or
- · we have not received all the information and explanations we require for our audit.

#### **Responsibilities of directors**

As explained more fully in the statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

#### Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at : <a href="www.frc.org.uk/auditorsresponsibilities">www.frc.org.uk/auditorsresponsibilities</a> This description forms part of our auditor's report.



#### Use of our report

This report is made solely to the Company's members, as a body, in accordance with part 3 of Chapter 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Daniel Hutson (Senior Statutory Auditor)
For and on behalf of
UHY Hacker Young
Chartered Accountants
Statutory Auditor

Quadrant House 4 Thomas More Square London E1W 1YW 30 April 2019





# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

		Year ended 31 December 2018	Year ended 31 December 2017
	Note	\$	\$
Revenue	3	23,958,289	20,828,163
Cost of sales	4	(17,651,387)	(15,967,563)
Gross profit		6,306,902	4,860,600
Administrative expenses	4	(5,241,033)	(5,540,185)
Operating profit/(loss)		1,065,869	(679,585)
Impairment expense	4	(2,592,276)	(5,280,551)
Finance expense	6 7	(3,062,982)	(2,750,908)
Finance income Revaluation of derivative liability	7 19	974 3,214,166	3,617 (1,078,399)
Loss before taxation	4	(1,374,249)	(9,785,826)
2033 Sciole taxation	7	(1,374,243)	(3,703,020)
Taxation	8	231,233	51,000
Loss for the year attributable to owners of the parent		\$(1,143,016)	\$(9,734,826)
Other comprehensive income – items that may subsequently be reclassified through profit or loss Foreign currency differences on translating foreign			
operations		(9,516)	(1,761)
Other comprehensive income for the year, net of income tax		(9,516)	(1,761)
Total comprehensive income for the year attributable to owners of the parent		\$(1,152,532)	\$(9,736,587)
Basic and diluted loss per share attributable to owners of the parent	9	\$(0.009)	\$(0.076)

All activities are classed as continuing.

The accompanying notes form part of these financial statements.



# **CONSOLIDATED BALANCE SHEET**

	31 December 2018	31 December 2017
Note	\$	\$
Assets	·	·
Non-current assets		
Intangible assets 10	1,064,642	1,965,957
Goodwill 11	3,087,251	3,087,251
Property, plant and equipment 12	17,351,258	19,331,538
Total non-current assets	21,503,151	24,384,746
Current assets		
Inventories 13	5,674,168	4,313,499
Trade and other receivables 15	4,428,004	4,621,681
Cash and cash equivalents 16	4,519,895	3,449,681
Total current assets	14,622,067	12,384,861
Total assets	\$36,125,218	\$36,769,607
Equity and liabilities		
Current liabilities		
Trade and other payables 17	4,970,843	4,214,586
Total current liabilities	4,970,843	4,214,586
Non-current liabilities		
Deferred tax liability 18	_	231,233
Term loan 19	3,263,529	3,074,846
Convertible loan notes 19	21,550,297	18,675,998
Convertible loan notes – derivative liability 19	392,835	3,607,001
Total non-current liabilities	25,206,661	25,589,078
Total liabilities	\$30,177,504	\$29,803,664
Equity attributable to owners of the parent		
Issued share capital 21	2,292,683	2,292,683
Share premium 21	48,991,647	48,991,647
Share-based payment reserve	1,768,693	1,634,390
Retained earnings	(41,160,987)	(40,017,971)
Foreign currency reserve	(5,944,322)	(5,934,806)
Total equity	\$5,947,714	\$6,965,943
Total equity and liabilities		

The financial statements on pages 35 to 71 were approved and authorised for issue by the Board and were signed on its behalf on 30 April 2019.

Dr. Thomas M. Becker

**Chief Executive Officer and President** 

Company number: 05393357

The accompanying notes form part of these financial statements.



# CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

	Attributable to owners of the parent					
	Share capital	Share premium	Share- based payment reserve	Retained earnings	Foreign currency reserve	Total equity
	\$	\$	\$	\$	\$	\$
Balance at 1 January 2017	\$2,292,683	\$48,991,647	\$1,634,390	\$(30,283,145)	\$(5,933,045)	\$16,702,530
Loss for the year attributable to owners of the parent	-	-	-	(9,734,826)	-	(9,734,826)
Other comprehensive income Exchange differences on translating foreign operations			_		(1,761)	(1,761)
Total comprehensive income attributable to owners of the				<del>_</del>	(1,701)	(1,701)
parent		-	-	(9,734,826)	(1,761)	(9,736,587)
Balance at 31 December 2017	\$2,292,683	\$48,991,647	\$1,634,390	\$(40,017,971)	\$(5,934,806)	\$6,965,943
Transactions with owners						
Share-based expense			134,303	_	_	134,303
Total transactions with owners	-	-	134,303	_	-	134,303
Loss for the year attributable to owners of the parent	-	-	-	(1,143,016)	-	(1,143,016)
Other comprehensive income Exchange differences on translating foreign operations	_	_	_	_	(9,516)	(9,516)
Total comprehensive income attributable to owners of the					(3,310)	(3,310)
parent				(1,143,016)	(9,516)	(1,152,532)
Balance at 31 December 2018	\$2,292,683	\$48,991,647	\$1,768,693	\$(41,160,987)	\$(5,944,322)	\$5,947,714





# CONSOLIDATED CASH FLOW STATEMENT

	Year ended 31 December 2018 \$	Year ended 31 December 2017 \$
Cash flows from operating activities	•	•
Loss before taxation	(1,374,249)	(9,785,826)
Adjustments for:	, , , ,	
Depreciation	1,331,317	1,821,685
Amortisation	245,000	258,322
Impairment expense	2,213,332	5,302,551
Construction in progress expenditure written off		26,107
Share-based payments	134,303	<del>-</del>
Finance expense	3,062,982	2,750,908
Finance income	(974)	(3,617)
Revaluation of derivative liability	(3,214,166)	1,078,399
Operating cash inflow before changes	<del></del>	
in working capital	2,397,545	1,448,529
Changes in working capital		
Decrease/(Increase) in trade and other receivables	193,677	(525,186)
Increase in inventories	(1,360,668)	(357,154)
Increase/(Decrease) in trade and other payables	756,263	(830,534)
Net cash inflow/(outflow) from operating activities	1,986,817	(264,345)
Cash flows from investing activities		
Interest received	974	3,617
Acquisition of intangible assets	_	(645)
Acquisition of property, plant and equipment	(908,056)	(2,081,530)
Net cash outflow from investing activities	(907,082)	(2,078,558)
Cash flows from financing activities		
Interest paid	_	(21,367)
Term loan		3,000,000
Net cash inflow from financing activities		2,978,633
Net increase in cash and cash equivalents	1,079,735	635,730
Effects of foreign exchange	(9,521)	(1,761)
	1,070,214	633,969
Cash and cash equivalents at beginning of year	3,449,681	2,815,712
Cash and cash equivalents at end of year	\$4,519,895	\$3,449,681



# **COMPANY BALANCE SHEET**

	Note	31 December 2018 \$	31 December 2017 \$
Assets		•	•
Non-current assets			
Investment in subsidiary undertakings	26	17,199,362	17,199,362
Total non-current assets		17,199,362	17,199,362
Current assets			
Due from subsidiaries	26	33,685,812	34,455,812
Trade and other receivables	15	11,782	3,099
Cash and cash equivalents	16	113,065	14,789
Total current assets		33,810,659	34,473,700
Total assets		\$51,010,021	\$51,673,062
Equity and liabilities Current liabilities			
Trade and other payables	17	186,818	139,593
Total current liabilities		186,818	139,593
Non-current liabilities			
Term loan	19	3,263,529	3,074,846
Convertible loan notes	19	21,550,297	18,675,998
Convertible loan notes – derivative liability	19	392,835	3,607,001
Total non-current liabilities		25,206,661	25,357,845
Total liabilities		25,393,479	25,497,438
Equity attributable to the owners of the parent			
Issued share capital	21	2,292,683	2,292,683
Share premium	21	48,991,647	48,991,647
Share-based payment reserve		1,768,693	1,634,390
Retained earnings		(21,677,140)	(20,993,276)
Foreign currency reserve		(5,759,341)	(5,749,820)
Total equity		25,616,542	26,175,624
Total equity and liabilities		\$51,010,021	\$51,673,062

The loss for the financial year dealt with in the financial statements of the parent company was \$683,864 (2017 loss \$9,806,463).

The financial statements on pages 35 to 71 were approved and authorised for issue by the Board and were signed on its behalf on 30 April 2019.

Dr. Thomas M Becker

**Chief Executive Officer and President** 

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Company number: 05393357





# COMPANY STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

	Attributable to equity holders of the parent					
	Share	Share	Share based	Retained	Foreign	Total
	capital	premium	payment	earnings	currency	equity
			reserve		reserve	
	\$	\$	\$	\$	\$	\$
Balance at 1 January 2017	\$2,292,683	\$48,991,647	\$1,634,390	\$(11,186,813)	\$(5,748,059)	\$35,983,848
Loss attributable to owners				(0.006.463)		(0.000.463)
of the parent	_	_	_	(9,806,463)	_	(9,806,463)
Other comprehensive income Exchange differences on						
translating foreign operations					(1,761)	(1,761)
Total comprehensive income for the year	_	_	_	(9,806,463)	(1,761)	(9,808,224)
Balance at 31 December 2017	\$2,292,683	\$48,991,647	\$1,634,390	\$(20,993,276)	\$(5,749,820)	\$26,175,624
Transactions with owners						
Share-based expense		_	134,303	_		134,303
Total transactions with owners	-	-	134,303	-	-	134,303
Loss attributable to owners of the parent	_	-	-	(683,864)	-	(683,864)
Other comprehensive income Exchange differences on						
translating foreign operations		_	_	_	(9,521)	(9,521)
Total comprehensive income for the year			<u>-</u>	(683,864)	(9,521)	(693,385)
Balance at 31 December 2018	\$2,292,683	\$48,991,647	\$1,768,693	\$(21,677,140)	\$(5,759,341)	\$25,616,542





# **COMPANY CASH FLOW STATEMENT**

	Year ended 31 December 2018 \$	Year ended 31 December 2017 \$
Cash flows from operating activities	(500.054)	(0.005.450)
Loss before taxation	(683,864)	(9,806,463)
Adjustments for:	424 202	
Share-based payments	134,303	2 720 544
Finance expense	3,062,982	2,729,541
Revaluation of derivative liability	(3,214,166)	1,078,399
Impairment of investment in subsidiary	(700 745)	5,300,000
	(700,745)	(698,523)
Changes in working capital		
Increase in other receivables	(8,683)	(1,890)
Increase in trade and other payables	47,225	51,560
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Net cash outflow from operating activities	(662,203)	(648,853)
Cash flows from investing activities		
Repayments/(advances) to subsidiaries	770,000	(2,440,002)
Net cash inflow from investing activities	770,000	(2,440,002)
Cash flows from financing activities		
Term loan		3,000,000
Net cash inflow/(outflow) from financing activities	_	3,000,000
Net increase/(decrease) in cash and cash equivalents	107,797	(88,855)
Effects of foreign exchange	(9,521)	(1,761)
	98,276	(90,616)
Cash and cash equivalents at beginning of year	14,789	105,405
Cash and cash equivalents at end of year	\$113,065	\$14,789



#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

# 1. Accounting policies

The Company is a public limited company incorporated and domiciled in the United Kingdom. The Company is listed on the AIM Market of the London Stock Exchange.

The registered office is located at 200 Strand, London, WC2R 1DJ. The principal activities of the Company have been and continue to be investment in subsidiaries engaged in the production of iodine and iodine derivatives, including the arrangement of finance for and the provision of management services to subsidiaries.

# a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRS') and IFRS Interpretations Committee ('IFRIC') as adopted by the European Union ('EU') and the Companies Act 2006 applicable to companies reporting under IFRS.

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements.

#### b) New standards and interpretations

Effective January 1, 2018, we adopted IFRS 15, "Revenue from Contracts with Customers" and all related amendments using the modified retrospective method. There was no material impact to our results of operations or financial position upon adoption, and no adjustment was made to retained earnings in our consolidated balance sheet because such adjustment was determined to be immaterial.

Effective January 1, 2018, we also adopted IFRS 9, "Financial Instruments". There was no material impact to our results of operations or financial position upon adoption.

Management continues to evaluate standards, amendments and interpretations which are effective for reporting periods beginning after the date of these financial statements and have not been adopted early, including IFRS 16, "Leases" effective January 1, 2019, but does not currently expect their implementation to have a material effect on the Group's financial statements.

#### c) Presentation of financial statements

The financial statements have been prepared on the historical cost convention as modified by the revaluation of financial liabilities at fair value through profit and loss.

As permitted by Section 408 of the Companies Act 2006, the parent company's income statement has not been included in these financial statements.

# d) Revenue recognition

Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or providing services, and is recognized when performance obligations are satisfied under the



terms of contracts with our customers. A performance obligation is deemed to be satisfied when control of the product or service is transferred to our customer. The transaction price of a contract, or the amount we expect to receive upon satisfaction of all performance obligations, is determined by reference to the contract's terms and includes adjustments, if applicable, for any variable consideration, such as customer rebates or commissions, although these adjustments are generally not material. Costs incurred to obtain contracts with customers are expensed immediately.

Revenue consists of sales of iodine derivatives, iodine, chemicals and ancillary products. All of our revenue is derived from contracts with customers, and almost all of our contracts with customers contain one performance obligation for the transfer of goods where such performance obligation is satisfied at a point in time. Control of a product is deemed to be transferred to the customer upon shipment or delivery. Significant portions of our sales are sold free on board shipping point or on an equivalent basis, while delivery terms of other transactions are based upon specific contractual arrangements. Our standard terms of delivery are generally included in our contracts of sale, order confirmation documents and invoices, while the timing between shipment and delivery generally ranges between 1 and 45 days. Costs for shipping and handling activities, whether performed before or after the customer obtains control of the goods, are accounted for as fulfillment costs.

Trade receivables at December 31, 2018 of \$4,056,947 (2017 \$4,273,120) represent all balances arising from contracts with customers.

#### e) Research and development expenditures

Expenditure on research (or the research phase of an internal project) is recognised as an expense in the period in which it is incurred. Costs that are directly attributable to the development phase of a new customised chemical manufacturing process or development of a new iodine project are recognised as intangible assets provided they meet the following recognition requirements:

- completion of the intangible asset is technically feasible so it will be available for use or sale;
- the Group intends to complete the intangible asset and use or sell it;
- the Group has the ability to use or sell the intangible asset;
- the intangible asset will generate probable future economic benefits;
- there are adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the expenditure attributable to the intangible asset during its development can be measured reliably.

Among other things, this requires that there is a market for the output from the intangible asset or for the intangible asset itself, or, if it is to be used internally, the asset will be used in generating such benefits.

Development costs not meeting these criteria for capitalisation are expensed as incurred. In 2018, all research and development expenditures were expensed as incurred.



#### f) Going concern

The refinancing in 2019 of the Company's \$22,371,945 Convertible Loan Notes debt and the \$3,263,529 Term Loan debt is set out in Notes 19 and 20 respectively. In particular the maturity of the debts has been extended from 1 June 2019 to 1 July 2020. The Group has prepared forecasts and projections that indicate there are adequate resources to continue in operational existence for the foreseeable future. The Directors therefore consider it appropriate to continue to adopt the going concern basis in preparing the financial statements.

# g) Basis of consolidation and investments in subsidiary undertakings

The consolidated financial statements incorporate the financial statements of the Company and its subsidiaries made up to 31 December 2018. Subsidiaries are entities over which the Group has the power to control the financial and operating policies so as to obtain benefits from their activities. The Group obtains and exercises control through voting rights. The acquisition method of accounting is used to account for the purchase of subsidiaries by the Group. On acquisition, the subsidiary's assets and liabilities are recorded at fair value, reflecting their condition at the date of acquisition.

The financial statements of subsidiaries are included in the consolidated financial statements from the date control commences until the date control ceases.

Intra-Group balances and any unrealised gains and losses or income and expenses arising from intra-Group transactions are eliminated in preparing the consolidated financial statements, unless the losses provide an indication of impairment of the assets transferred.

Amounts reported in the financial statements of the subsidiaries are adjusted where necessary to ensure consistency with the accounting policies adopted by the Group.

Investments in subsidiary undertakings are stated in the parent company balance sheet at cost less provision for any impairment losses.

#### h) Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The acquisition method involves the recognition of the acquiree's identifiable assets and liabilities, including contingent liabilities, regardless of whether they were recorded in the financial statements prior to acquisition. On initial recognition, the assets and liabilities of the acquired subsidiary are included in the consolidated balance sheet at their fair values, which are also used as the basis for subsequent measurement in accordance with the Group's accounting policies. Acquisition costs are expensed as incurred.

Goodwill represents the excess of the fair value of consideration payable in a business combination over the fair value of the Group's share of the identifiable net assets of the acquiree at the date of acquisition. Any excess of identifiable net assets over the fair value of consideration is recognised in profit or loss immediately after acquisition.



#### i) Foreign currency

The vast majority of the Group's business is denominated in U.S. Dollars, which is the functional currency of the main operating subsidiaries. U.S. Dollars is the presentational currency for the Group financial statements.

Transactions denominated in foreign currencies are translated at the rates of exchange ruling at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated at the rates of exchange ruling at the balance sheet date. Non-monetary items that are measured at historical cost in a foreign currency are translated at the exchange rate at the date of transaction. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date the fair value was determined.

Any exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were initially recorded are recognised in profit and loss in the period in which they arise. Exchange differences on non-monetary items are recognised in other comprehensive income to the extent that they relate to a gain or loss on that non-monetary item taken to the statement of changes in equity, otherwise such gains and losses are recognised in profit and loss.

On disposal of a foreign operation for which the presentational and functional currencies were different in previous periods, the cumulative translation differences are transferred to profit and loss as part of the gain or loss on disposal. The US Dollar/Pounds Sterling exchange rate averaged 1.335 in 2018 (2017 1.289), and at 31 December 2018 was 1.274 (2017: 1.349).

# j) Intangible assets

# **Exploration and evaluation costs**

All costs incurred prior to obtaining the legal right to undertake exploration and evaluation activities on a project are written off as incurred.

Once a legal right has been obtained, exploration and evaluation costs are capitalised on a project-by-project basis, pending determination of the technical feasibility and commercial viability of the project. Costs incurred include appropriate technical and administrative overheads.

Capitalised exploration costs are carried at historical cost less any impairment losses recognised. If an exploration project is successful, the related expenditures will be transferred to development assets and amortised over the estimated life of the reserves on a unit of production basis.

The recoverability of capitalised exploration and evaluation costs is dependent upon the discovery of economically recoverable reserves, the ability of the Group to obtain the necessary financing to complete the development of reserves and future profitable production or proceeds from the disposal thereof.



# **Undeveloped leasehold costs**

Undeveloped leasehold costs relate to the costs of acquiring brine leases in respect of the surface and mineral rights of landowners in areas of interest outside of those currently connected to the Group's operating plants.

These costs are capitalised as exploration and evaluation assets and are carried at historical cost less any impairment losses recognised. If areas leased provide brine to operating plants, the related costs are transferred to the relevant plants and amortized over the lives of those plants.

# Other intangible assets

Other identifiable intangible assets arose from the acquisition of H&S Chemical in 2009. These assets were valued by an external, independent valuation firm. Based on the type of asset, the useful life of each asset was estimated. The value of each identifiable intangible asset is amortised evenly over its useful life. The following useful lives are applied:

■ WET® patent: 15 years

Customer relationships: 10 years

Patent portfolio: 8 yearsEPA registrations: 2 years

Amortisation is included within administrative expenses.

#### Goodwill

Goodwill represents the excess of the fair value of consideration in a business combination over the fair value of the Group's share of the identifiable net assets acquired. Goodwill is carried at cost less accumulated impairment losses.

# k) Property, plant and equipment

Property, plant and equipment are stated at historical cost, net of depreciation and any provision for impairment. Cost includes purchase price and costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, such as costs relating to construction, site preparation, installation and testing.

Depreciation is provided at rates calculated to write off the depreciable amount of each asset on a straight line basis over its expected useful life, as follows:

- Buildings: 2.5 percent per annum
- Equipment and machinery:
  - o IOSorb plants 5 percent per annum
  - Other plant and equipment 5 to 7 years
  - Vehicles and office equipment 20 percent per annum
  - o Computer equipment 33 percent per annum

Reviews of the estimated remaining lives and residual values of individual productive assets are made annually.

Freehold land is not depreciated.



#### I) Financial instruments

#### **Financial liabilities**

# Trade and other payables

Trade and other payables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest rate method.

#### **Convertible loan notes**

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities.

Interest-bearing loans are recorded initially at their fair value, net of direct transaction costs. Such instruments are subsequently carried at their amortised cost and finance charges, including premiums payable on settlement, redemption or conversion, are recognised in profit or loss over the term of the instrument using the effective rate of interest.

Instruments where the holder has the option to redeem for cash or convert into a pre-determined quantity of equity shares are classified as compound instruments and presented partly as a liability and partly as equity.

Instruments where the holder has the option to redeem for cash or convert into a variable quantity of equity shares are classified separately as a loan and a derivative liability.

Where conversion results in a fixed number of equity shares, the fair value of the liability component at the date of issue is estimated using the prevailing market interest rate for a similar non-convertible instrument. The difference between the proceeds of issue and the fair value assigned to the liability component, representing the embedded option to convert the liability into equity of the Group, is included in equity. Where conversion is likely to result in a variable quantity of equity shares the related derivative liability is valued and included in liabilities.

The interest expense on the liability component is calculated by applying the prevailing market interest rate for similar nonconvertible debt to the instrument. The difference between this amount and the interest paid is added to the carrying value of the convertible loan note.

Derivative liabilities are revalued at fair value at the balance sheet date, and changes in the valuation amounts are credited or charged to the profit and loss account.

#### **Financial assets**

Cash and cash equivalents represent short term, highly liquid investments with an original maturity of fewer than three months that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. At the end of 2018 and 2017, all cash accounts were in 100 percent liquid accounts.

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest rate method, less provision for impairment. A provision for impairment of



trade receivables is established when there is objective evidence that the Group will not be able to collect all amounts due according to the original terms of the receivables.

#### m) Impairment

Whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable, that asset is reviewed for impairment. An asset's carrying value is written down to its estimated recoverable amount (being the higher of the fair value less costs to sell and value in use) if that is less than the asset's carrying amount.

Impairment reviews for exploration and evaluation costs are carried out on a project by project basis, with each project representing a potential single cash generating unit. An impairment review is undertaken when indicators of impairment arise, typically when one of the following circumstances applies:

- i) unexpected geological occurrences that render the resource uneconomic;
- ii) title to the asset is compromised;
- iii) variations in prices that render the project uneconomic; or
- iv) variations in the currency of operation.

Goodwill is allocated to those cash-generating units that are expected to benefit from synergies of the related business combinations and represent the lowest level within the Group at which management monitors goodwill.

Cash-generating units to which goodwill has been allocated are tested for impairment at least annually. An impairment loss is recognised for the amount by which the asset's or cash generating unit's carrying amount exceeds its recoverable amount, which is the higher of fair value less costs to sell and value in use. To determine the value in use, management estimates expected future cash flows from each cash-generating unit and determines a suitable discount rate in order to calculate the present value of those cash flows. The data used for impairment testing procedures are directly linked to the Group's latest approved budget, adjusted as necessary to exclude the effects of future reorganisations and asset enhancements. Discount factors are determined individually for each cash-generating unit and reflect their respective risk profiles as assessed by management.

Impairment losses for cash-generating units reduce first the carrying amount of any goodwill allocated to that cash-generating unit. Any remaining impairment loss is charged pro rata to the other assets in the cash-generating unit. With the exception of goodwill, all assets are subsequently reassessed for indications that an impairment loss previously recognised may no longer exist. An impairment charge is reversed if the cash-generating unit's recoverable amount exceeds its carrying amount.

# n) Equity

Equity comprises the following:

- "Share capital" represents the nominal value of equity shares.
- "Share premium" represents the excess over nominal value of the fair value of consideration received for equity shares, net of expenses for the share issue.



- "Share-based payment reserve" represents the cumulative fair value of options and warrants issued by the Company and recognised in profit and loss.
- "Retained earnings" represents retained profits or accumulated losses.
- "Foreign currency reserve" represents the cumulative differences arising from translation of foreign operations.

# o) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost includes all expenses directly attributable to the manufacturing process as well as suitable portions of related production overheads, based on normal operating capacity. Costs of ordinarily interchangeable items are assigned using the first in, first out cost formula. Cost excludes unrealised gains arising from intra-Group transactions. Net realisable value is the estimated selling price in the ordinary course of business less any applicable selling expenses. When inventory is sold the cost is included in Cost of Sales on the Statement of Comprehensive Income.

### p) Taxation

Tax expense recognised in profit or loss is the tax currently payable based on taxable profit for the year and deferred tax not recognised directly in equity.

Deferred income taxes are calculated using the balance sheet liability method. Deferred tax is generally provided on the difference between the carrying amounts of assets and liabilities and their tax bases. However, deferred tax is not provided on the initial recognition of goodwill, nor on the initial recognition of an asset or liability unless the related transaction is a business combination or affects tax or accounting profit. Deferred tax on temporary differences associated with shares in subsidiaries is not provided if reversal of these temporary differences can be controlled by the Group and it is probable that reversal will not occur in the foreseeable future. In addition, tax losses available to be carried forward, as well as other income tax credits to the Group, are assessed for recognition as deferred tax assets according to the likelihood of their recoverability in the foreseeable future.

Deferred tax liabilities are provided in full, with no discounting. Deferred tax assets are recognised to the extent that it is probable that the underlying deductible temporary differences will be able to be offset against future taxable income. Current and deferred tax assets and liabilities are calculated at tax rates that are expected to apply to their respective period of realisation, provided they are enacted or substantively enacted at the balance sheet date.

Changes in deferred tax assets or liabilities are recognised as a component of tax expense in profit or loss, except where they relate to items that are charged or credited directly to equity in which case the related deferred tax is also charged or credited directly to equity.

# q) Operating leases

Leases where a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Payments made under operating leases are charged to profit and loss on a straight-line basis over the period of the lease.



#### r) Share-based payments

The cost of equity settled transactions is measured at fair value at the grant date as measured by use of the Black Scholes model. If vesting periods or other vesting conditions apply, the expense is allocated over the vesting period, based on the best available estimate of the number of share options expected to vest. Non-market vesting conditions are included in assumptions about the number of options that are expected to become exercisable. Estimates are subsequently revised if there is any indication that the number of share options expected to vest differs from previous estimates. Any cumulative adjustment prior to vesting is recognised in the current period. No adjustment is made to any expense recognised in prior periods if share options ultimately exercised are different to those estimated on vesting.

Charges made to profit or loss, in respect to share-based payments, are credited to the share-based payment reserve.

#### s) Segment reporting

In identifying its operating segments, management follows the Group's service lines, which represent the main products provided by the Group and are based on the information presented to the chief operating decision maker, which is the Board. The Group's current activities, comprising the exploration and production of iodine with complete vertical integration into its specialty chemical halogen derivatives business, are considered to fall into one operating segment.

#### 2. Significant judgements and estimates

Judgements and estimates are regularly evaluated based on historical experience, current circumstances and expectations of future events.

The critical estimates made in the preparation of the financial statements are set out below. The resulting accounting estimate may not equal the related actual result, and management must also make judgements about current circumstances and expectations of future events. Significant judgements made by management include:

- a. Intangible and tangible assets are tested for impairment where there is an indication that they may be impaired. In accordance with IAS 36 Impairment of Assets, an intangible or tangible asset is considered impaired when its carrying amount exceeds its recoverable amount on an individual cash generating unit basis. The recoverable amounts of relevant cash generating units are based on value in use calculations using management's best estimate of future business performance. In carrying out impairment testing, management will make a number of significant estimates in relation to the assumptions incorporated into their calculations. These will include factors such as growth rates and discount rates. Details and carrying values of intangible assets, goodwill and property, plant and equipment are provided in notes 10, 11 and 12.
- b. Management reviews the useful lives of depreciable and amortisable assets at each reporting date. The carrying amounts are analysed in notes 10 and 12. Management's estimate of the useful lives of plant and equipment as detailed in note 1k are common life expectancies for the industry. In particular, the expected useful life attributed to each IOsorb® plant is 20 years. Changes in the



expected level of usage or other technological developments could impact the life and residual value of these assets.

- c. Certain intangible and tangible assets are regarded as Exploration and Evaluation Assets. Details of these assets are shown in notes 10 and 12. Included in those assets are Oklahoma undeveloped lasehold costs which had a carrying value of \$656,315 at 31 December 2018. An impairment review of these assets was carried out and it was determined that the recoverable amount should prudently be regarded as Nil, and therefore an impairment of \$656,315 was considered to be required. Further details of this review are set out in note 12.
- d. The carrying amount of the parent company's investment in its subsidiaries of \$50.9m, net of an existing impairment provision of \$5.3m, has been evaluated for impairment. For this purpose the two operating subsidiaries have been treated as one unit, given the vertical integration of the Group's operating activities. The carrying amount of the parent company's investment of \$50.9m compares to carrying amounts of the subsidiaries' net assets, excluding loans from the parent company, of \$31.8m. An assessment has been made of the present values of the future cash flows related to the operating activities of the the subsidiaries to determine whether any impairment lossses should be recognised. The Group has concluded that it is appropriate to continue to recognise the impairment provision of \$5.3m that was established in 2017.
- e. The derivative liability relating to share conversion rights attaching to the convertible loan notes has been valued using the Black Scholes model.

#### 3. Segment reporting

- a. **Business segments** The Group's operations comprise the exploration and production of iodine with complete vertical integration into its specialty chemical halogen derivatives business, and are therefore considered to fall within one business segment.
- b. Geographical segments The Group reports by geographical segment. The Group's activities are related to exploration for, and development of, iodine in certain areas of the USA and the manufacturing of specialty chemicals in the USA with support provided by the UK office. In presenting information on the basis of geographical segments, segment assets and the cost of acquiring them are based on the geographical location of the assets.



# 3. Segment reporting (continued)

	31 December 2018	31 December 2017
	\$	\$
Assets		
UK	124,847	17,888
USA	36,00,371	36,751,719
Total	\$36,125,218	\$36,769,607
Liabilities		
UK	25,393,479	25,728,670
USA	4,784,025	4,074,994
Total	\$30,177,504	\$29,803,664
Revenue		
North America	13,922,512	13,519,531
Asia	8,954,536	6,815,860
South America	780,480	239,400
Europe	281,183	148,694
Other	19,578	104,678
Total	\$23,958,289	\$20,828,163

**c. Significant customers** - Iofina Chemical had four significant customers in 2018; one customer represented 18 percent of sales, another customer 9 percent and the third and fourth each accounted for 6 percent of sales. In 2017, there were three significant customers representing 20 percent, 17 percent and 8 percent of sales.

# 4. Loss before taxation

# Loss before taxation is stated after charging:

	Year ended	Year ended
	31 December	31 December
	2018	2017
	\$	\$
Depreciation expense	1,331,317	1,821,685
Amortisation expense	245,000	258,322
Impairment expense	2,592,276	5,280,552
Operating lease expense – land and buildings	151,665	149,741
Other: Annual audit fees for audit of parent company and		
consolidated financial statements	75,140	87,522
Fees payable to the company's auditor for other services	_	14,613



# 4. Loss before taxation (continued)

# Impairment expense is made up as follows:

	Year ended	Year ended
	31 December	31 December
	2018	2017
	\$	\$
IO5 Plant - Equipment and Machinery (Note 12)	1,698,069	_
Other obsolete Equipment and Machinery (Note 12)	178,950	_
Oklahoma undeveloped leasehold (Note 10)	656,315	_
IO3 Plant:		
Equipment and Machinery	-	2,037,964
Termination and remediation costs	_	100,000
Royalties overaccrued	58,942	(122,000)
Montana Atlantis Field:		
Remediation costs (Note 12)	320,000	_
Property, plant and equipment (Note 12)	(320,000)	856,967
Intangible assets	_	2,407,620
	\$2,592,276	\$5,280,551

# Cost of sales – analysis by nature

	Year ended 31 December	Year ended 31 December
	2018	2017
	\$	\$
Raw materials	7,734,440	6,207,618
Freight	657,542	546,816
Sales commission	128,296	51,477
Labour, manufacturing overhead and royalties	9,131,109	9,161,652
	\$17,651,387	\$15,967,563

# Administrative expenses – analysis by nature

	Year ended 31 December 2018 \$	Year ended 31 December 2017 \$
Remuneration and benefits	2,355,897	2,223,056
Share-based payments	134,303	_
Office expenses	161,947	134,885
Professional services	601,434	744,524
Travel	144,844	146,836
Rent	73,119	57,637
Other	193,172	153,240
Depreciation	1,331,317	1,821,685
Amortisation	245,000	258,322
	\$5,241,033	\$5,540,185

Research and development expenses recognised during the period were \$243,533 (2017: \$235,380), and are included in administrative expenses above.



#### 5. Staff numbers and costs

The average number of Group employees, including executive directors, and their costs were:

	Year ended 31 December 2018 Number	Year ended 31 December 2017 Number
Production	68	67
Administrative	13	13
Sales	1	1
Total staff	82	81
	Year ended	Year ended
	31 December	31 December
	2018	2017
	\$	\$
Wages and salaries	5,253,390	4,981,033
Social security costs	982,784	877,219
	\$6,236,174	\$5,858,252

Of the total staff costs above, \$4,019,421 (2017: \$3,765,196) is included within cost of sales and \$2,216,753 (2017: \$2,093,056) is included within administrative expenses.

Payments to directors (considered to be key management personnel) for their services during the year were as follows:

	Year ended 31 December 2018	Year ended 31 December 2017
	\$	\$
Wages and salaries	568,901	591,755
Social security costs	65,040	48,441
Total directors' cost	\$633,941	\$640,196

Included within wages and salaries above is \$250,800 (2017: \$278,000) in respect of the highest paid director. No options were exercised by a director in 2018.

# 6. Finance expense

	Year ended 31 December 2018	Year ended 31 December 2017
	\$	\$
Convertible loan notes and term loan:		
Interest payable (deferred and capitalised)	1,273,178	1,106,769
Amortisation of discount on convertible loan notes	1,789,804	1,622,771
Other interest payable	_	21,368
Total finance expense	\$3,062,982	\$2,750,908



# 7. Finance income

	Year ended 31 December 2018 \$	Year ended 31 December 2017 \$
Interest income	974 <b>\$974</b>	3,617 <b>\$3,617</b>
8. Taxation	Year ended 31 December 2018 \$	Year ended 31 December 2017 \$
Tax credit comprises:	•	•
Deferred tax credit	(231,233) <b>\$(231,233)</b>	(51,000) \$(51,000)

Provision for a deferred tax liability is no longer required in view of the tax losses available to the Group to offset such a liability.

	Year ended 31 December 2018 \$	Year ended 31 December 2017 \$
Tax reconciliation:		
Loss on ordinary activities before tax	(1,374,249)	(9,785,826)
Tax at UK income tax rate of 19.00% (2017: 19.25%)	(261,107)	(1,883,771)
Effects of:		
Temporary differences	226,942	1,273,351
Permanent differences	27,246	1,870
Losses not recognised for deferred tax purposes	6,919	608,550
Deferred tax on amortisation of intangibles	(231,233)	(51,000)
Total tax credit	\$(231,233)	\$(51,000)

The Group has accumulated US tax losses of approximately \$32,000,000 (2017: \$33,000,000) that may be deductible from future taxable profits subject to agreement with the relevant tax authorities. To the extent tax losses are not utilised to offset current income taxes they will begin to expire in 2026.

A deferred tax asset has not been recognised in respect of losses due to uncertainty over the timing of the recovery of these tax losses.



# 9. Loss per share

The calculation of loss per ordinary share is based on a loss attributable to shareholders of \$1,143,016 (2017: \$9,734,826) and the weighted average number of ordinary shares outstanding of 127,569,398 (2017: 127,569,398). The diluted weighted average number of ordinary shares outstanding was 194,164,867 (2017: 194,160,498). Due to the loss in the year, there is no difference between the diluted loss per share and the basic loss per share, because the 2,965,000 (2017: 985,000) outstanding share options and the two convertible notes (see note 19) would have the effect of reducing the loss per ordinary share and would therefore not be dilutive under the terms of IAS 33.

# 10. Intangible assets (Group)

	Exploration and I	Evaluation Assets		
	Montana	Oklahoma	Other intangible	
	Atlantis	Undeveloped	assets	Total
	Field	Leasehold	(see below)	
	\$	\$	\$	\$
Cost				
At 31 December 2016	3,358,405	655,670	3,843,671	7,857,746
Additions	-	645	_	645
At 31 December 2017	3,358,405	656,315	3,843,671	7,858,391
At 31 December 2017	3,555, 155	050,515	3,043,071	7,030,331
Impairment	_	(656,315)	_	(656,315)
At 31 December 2018	\$3,358,405	_	\$3,843,671	\$7,202,076
				_
Accumulated amortization				
At 31 December 2016	950,785	_	2,275,707	3,226,492
Charge for the year	_	_	258,322	258,322
Impairment	2,407,620	_	-	2,407,620
At 31 December 2017	3,358,405	_	2,534,029	5,892,434
Charge for the year		_	245,000	245,000
At 31 December 2018	\$3,358,405		\$2,779,029	\$6,137,434
Carrying amounts	2 407 620			
At 31 December 2016	2,407,620	655,670	1,567,964	4,631,254
At 31 December 2017	_	656,315	1,309,642	1,965,957
At 31 December 2018		_	\$1,064,642	\$1,064,642

Oklahoma undeveloped leasehold costs relate to the costs of acquiring brine leases in respect of the surface and mineral rights of landowners in areas of interest outside of those currently connected to the Group's operating plants. An impairment review carried out as of 31 December 2018 ascertained that there had been no further development work on these leased areas in the last twelve months, the leases themselves either had expired during that period or would imminently expire, and there is no expectation of further development of the areas concerned in the foreseeable future. The recoverable amount of these assets was therefore regarded as Nil, and an impairment of \$656,315 has been recognised.

Details of other intangible assets are set out below.



# 10. Intangible assets (Group - continued)

# Other intangible assets

	WET® patent	Customer relationships	Patent portfolio	EPA registrations	Total
	\$	\$	\$	\$	\$
Cost At 31 December 2016, 31 December 2017 and					
31 December 2018	\$2,700,000	\$660,671	\$212,000	\$271,000	\$3,843,671
Accumulated amortization					
At 31 December 2016	1,337,404	493,625	173,678	271,000	2,275,707
Charge for the year	180,000	65,000	13,322	-	258,322
At 31 December 2017	1,517,404	558,625	187,000	271,000	2,534,029
Charge for the year	180,000	65,000	-	-	245,000
At 31 December 2018	\$1,697,404	\$623,625	\$187,000	\$271,000	\$2,779,029
Carrying amounts					
At 31 December 2016	1,362,596	167,046	38,322	_	1,567,964
At 31 December 2017	1,182,596	102,046	25,000	_	1,309,642
At 31 December 2018	\$1,002,596	\$37,046	\$25,000	_	\$1,064,642

Other intangible assets were acquired in the acquisition of H&S Chemical in 2009.

#### WET® Patent

The WET® Patent technology employs two different iodine extraction methods depending on brine chemistry for optimal efficiency. We utilised a with and without analysis, a variation of the discounted cash-flow method, to estimate the fair value of a WET® Patent at date of acquisition. The methodology compared the cash flow generating capacity of Iofina Chemical assuming it was operating without the benefit of the WET® Patent to the projected cash flow with the benefit of the patent. The contractual life of the patent is in excess of 20 years; however, the useful life of the patent was estimated at 15 years based on the following:

- Management's expectation for the expected viability of the technology
- Management's expectations regarding the timing of significant substitute technology
- The lack of comparable substitute technologies as of the valuation date
- The remaining amortization period is 5.5 years

#### **Customer relationships**

The amount capitalised relates to the acquisition of Iofina Chemical and the then existing customer base. The initial useful life was 10 years and the remaining amortization period is approximately 0.5 years.

# Patent portfolio

This includes all patents held by Iofina Chemical related to the production of its iodine derivatives, specifically IPBC. The fair value of the general patent portfolio was estimated using the relief from royalty cash-flow methodology of the income approach. Based on our search for technology licensing



# 10. Intangible assets (Group – continued)

agreements in the marketplace, we determined that a royalty rate of 1.5 percent was appropriate. An 8 year life was applied to the patent portfolio based on the historical life of the portfolio as well as the intended future use of the asset.

# 11. Goodwill (Group)

# **Carrying amounts**

At 31 December 2016, 31 December 2017 and 31 December 2018

\$3,087,251

Goodwill arose on the acquisition of H&S Chemical in 2009 and is wholly allocated to the Iofina Chemical cash generating unit of the Group. Goodwill impairment testing is conducted annually, based on projected cash flow to be generated.

The Chemical business has been in operation for 34 years, and much of its products and customer base are long established. For impairment testing, a growth factor of 2.25% per annum was applied to budgeted cash flows and a discount rate of 10% per annum was used. On this basis the net present value of cash flow exceeded the goodwill amount of \$3,087,251.

# Sensitivity analysis

A five year projection based on the above assumptions shows headroom of \$6,071,769 between the value in use of \$9,159,020 and the carrying value of \$3,087,251. In order for the value in use to equal the carrying value it would be necessary for the discount rate to rise to 57.65% or the annual growth factor to be 51.5% negative. Based on the results of this impairment testing management are satisfied that a reasonably possible change in assumption would not lead to an impairment.



# 12. Property, plant and equipment (Group)

**Exploration** 

	and Evaluation Assets					
	Montana Atlantis Field	Freehold Land	Buildings	Equipment and Machinery	Construction in Progress	Total
	\$	\$	\$	\$	\$	\$
Cost						
At 31 December 2016	5,841,415	209,000	1,556,557	25,875,552	684,387	34,166,911
Impairment	_	_	_	(2,507,218)	_	(2,507,218)
Transfers	_	_	4,844	(1,301,392)	970,855	(325,693)
Additions	_	_	37,600	285,916	1,758,014	2,081,530
Disposals		_	_	_	(26,106)	(26,106)
At 31 December 2017	5,841,415	209,000	1,599,001	22,352,858	3,387,150	33,389,424
Impairment	_	_	_	_	(60,370)	(60,370)
Transfers	_	_	9,853	3,666,564	(3,676,417)	_
Additions		_	57,055	122,391	728,610	908,056
At 31 December 2018	\$5,841,415	\$209,000	\$1,665,909	\$26,141,813	\$378,973	\$34,237,110
Accumulated depreciation		\$209,000	\$1,665,909	\$26,141,813	\$378,973	\$34,237,110
Accumulated	<b>\$5,841,415</b> 4,519,108	\$209,000 _	<b>\$1,665,909</b> 277,115	<b>\$26,141,813</b> 7,377,958	\$378,973 _	\$34,237,110 12,174,181
Accumulated depreciation		\$209,000			\$378,973 - -	
Accumulated depreciation At 31 December 2016	4,519,108	\$209,000 - - -		7,377,958	\$378,973 - - -	12,174,181
Accumulated depreciation At 31 December 2016	4,519,108	\$209,000 - - - -		7,377,958 (469,254)	\$378,973 - - - -	12,174,181 387,713
Accumulated depreciation At 31 December 2016 Impairment Transfers	4,519,108 856,967 –	\$209,000 - - - -	277,115 - -	7,377,958 (469,254) (325,693)	\$378,973 - - - -	12,174,181 387,713 (325,693)
Accumulated depreciation At 31 December 2016  Impairment Transfers Charges for the year	4,519,108 856,967 – 465,340	\$209,000 - - - -	277,115 - - 50,395	7,377,958 (469,254) (325,693) 1,305,950	\$378,973 - - - -	12,174,181 387,713 (325,693) 1,821,685
Accumulated depreciation At 31 December 2016  Impairment Transfers Charges for the year	4,519,108 856,967 – 465,340	\$209,000 - - - - -	277,115 - - 50,395	7,377,958 (469,254) (325,693) 1,305,950	\$378,973 - - - -	12,174,181 387,713 (325,693) 1,821,685
Accumulated depreciation At 31 December 2016 Impairment Transfers Charges for the year At 31 December 2017	4,519,108 856,967 - 465,340 5,841,415	\$209,000 - - - - -	277,115 - - 50,395	7,377,958 (469,254) (325,693) 1,305,950 7,888,961	\$378,973 - - - - -	12,174,181 387,713 (325,693) 1,821,685 14,057,886
Accumulated depreciation At 31 December 2016 Impairment Transfers Charges for the year At 31 December 2017 Impairment	4,519,108 856,967 - 465,340 5,841,415	- - - -	277,115 - - 50,395 327,510	7,377,958 (469,254) (325,693) 1,305,950 7,888,961 1,816,649	- - - -	12,174,181 387,713 (325,693) 1,821,685 14,057,886 1,496,649
Accumulated depreciation At 31 December 2016  Impairment Transfers Charges for the year At 31 December 2017  Impairment Charges for the year	4,519,108 856,967 – 465,340 5,841,415 (320,000) –	- - - -	277,115 - - 50,395 327,510 - 52,574	7,377,958 (469,254) (325,693) 1,305,950 7,888,961 1,816,649 1,278,743	- - - -	12,174,181 387,713 (325,693) 1,821,685 14,057,886 1,496,649 1,331,317
Accumulated depreciation At 31 December 2016  Impairment Transfers Charges for the year At 31 December 2017  Impairment Charges for the year	4,519,108 856,967 – 465,340 5,841,415 (320,000) –	- - - -	277,115 - - 50,395 327,510 - 52,574	7,377,958 (469,254) (325,693) 1,305,950 7,888,961 1,816,649 1,278,743	- - - -	12,174,181 387,713 (325,693) 1,821,685 14,057,886 1,496,649 1,331,317
Accumulated depreciation At 31 December 2016  Impairment Transfers Charges for the year At 31 December 2017  Impairment Charges for the year At 31 December 2018	4,519,108 856,967 – 465,340 5,841,415 (320,000) –	- - - -	277,115 - - 50,395 327,510 - 52,574	7,377,958 (469,254) (325,693) 1,305,950 7,888,961 1,816,649 1,278,743	- - - -	12,174,181 387,713 (325,693) 1,821,685 14,057,886 1,496,649 1,331,317
Accumulated depreciation At 31 December 2016  Impairment Transfers Charges for the year At 31 December 2017  Impairment Charges for the year At 31 December 2018  Carrying amounts	4,519,108 856,967 — 465,340 5,841,415 (320,000) — \$5,521,415	- - - - -	277,115 - - 50,395 327,510 - 52,574 \$380,084	7,377,958 (469,254) (325,693) 1,305,950 7,888,961 1,816,649 1,278,743 \$10,984,353	- - - - -	12,174,181 387,713 (325,693) 1,821,685 14,057,886 1,496,649 1,331,317 \$16,885,852

Included in Equipment and Machinery above was a carrying value as at 31 December 2018 of \$2,716,555 in respect of IO5 plant. Operations at this plant ceased at the beginning of 2018 due to reduced injection volumes at the related Salt Water Disposal well. Over the course of the year it became apparent that these reductions would continue for the foreseeable future, and therefore an impairment of \$1,698,069 has been recognised in respect of the carrying value of costs that are not expected to be recoverable. The \$1,018,486 remainder of the total carrying value has been identified as relating to items that can be repurposed to a new losorb plant. An additional impairment of \$178,950 has been recognised in respect of obsolete Equipment and Machinery and Construction in Progress items.



# 12. Property, plant and equipment (Group – continued)

During 2018 the Group concluded that there is no realistic prospect of disposing of the Montana Atlantis Field to a potential purchaser in the foreseeable future. Therefore an abandonment plan has been drawn up and a provision of \$320,000 has been made in respect of remediation costs, including the plugging of wells, and is included in Accrued expenses and deferred income (Note 17). A reevaluation of the sale value of remaining property and equipment has been made, and some buying interest has been identified that was not apparent at the time these assets were impaired in the prior year, and is estimated to be sufficient to cover the remediation costs. Accordingly impairment provisions have been reversed by \$320,000.

#### 13. Inventories

Group	31 December 2018 \$	31 December 2017 \$
Raw materials	2,955,907	2,164,660
Work in progress	1,943,549	1,548,229
Finished goods	774,712	600,610
	\$5,674,168	\$4,313,499

At year end, there were no provisions against the carrying value of inventories (2017: nil). During the year, the cost of inventories recognised as expense and included in 'cost of sales' amounted to \$16,865,549 (2017: \$15,369,270).

#### 14. Financial instruments

The Board of directors determines, as required, the degree to which it is appropriate to use financial instruments to mitigate risks. The main risks for which such instruments may be appropriate are interest rate risk, foreign currency risk, credit risk, liquidity risk and commodity risk. The Group's principal financial asset is cash, which is invested with major banks. The Group has a term loan, two convertible bonds and no other borrowings. Future principal maturities as of 31 December 2018 for the long-term debt obligations were as follows:

	\$
2019	25,635,474
	\$25,635,474

The maturity date for the long-term debt obligations was revised from 1 June 2019 to 1 July 2020 as part of the restructuring of debt subequent to year end (see Notes 19 and 20).



# 14. Financial Instruments (continued)

# Financial assets and liabilities Group

Group		Financial	Derivative	
2018	Loans and receivables \$	liabilities at amortised cost	liability at fair value \$	Total \$
Cash and cash equivalents	4,519,895	Ψ	·	4,519,895
Trade receivables	4,056,947			4,056,947
	.,000,01			\$8,576,842
				ψο,σ, σ,σ :Σ
Trade payables		1,667,787		1,667,787
Accrued liabilities		3,303,056		3,303,056
Term loan		3,263,529		3,263,529
Convertible loan notes		21,550,297		21,550,297
Derivative liability			392,835	392,835
				\$30,177,504
2017				
Cash and cash equivalents	3,449,681			3,449,681
Trade receivables	4,273,120			4,273,120
				\$7,722,801
Trade payables		985,231		985,231
Accrued liabilities		3,229,353		3,229,353
Term loan		3,074,846		3,074,846
Convertible loan notes		18,675,998		18,675,998
Derivative liability			3,607,001	3,607,001
				\$29,572,429
Company				
company .		Financial	Derivative	
	Loans and	liabilities at	liability at fair	
2040	receivables	amortised cost	value \$	Total
2018	\$	\$	<b>.</b>	\$
Cash and cash equivalents  Due from subsidiaries	113,065			113,065
Due from subsidiaries	33,685,810			33,685,810
				\$33,798,875
Accruals		186,818		186,818
Term loan		3,263,529		3,263,529
Convertible loan notes		21,550,297		21,550,297
Derivative liability			392,835	392,835
·				\$25,393,479
2017				
Cash and cash equivalents	14,789			14,789
Due from subsidiaries	34,455,812			34,455,812
				\$34,470,601
Accruals		139,592		139,592
Term loan		3,074,846		3,074,846
Convertible loan notes		18,675,998		18,675,998
Derivative liability		10,073,330	3,607,001	3,607,001
			3,007,001	\$25,497,437
				723,737,737



# 14. Financial Instruments (continued)

The derivative liability at fair value is valued on the basis of Level 2 inputs as defined in IFRS 13.

#### Interest rate risk

Surplus funds are held within the Group's checking and savings accounts. The benefit of fixing rates for longer term is kept under review, having regard to forecast cash requirements and the levels of return available. Given the short term nature of Iofina's surplus funds, the Group has limited interest rate risk. As of 31 December 2018, all surplus funds were invested in checking and savings accounts that had no terms and were 100% liquid.

In accordance with the restructured debt agreements executed on 29 March 2019 the interest rates on the Loan Notes of \$22,371,945 and the Term Loan of \$3,263,529 (see Notes 19 and 20) are fixed over the period of the loans at 7.5% rising to 12% for the Term Loan with effect from 1 July 2019.

# Foreign currency risk

The Group has potential transactional currency exposure in respect of items denominated in foreign currencies relating to the Group's administration in the UK. The balance of cash held in foreign currency was \$113,065 as of year-end.

Sales transactions are denominated in US Dollars, which is the operating currency. Other impacts of foreign currency risk are not deemed material to these financial statements.

#### **Credit risk**

The maximum exposure is reflected by the carrying amount of financial assets. Because the counterparties to the majority of Iofina's financial instruments are prime financial institutions, Iofina does not expect any counterparty to fail to meet its obligations. Additionally, the Group is exposed to marginal credit risk in the form of receivables for product sales. Credit risk in this regard is mitigated through long-term customer payment history, extensive credit analysis of large purchasers, use of letters of credit, and the requirement for partial or total payment prior to shipment for some customers.

#### **Liquidity risk**

The Group raises funds as required on the basis of forecast expenditure and cash inflows over the next 12 months. When necessary, the scope and rate of activity are adjusted to take account of the funds available.

# **Commodity risk**

The Group is exposed to movements in the price of raw iodine. Sales of iodine based products were \$14,794,238 (2017: \$12,814,677). Iodine is produced internally and is the most significant cost component for iodine based products.



# 15. Trade and other receivables

# Group

	31 December 2018	31 December 2017
	\$	\$
Trade receivables	4,056,947	4,273,120
Prepayments and other receivables	371,057	348,561
	\$4,428,004	\$4,621,681
Company		
	31 December	31 December
	2018	2017
	\$	\$
Prepayments and other receivables	11,782	3,099
	\$11,782	\$3,099

All receivables and prepayments are short term in nature. The carrying values are considered a reasonable approximation of fair value. There is no bad debt provision, and therefore no movement on the bad debt provision for the year.

The Group or Company has not received a pledge of any assets as collateral for any receivable or asset.

# 16. Cash and cash equivalents

# Group

Cash in US Dollar accounts Cash in GB Pound Sterling accounts	31 December 2018 \$ 4,406,830 113,065 \$4,519,895	31 December 2017 \$ 3,434,892 14,789 \$3,449,681
Company	31 December	31 December
Cash in GB Pound Sterling accounts	2018 \$ 113,065 \$113,065	2017 \$ 14,789 \$14,789



# 17. Trade and other payables

# Group

Group	24 Danielle	24 D
	31 December	31 December
	2018	2017
	\$	\$
Trade payables	1,667,787	985,231
Accrued expenses and deferred income	3,303,056	3,229,355
	\$4,970,843	\$4,214,586
Company		
	31 December	31 December
	2018	2017
	\$	\$
Accrued interest and expenses	186,818	139,593
	\$186,818	\$139,593

All trade and other payables are considered short term. The carrying values are considered to be a reasonable approximation of fair value.

Except as regards the term loan and convertible loan notes, the Group and Company have not pledged any assets as collateral for any liabilities or contingent liabilities.

# 18. Deferred tax liability

	\$
At 31 December 2016	282,233
Credit to income for the year	(51,000)_
At 31 December 2017	231,233
Credit to income for the year	(231,233)
At 31 December 2018	

The deferred tax liability arises on recognition of intangible assets at fair value on acquisition of H&S Chemical in 2009. Provision for a deferred tax liability is no longer required in view of the tax losses available to the Group to offset such a liability.



# 19. Term loan, convertible loan notes and derivative liability

	5% Secured Convertible	6% Secured	
	Loan Notes	Term Loan	Total
	\$	\$	\$
A1 24 Day and a 2046	·	ş	•
At 31 December 2016	16,021,304	_	16,021,304
6% Secured Term Loan drawn	_	3,000,000	3,000,000
Amortisation of discount	1,622,771	_	1,622,771
Interest capitalised	1,031,923	74,846	1,106,769
At 31 December 2017	18,675,998	3,074,846	21,750,844
Amortisation of discount	1,789,804	_	1,789,804
Interest capitalised	1,084,495	188,683	1,273,178
At 31 December 2018	\$21,550,297	\$3,263,529	\$24,813,826
Amounts repayable:			
5% Secured Convertible Notes	20,000,000	_	20,000,000
Interest capitalised	255,527	_	255,527
At 31 December 2016	20,255,527	_	20,255,527
6% Secured Term Loan drawn	_	3,000,000	3,000,000
Interest capitalised	1,031,923	74,846	1,106,769
At 31 December 2017	21,287,450	3,074,846	24,362,296
Interest capitalised	1,084,495	188,683	1,273,178
At 31 December 2018	\$22,371,945	\$3,263,529	\$25,635,474
Derivative liability			
	2018		2017
	\$		\$
At 1 January	3,607,001		2,528,602
Revaluation (credit)/charge	(3,214,166)	_	1,078,399
At 31 December	\$392,835	_	\$3,607,001

The convertible loan notes balance of \$21,550,297 above is stated on the basis of amortised cost and includes capitalised interest. The amount of \$22,371,945 shown as repayable in respect of the Convertible Loan Notes represents the principal amount of \$20,000,000 plus accrued capitalised interest of \$2,371,945, and reflects the sum actually repayable to the lenders as of 31 December 2018. This debt together with the Term Loan of \$3,263,529 has been refinanced with the lenders under agreements executed on 29 March 2019.

# i) The following terms are those applicable to the Converible Loan Notes as at 31 December 2018:

The convertible loan notes include share conversion rights where the calculation of the number of conversion shares depends on the USD to GBP exchange rate. The share conversion rights have consequently been valued separately at fair value as an embedded derivative liability in accordance with IFRS 9, "Financial Instruments".



# 19. Term loan, convertible loan notes and derivative liability (continued)

Any or all of the initial amount of \$20 million due under the convertible loan notes may be converted upon 28 days notice into Ordinary Shares of the Company on the basis of converting one third of the total amount at 18p per share, one third at 25p per share, and one third at 32p per share. These conversion rights have been valued using the Black Scholes model and the following inputs:

	Share	USD/GBP	Number of	Risk free	
Valuation date	price	rate	Shares	rate	Volatility
29 September 2016	13.75p	1.30	65,084,563	0.80%	86%
31 December 2016	10.13p	1.23	68,550,399	0.80%	85%
31 December 2017	15.38P	1.35	62,661,802	1.89%	84%
31 December 2018	11.25p	1.27	66,378,423	2.63%	83%

The \$20,000,000 6 per cent convertible loan notes outstanding at 31 December 2015, of \$15,000,000 and \$5,000,000 respectively, were refinanced as of 29 September 2016 by the issue by the Company of new 5 per cent convertible secured loan notes in the same amounts to the same note holders. The principal terms and conditions attaching to the new notes are:

- a) The notes may be repaid at any time without penalty by the Company, and are redeemable at par together with capitalised interest on 1 June 2019;
- b) Interest is payable quarterly in arrears at 5 per cent per annum, or at the Company's discretion may be rolled up and capitalised;
- c) The notes may be converted into Ordinary Shares of the Company upon 28 days notice by the note holders, in three equal tranches at 18p, 25p and 32p per share. Capitalised interest may also be converted at 32p per share;
- d) The Company may require conversion of any or all of the notes into Ordinary Shares following the publicly quoted closing price per Ordinary Share being 50p or more for at least five consecutive trading days;
- e) The notes are secured against the assets of the Group, by a share pledge and a debenture granted by the Company, and by further pledges, a security agreement and guarantees granted by certain subsidiaries of the Group.
- ii) The following terms apply with effect from the execution of revised agreements on 29 March 2019:
- a) The Loan Notes are to be treated as a term loan with no rights of conversion into shares of the Company;
- b) The repayment date is extended to 1 July 2020, and repayment may be made at any time without penalty subject to prior repayment of the entirety of the Term loan facility set out in Note 20 below;
- c) Interest is payable quarterly in arrears at 7.5 per cent per annum with effect from 1 January 2019;
- d) An arrangement fee of 1% of the initial amount of the loan is payable on 1 July 2020;



# 19. Term loan, convertible loan notes and derivative liability (continued)

e) The notes are secured against the assets of the Group, by a share pledge and a debenture granted by the Company, and by further pledges, a security agreement and guarantees granted by certain subsidiaries of the Group.

# 20. Term loan facility

On 29 September 2016 the Company entered into an agreement for a term loan facility of up to \$10,000,000 with the holder of the \$15,000,000 convertible loan note. At 31 December 2018 the Company had drawn \$3,000,000 under the facility, and had opted to defer and capitalise all interest due up to that date, amounting to \$263,529 (see Note 19). As explained in Note 19 the total amount of \$3,263,529 outstanding at 31 December 2018 has been refinanced with the lender under agreements executed on 29 March 2019.

- i) The following terms are those applicable to the Term loan facility as at 31 December 2018:
- a) The facility is to be utilised for capital expenditure and working capital purposes in connection with the Company's existing business activities;
- b) The Company may draw down up to \$3,000,000 of the facility on request. Drawdowns in excess of \$3,000,000 are dependent upon satisfactory completion of a due diligence exercise by the lender;
- c) Amounts outstanding under the facility may be repaid at any time without penalty by the Company, and are repayable in full together with capitalised interest on 1 June 2019;
- d) Interest is payable quarterly in arrears at 6 per cent per annum, or at the Company's discretion may be rolled up and capitalised;
- e) Amounts outstanding under the facility are secured against the assets of the Group, by a share pledge and a debenture granted by the Company, and by further pledges, a security agreement and guarantees granted by certain subsidiaries of the Group.
- f) While amounts are outstanding under the facility the Company is not to make payments to shareholders or other debt providers, including amounts outstanding under the convertible loan notes, without the lender's consent.
- ii) The following terms apply with effect from the execution of revised agreements on 29 March 2019:
- a) Amounts outstanding under the facility may be repaid at any time without penalty by the Company, and are repayable in full together with capitalised interest on 1 July 2020;
- b) Interest is payable quarterly in arrears with effect from 1 January 2019 at 7.5% per annum, rising to 12 per cent per annum with effect from 1 July 2019;
- c) An arrangement fee of 1% of the initial amount of the loan is payable on 1 July 2020;
- d) Amounts outstanding under the facility are secured against the assets of the Group, by a share pledge and a debenture granted by the Company, and by further pledges, a security agreement and guarantees granted by certain subsidiaries of the Group.



# 20. Term loan facility (continued)

e) While amounts are outstanding under the facility the Company is not to make payments to shareholders or other debt providers, including amounts outstanding under the convertible loan notes, without the lender's consent.

# 21. Share capital

·		31 December 2018	31 December 2017
Authorised:			
Ordinary shares of £0.01 each	- number of shares	1,000,000,000	1,000,000,000
	- nominal value	£10,000,000	£10,000,000
Allotted, called up and fully paid:			
Ordinary shares of £0.01 each	- number of shares	127,569,398	127,569,398
	- nominal value	£1,275,694	£1,275,694
		31 December	31 December
		2018	2017
to a delega a seguent		\$	\$
Issued share capital		\$2,292,683	\$2,292,683
Share premium		\$48,991,647	\$48,991,647

The total number of voting rights in the Company's ordinary shares at 31 December 2018 was 127,569,398 (2017: 127,569,398).

Number of ordinary shares 127,569,398

# At 31 December 2016, 2017 and 2018

# 22. Share based payments

On 13 June 2018 options over 1,980,000 ordinary shares of the Company, representing 1.55% of the Company's issued share capital at that date, were granted to directors and key management personnel. The options are exercisable at the closing share price on 12 June 2018 of 16.2p per share, with 50% vesting after one year on 13 June 2019 and 50% vesting after two years on 13 June 2020. The options expire ten years from the date of grant.

The above options were valued using the Black Scholes model and the exercise price of 16.2p, an expected term of 5.75 years, historical volatility of 93.53% and a risk free rate of 2.90%. The resulting valuation of \$325,327 is being amortised over the vesting periods, and \$134,303 has been charged as an expense in respect of the period from 13 June to 31 December 2018.



# 22. Share based payments (continued)

Details of options outstanding and exercisable at 31 December 2018 are as follows:

Date of Grant	Number of Options	Vesting Date	Share Price £	Exercise Price £	Exercise Price 2018 \$	Exercise Price 2017 \$
2 July 2011	985,000	2 July 2012	0.30	0.30	0.38	0.40
13 June 2018	990,000	13 June 2019	0.162	0.162	0.21	_
13 June 2018	990,000	13 June 2020	0.162	0.162	0.21	_
Weighted average	2,965,000		£0.21	£0.21	\$0.26	\$0.40

Exercise prices shown in USD are based on the US Dollar/Pounds Sterling exchange rate at 31 December 2018 of 1.274 (2017 1.349). Options outstanding at 31 December 2018 expire the earlier of ten years from grant date or 90 days after the termination of service to the Company.

Options outstanding and exercisable	2018	2017
At 1 January	985,000	1,025,000
Granted during the year	1,980,000	_
Lapsed/forfeited	<del>-</del>	(40,000)
At 31 December	2,965,000	985,000

# 23. Related party transactions

In September 2016 Iofina plc executed a convertible note in the amount of \$15,000,000 with Stena Investment S.à.r.l., who held in excess of 5% of the outstanding common shares. This transaction was deemed a related party transactions pursuant to AIM Rule 13. See note 19 for a description of the transaction.

There are intercompany transactions among the members of the Group. In both 2017 and 2018 all iodine produced by Iofina Resources was sold to Iofina Chemical. Related party balances are as follows:

		31 December 2018 \$		ember 17
	Due to	Due from	Due to	Due from
Iofina plc	39,025,812	40,000	39,775,812	20,000
Iofina Resources	_	42,788,451	_	42,773,891
Iofina Chemical	3,802,639	_	3,018,079	_

Additional related party transactions with directors, who are considered to be key management personnel, are set out in note 5. Option grants as described in note 22 are to employees and Directors.

The Company has entered into a number of unsecured related party transactions with its subsidiary undertakings. The most significant transactions carried out between the Company and its subsidiary undertakings are financing.



#### 24. Leases

Leases relate to office space and agreements for the drilling and use of fresh water wells at certain plants.

	31 December	31 December
Future minimum lease payments	2018 \$	2017 \$
Due in one year	145,731	143,798
Due in more than one and less than five years	477,435	177,356
Total	\$623,166	\$321,154

# 25. Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern, to provide returns for shareholders and to maintain an optimal capital structure to reduce the cost of capital. The Group defines capital as being share capital plus reserves as shown in the balance sheet. The Directors continue to monitor the level of capital as compared to the Group's commitments and adjust the level of capital as is determined to be necessary by issuing new shares. Iofina plc is not subject to any externally imposed capital requirements. The Directors consider the capital of the Group to be the total equity attributable to the equity holders of the parent of \$5.95 million as at 31 December 2018 (2017: \$6.97 million).

# 26. Subsidiary undertakings

# **Investment in subsidiaries**

		Investment in subsidiaries \$
Cost		
Balance at 31 December 2016, 2017 and 2018		\$17,199,362
Due from subsidiaries		
	2018	2017
	\$	\$
Cost		
At 1 January	39,755,812	37,315,810
Changes for the year	(770,000)	2,440,002
At 31 December	38,985,812	39,755,812
Impairment		
Impairment of amount due from Iofina Resources, Inc.	(5,300,000)	(5,300,000)
Carrying amount		
At 31 December	\$33,685,812	\$34,455,812
AC DE December	755,005,012	737,733,012

An impairment of \$5,300,000 was recognised in 2017 in respect of amounts due from Iofina Resources, Inc. (Note 2d).



# 26. Subsidiary undertakings (continued)

# **Subsidiary undertakings**

Company	Country of incorporation and operation	Principal activity	Interest in ordinary shares and voting rights
Iofina, Inc.	United States/CO	Holding company	100%
Iofina Resources, Inc.	United States/CO	Iodine production	100%
Iofina Chemical, Inc.	United States/DE	Specialty chemical	100%
Iofina Resources, LLC	United States/CO	Dormant	100%
Iofina Resources, LLC	United States/TX	Dormant	100%
Iofina Resources, LLC	United States/OK	Dormant	100%
Atlantis Water Solutions, LLC	United States/MT	Dormant	100%

lofina, Inc. was established in February 2006 and is a wholly owned subsidiary of lofina plc. lofina, Inc. owns the whole of the issued share capital of lofina Resources, Inc. and lofina Chemical, Inc. Other entities are subsidiaries of lofina Resources, Inc., the iodine production company.

The registered offices of the above companies are as follows:

Company	Registered office
Iofina, Inc.	8480 East Orchard Road, Greenwood Village CO 80111, USA
Iofina Resources, Inc.	8480 East Orchard Road, Greenwood Village CO 80111, USA
Iofina Chemical, Inc.	306 W. Main Street, Frankfort, KY 40601, USA
Iofina Resources, LLC (CO)	8480 East Orchard Road, Greenwood Village CO 80111, USA
Iofina Resources, LLC (TX)	815 Brazos Street, Austin TX 78701, USA
Iofina Resources, LLC (OK)	26610 CR 500, Alva OK 73717, USA
Atlantis Water Solutions, LLC	16192 Coastal Highway, Lewes DE 19958, USA

# 27. Capital commitments

At 31 December 2018 the Group had no capital commitments.

#### 28. Post balance sheet events

As of 29 March 2019 the Group completed arrangements to refinance the 31 December 2018 amounts due in respect of the Convertible Loan Notes of \$22,371,945 and the Term Loan of \$3,263,529. Details of these arrangements are set out in Notes 19 and 20.

# 29. Contingent liabilities

All previous disclosed liabilities have been settled and are not material events for the Group.

# 30. Ultimate controlling party

There is no ultimate controlling party of the Group.



#### Iofina and the environment

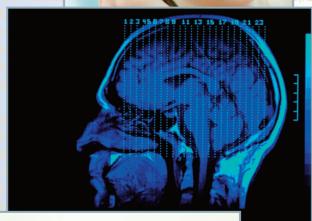
lofina promotes, wherever possible, environmental sustainability in its working practices and seeks to minimise, mitigate, or remedy any harmful effects from the Group's operations on the environment at each of its operational sites. To continue that effort through all aspects of business, this report has been produced to minimise its effect on the environment by using thinner paper, fewer pages, smaller type set, and non-colour printing as much as possible. As part of this effort lofina is trying to move attention to its online annual reports available at **www.iofina.com**. By being a better steward of the environment, lofina saves valuable shareholder funds instead of producing glossy magazine pages throughout the whole document.

This page does not form part of the statutory financial statements.











lodine is essential for life and industry.

lodine compounds improve imaging contrast in the body when used with CT scans, MRI's and X-rays helping doctors diagnose patients more effectively.

lodine compounds are added to paints and protective coatings because they are effective in preventing the growth of molds and other pathogens.

lodine compounds are added to cosmetics products for the prevention of growth and transfer of harmful bacteria.

lodine formulations protect dairy cows and humans from infections that can be transferred through milk.

lodine compounds are used to manufacture high-tech LCD displays allowing for superior image quality.

lodine derivatives are used to produce many ressential pharmaceuticals which provide doctors with powerful new drugs to fight diseases. HaNaCla CaHaFN CHala CHaFN

lodine compounds are used as catalysts in a variety of industrial transformations. One example of this is the use of iodine species in the production of acetic acid which is diluted and used as household vinegar or can be transformed into other compounds such as polyvinyl acetate which has many adhesive applications.

lodine is supplemented to table salt thereby insuring adequate daily intake of this vital micro nutrient.

Insufficient iodine causes lodine Deficiency Disorder (IDD). IDD has been medically proven to cause cretinism, goiter (enlargement of the thyroid gland) and depressed intellectual function in children and adults which affects more than 600 million people worldwide.

lodine is an essential element touching our lives everyday. | NaIO<sub>3</sub> Ca(IO<sub>3</sub>)<sub>2</sub> C-H-CINO<sub>3</sub> SNast



