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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

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**FORM SD**

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**Specialized Disclosure Report**

**Commission File Number 000-12790**

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**ORBOTECH LTD.**

**(Exact name of Registrant as specified in its charter  
and translation of Registrant's name into English)**

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**ISRAEL**

**(Jurisdiction of incorporation or organization)**

**7 SANHEDRIN BOULEVARD, NORTH INDUSTRIAL ZONE, YAVNE 8110101, ISRAEL**  
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**(Name, Telephone, E-mail and/or Facsimile number and address of Company Contact Person)**

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Check the appropriate box to indicate the rule pursuant to which this form is being filed, and provide the period to which the information in this form applies:

Rule 13p-1 under the Securities Exchange Act (17 CFR 240.13p-1) for the reporting period from January 1, 2017 to December 31, 2017

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**Section 1 – Conflict Minerals Disclosure**

Items 1.01 and 1.02 Conflict Minerals Disclosure and Report, Exhibit

A copy of the Registrant's Conflict Minerals Report for the reporting period January 1, 2017 to December 31, 2017 is provided as Exhibit 1.01 hereto and is publicly available and may be accessed through the 'Investors' section of the Registrant's corporate website at: [www.orbotech.com](http://www.orbotech.com).

**Section 2 – Exhibits**

Item 2.01 Exhibits

Exhibit 1.01 – Conflict Minerals Report as required by Items 1.01 and 1.02 of this Form.

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the duly authorized undersigned.

ORBOTECH LTD.

By: /s/ Alon Rozner  
Alon Rozner  
Corporate Vice President and  
Chief Financial Officer

Dated: May 29, 2018

**Orbotech Ltd.**  
**Conflict Minerals Report**  
**For The Year Ended December 31, 2017**

**Company and Products Overview**

Orbotech Ltd. (the “**Registrant**”, the “**Company**” or “**Orbotech**”) is a global innovator and supplier of enabling solutions used to manufacture the world’s most sophisticated consumer and industrial electronic products and is part of a select group of companies whose technology is literally driving the future of electronics. The Company’s core business lies in enabling electronic device manufacturers to inspect, test and measure printed circuit boards (“**PCB**”)s and flat panel displays (“**FPD**”)s to verify their quality (‘reading’); pattern the desired electronic circuitry on the relevant substrate and perform three-dimensional shaping of metalized circuits on multiple surfaces (‘writing’); and utilize advanced vacuum deposition and etching processes in semiconductor device (“**SD**”) and semiconductor manufacturing and to perform laser drilling of electronic substrates (‘connecting’). Orbotech refers to this ‘reading’, ‘writing’ and ‘connecting’ as enabling the ‘Language of Electronics’.

The products designed, developed, manufactured, marketed and serviced by the Company include: direct imaging, automated optical inspection (“**AOI**”), automated optical shaping, via formation laser drilling tools, additive printing solutions (previously known as inkjet printing) and other production systems used in the manufacture of PCBs; AOI, test, repair and process monitoring systems used in the manufacture of FPDs; and etch, physical vapor deposition, chemical vapor deposition and molecular vapor deposition equipment for use in the manufacture of SDs, such as micro-electro-mechanical systems, advanced semiconductor packaging, power and radio frequency devices and high brightness light emitting diode devices.

The Company also markets computer-aided manufacturing (“**CAM**”) and engineering solutions for PCB production, which are designed and developed by the Frontline P.C.B. Solutions Limited Partnership (“**Frontline**”). In addition, through its subsidiary Orbotech LT Solar, LLC (“**OLTS**”), the Company is engaged in the research, development and marketing of products for the deposition of thin film coating of various materials on crystalline silicon photovoltaic wafers for solar energy panels through plasma-enhanced chemical vapor deposition (“**PECVD**”); and, through its subsidiary Orbograph Ltd. (“**Orbograph**”), in the development and marketing of character recognition solutions to banks, financial and other payment processing institutions and healthcare providers.

The Company continues to develop technologies for use in other applications both within and outside the electronics industry and also regularly and selectively evaluates opportunities to acquire complementary technologies to further diversify its business. The Company derives a significant portion of its revenues from the service and support of its substantial installed base of products. In this report on Form SD, references to the Registrant, the Company or Orbotech are, unless the context otherwise requires, intended to be to Orbotech Ltd. and its consolidated entities.

For over 30 years, Orbotech has built its global installed base of systems at customers that include leading PCB manufacturers, practically all FPD manufacturers and multiple customers at independent semiconductor and microelectronic device manufacturers, foundries and outsourced semiconductor assembly and test (“**OSAT**”) manufacturers, for whom our solutions are designed to enable cutting-edge production processes, optimize production yields, improve throughput and increase production process cost effectiveness. The Company has three major business divisions, each with multiple product lines and many different products. A typical Orbotech product contains hundreds of different parts, from a wide range of manufacturers and suppliers. The

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Company sells its solutions to PCB manufacturers globally and, as of December 31, 2017, had an installed base (excluding CAM and engineering solutions) of approximately 13,600 PCB systems. The Company's FPD customers include the major display manufacturers and, as of December 31, 2017, it had an installed base of approximately 1,950 FPD systems. The Company's SD customers include SD manufacturers, foundries, OSAT providers and research institutes and, as of December 31, 2017, it had an active installed base of approximately 7,000 SD modules in production worldwide.

The scope of this report on Form SD for the year ended December 31, 2017 (this "**Report**" or "**CMR**") includes all of the Company's businesses. During 2017, the Company conducted ongoing due diligence efforts with respect to manufacturers and suppliers engaged by its subsidiaries worldwide.

### **Introduction**

This Report is presented to comply with Rule 13p-1 under the Securities Exchange Act of 1934 (the "**Rule**"), which was adopted by the Securities and Exchange Commission (the "**SEC**") to implement reporting and disclosure requirements related to conflict minerals as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "**Dodd-Frank Act**"). The Rule imposes certain reporting obligations on SEC registrants whose manufactured products contain cassiterite, columbite-tantalite, gold, wolframite or their derivatives, which are limited to tin, tantalum and tungsten ("**Conflict Minerals**") and which are necessary to the functionality or production of their products. Certain of these requirements apply to registrants whatever the geographic origin of the Conflict Minerals and whether or not they fund armed conflict.

### **Reasonable Country of Origin Inquiry**

In connection with the implementation of the applicable provisions of the Dodd-Frank Act, Orbotech evaluated its current product lines and determined that Conflict Minerals were necessary to the production or functionality of products manufactured, or contracted to be manufactured, by it during 2017. Accordingly, in 2017 it pursued its good faith reasonable country of origin inquiry ("**RCOI**") to determine whether the Conflict Minerals actually used in such products originate from the Democratic Republic of the Congo or adjoining countries (collectively, the "**Covered Countries**") and whether these Conflict Minerals did not come from recycled or scrap sources.

The RCOI undertaken by the Registrant in 2017 incorporated a data collection strategy which focused on identified manufacturers and suppliers. In conducting its RCOI, and then in carrying out the analysis for this Report, the Company focused its strategy and efforts on its so-called 'first'- and 'second'-tier suppliers while, at the same time, refreshing information received from manufacturers and suppliers addressed in the course of RCOIs conducted in previous years and whose products are used extensively in the Company's systems. 'First'- and 'second'-tier suppliers are generally defined as suppliers which are in contact with the Company's supply chain management team, are considered to be 'strategic' partners, have a long-term relationship with Orbotech and carry out a large volume of business with it. In generating the list of manufacturers and first- and second-tier suppliers to be studied in the RCOI, the Company considered both direct suppliers (primarily turn-key suppliers and certain strategic original-equipment manufacturers) and indirect suppliers (primarily non-strategic original-equipment manufacturers).

Through this process, the Company identified a list of 314 entities to be examined in the RCOI which, between them, accounted for over 79% of applicable expenditure by the Company on component costs for its products manufactured during 2017. All of these are considered to be first- and second-tier suppliers and 68 were identified as SEC registrants. The Company solicited information from these direct and indirect suppliers

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and manufacturers using the Conflict Minerals Reporting Template (version 5.x) (the “**CMRT**”), an industry-standard template for Conflict Minerals reporting designed by the Responsible Minerals Initiative (the “**RMI**”) (formerly known as the Conflict-Free Sourcing Initiative), and received 184 completed responses (58%). The CMRT requested, among other things, that manufacturers and suppliers specify the country of origin of any Conflict Minerals used in the Company’s products manufactured during 2017 and that they provide certain additional information in respect of the facilities used to process these Conflict Minerals. The Company reviewed, through its designated subcontractor, all responses received and followed up on responses that appeared to be inconsistent, incomplete or inaccurate.

Because of the extensive nature of the Company’s supply chain, the multiple technologies and assemblies utilized to manufacture Company products, the fact that many of the Company’s products are manufactured by turn-key manufacturers and the numerous tiers existing between the Company and the smelters and refiners from which Conflict Minerals used in its products are extracted, the due diligence investigation to be undertaken and information required to be able to guarantee that any individual product is Conflict Minerals free are significant and burdensome.

Based on information obtained during the RCOI, and taking into account the complexities referred to in the preceding paragraph, Orbotech concluded that it did not have sufficient information to determine the country of origin of all Conflict Minerals in its products and was therefore unable to rule out the possibility that Conflict Minerals used in its products originated, or may have originated, from the Covered Countries or that such Conflict Minerals may not have come from recycle or scrap sources. The Company therefore undertook a due diligence investigation of the source and chain of custody of these Conflict Minerals.

## **Due Diligence Process**

### 1. Due diligence framework

In accordance with the Rule, the Company has undertaken due diligence investigations to attempt to determine whether or not those Conflict Minerals that are necessary to the functionality or production of its products during 2017 were or were not ‘DRC Conflict Free’ (as that term is defined in the Rule). The Company designed its due diligence measures, in all material respects, to conform as far as practicable with the internationally recognized due diligence framework recommended by the Organisation for Economic Co-operation and Development (the “**OECD**”) known as ‘Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD, 3d Ed., 2016)’ and related supplements for Conflict Minerals (the “**OECD Guidance**”).

As a result of its due diligence, the Company has been unable to determine that its Conflict Minerals either: (a) did *not* originate in the Covered Countries; or (b) *did* come from recycled or scrap sources. Accordingly, it has prepared this CMR and is filing it as an exhibit to its Specialized Disclosure Report on Form SD. The CMR may also be accessed through the ‘Investors’ section of the Company’s corporate website (the address of which is: [www.orbotech.com](http://www.orbotech.com)) (the “**Corporate Website**”).

### 2. Due diligence measures undertaken

In substantial conformance with the OECD Guidance, the Company operates its Conflict Minerals due diligence program to: maintain strong Company management systems; identify and assess risks in the supply chain; design, implement and update strategies to respond to identified risks; rely upon cross-industry initiatives to conduct independent third-party audits of smelter/refiner diligence practices; and report annually on supply chain due diligence. The steps taken by the Company during the reporting period January 1, 2017 to December 31, 2017, in each of these areas are described below.

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*(i) Establish strong Company management systems*

The Company maintains its already-established internal management systems and internal cross-functional teams to support the supply chain due diligence process. Business units participating in this process include operations, purchasing, standards compliance, finance, legal and corporate management. The internal process is managed by the Company's Global Products Configuration Control and Standards Compliance Manager, with the support of internal legal, purchasing and compliance teams.

In connection with its Conflict Minerals efforts, in 2013 Orbotech adopted a Conflict Minerals policy (the "**Policy**"), which was last amended in 2015, and which affirms the Company's commitment to responsible sourcing and its support of global efforts to ensure responsible manufacturing processes through, inter-alia, transparent sourcing of materials. The Policy describes, in general terms, the standards adopted by the Company in connection with Conflict Minerals. The Policy may be accessed through the 'Corporate Governance' hyperlink contained in the 'Investors' section of the Corporate Website. The Company's commitment to responsible sourcing – and its corresponding expectations of suppliers – are also incorporated into the Company's 'General Purchasing Terms and Conditions', which are generally delivered as part of the Company's engagement with its suppliers. In addition, the supplier page on the Corporate Website references the Policy.

Company purchase orders include a statement pursuant to which suppliers agree to comply with and follow the Policy, and to undertake appropriate due diligence steps, as well as ongoing monitoring of their supply chain, such as may reasonably be necessary to avoid procurement or use of raw materials sourced from defined 'conflict regions'. Pursuant to the same statement, suppliers agree to file the RMI CMRT annually. The Company also communicates the Policy to suppliers and to the public.

For this CMR, the Company continued its procurement of information through examination of the supply chains of its subsidiaries which operate production facilities. This process included analyzing money spent during the year by each of these subsidiaries on bills of materials, classified according to first- and second-tier suppliers (both in terms of the amount of money spent and critical dependency).

*(ii) Identify and assess risks in the supply chain*

The Company addressed first- and second-tier suppliers that are considered to be 'strategic' partners, have a long-term relationship with Orbotech and carry out a large volume of business with it, as well as original-equipment manufacturers whose products are known to form part of the bill of materials of its products.

In this phase, the Registrant identifies and assesses Conflict Minerals-related risks in its supply chain based on supplier characteristics, such as the geographical location of the manufacturer or supplier, the extent to which the Company is dependent upon any particular manufacturer or supplier (or, conversely, the availability of alternative manufacturers or suppliers), the volume of spending during the relevant period and whether or not the manufacturer or supplier is an SEC registrant. Based upon this analysis, the Company, for internal purposes, periodically designates each manufacturer and supplier into a risk category: high, medium or low.

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To identify and assess the extent to which Conflict Minerals were used in its products in 2017, the Company engaged with an identified group of manufacturers and suppliers. As in its RCOI, as part of the Company's risk-based approach, Orbotech decided to focus its due diligence on what it refers to as 'first'- and 'second'-tier suppliers, in addition to refreshing information received from manufacturers and suppliers to which the Company addressed inquiries in previous years, and whose products are known to be found in the Company's products. The suppliers identified by the Company represent 79% of the amount spent by the Company on its overall bill of materials. These manufacturers and suppliers were surveyed to determine whether the Conflict Minerals used in the Company's products in 2017 were or were not DRC Conflict Free. In this survey, these manufacturers and suppliers were requested to specify the country of origin of any Conflict Minerals used in the Company's products manufactured during 2017 and to provide additional information in respect of the facilities used to process these Conflict Minerals. Through these inquiries, the Company has been able to identify certain of the smelters or refiners in its supply chain, which were then cross referenced with the list of smelters or refiners that have been designated as 'conflict free' in publicly available industry-wide initiatives.

*(iii) Design and implement a strategy to respond to identified risks*

The Company continued to initiate supply-chain surveys using the RMI CMRT, to attempt to identify those smelters and refiners from which Conflict Minerals used in the Company's products may have been derived. Results and progress were reported back to the Company's senior management responsible for supply chain.

*(iv) Carry out independent third-party audit of smelter/refiner's due diligence practices*

As a 'downstream' consumer of Conflict Minerals, Orbotech is several steps removed from smelters and refiners which provide minerals and ores, and it does not independently perform audits of smelters and refiners within the supply chain. Orbotech's due diligence efforts in this regard involve reference to publicly available cross-industry initiatives to conduct smelter and refiner due diligence.

*(v) Report annually on supply chain due diligence*

Orbotech complies with Section 1502 of the Dodd-Frank Act by filing this CMR with the SEC and posting such CMR on the Corporate Website.

3. Results of assessment

Orbotech maintains and operates a complex and multi-level supply chain in which there typically exist numerous tiers between the Company and the smelters and refiners from which Conflict Minerals used in its products are extracted. Therefore, the Company necessarily relies on manufacturers and suppliers, some of which are contract and turn-key manufacturers, with which it has contractual relations, to provide it with information as to the origin of Conflict Minerals contained in components and materials supplied to Orbotech and incorporated into the Company's products.

Information gathered by the Registrant from suppliers and manufacturers is not provided on a continuous, real-time basis. The Company is therefore only able to provide reasonable, not absolute, assurance regarding the source and chain of custody of the Conflict Minerals necessary to its products, since the information comes from indirect and secondary suppliers, manufacturers and independent third party audit programs. The Company considers its implementation of OECD guidelines generally, and its adoption of the RMI template in particular, to be the best currently available methodology for gathering country of origin and other information from smelters and refiners.

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From the identified group of manufacturers and suppliers as a whole, the Company received responses containing the names and locations of smelters and refiners that process Conflict Minerals used in components provided by the Company's manufacturers and suppliers.

Despite receiving responses from manufacturers and suppliers which included a listing of smelter or refiner names, most manufacturers and suppliers were unable to report with accuracy which smelters and refiners were part of the supply chain of the components that were sold to Orbotech in 2017. Based on these responses, out of a total of 992 individual smelters and refiners named by the Company's manufacturers and suppliers, 263 have been validated as having completed the RMI audit process and being in good standing, as further detailed in Appendix A attached hereto.

Of the total number of 314 suppliers and manufacturers surveyed (68 of which are SEC registrants that are subject to the Rule), as of the Company's due diligence cut-off date, which was May 3, 2018:

- 184 had provided satisfactory CMRTs, including:
  - 40 that were classified as 'Free of 3TG'<sup>1</sup>;
  - 9 that were classified as 'Not from DRC'<sup>2</sup>;
  - 15 that were classified as 'DRC Conflict Free'<sup>3</sup>;
  - 80 that were classified as 'Undetermined from DRC'<sup>4</sup>;
  - 30 that were classified as 'Undetermined not from DRC'<sup>5</sup>;
  - 10 that were classified as 'Undefined from DRC'<sup>6</sup>; and
- 130 had not provided satisfactory CMRTs.

Because: (i) many manufacturers and suppliers were unable to report with accuracy which smelters and refiners were part of the supply chain of the components that were sold to Orbotech in 2017; and (ii) of the list of 992 individual smelters and refiners reported by the suppliers only 322 (32%) smelters were identified with a Responsible Minerals Initiative Smelter's Identification Number, the Company is unable to determine which facilities processed the Conflict Minerals used in its products. For similar reasons, the Company is unable to identify the country of origin of the specific minerals used in the Company's products.

<sup>1</sup> 'Free of 3TG' indicates that the in-scope suppliers reported that Conflict Minerals are not contained in the product, nor are they necessary for the functionality, or included in the production of, products provided to Orbotech.

<sup>2</sup> 'Not from DRC' indicates that the in-scope suppliers reported that they were sourcing Conflict Minerals; however, from countries other than the Covered Countries.

<sup>3</sup> 'DRC Conflict Free' indicates that the in-scope suppliers reported that the Conflict Minerals used in the products provided to Orbotech originate from Covered Countries; however, they were extracted from smelters which are approved under the RMI Conflict Free Smelter Program.

<sup>4</sup> 'Undetermined from DRC' indicates that the in-scope suppliers reported that the Conflict Minerals used originate from Covered Countries and that the smelters from which they were extracted are approved under the RMI program; however, they have not yet concluded their due diligence process and, as a result, this determination could potentially change. Due diligence for these in-scope suppliers is expected to continue.

<sup>5</sup> 'Undetermined not from DRC' indicates that the in-scope suppliers reported the Conflict Minerals used in the products do not originate from Covered Countries; however, they have not yet concluded their due diligence process and, as a result, this determination could potentially change. Due diligence for these in-scope suppliers is expected to continue.

<sup>6</sup> 'Undefined from DRC' indicates that the in-scope suppliers reported that the Conflict Minerals used originate from Covered Countries and that the smelters from which they were extracted are not yet approved under the RMI program.

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**Risk mitigation and future due diligence measures**

The Registrant intends to continue its risk mitigation and due diligence efforts and measures by taking the following (among other) steps:

- continuing to require its suppliers contractually to undertake appropriate due diligence and monitor their own supply chains as may reasonably be necessary to avoid procurement or use of Conflict Minerals;
- continuing to encourage its suppliers to obtain current, accurate and complete information about their smelters and refiners of Conflict Minerals;
- continuing to co-operate with other industry members with whom the Company shares common suppliers; and
- continuing to report publicly, as required, on due diligence for responsible supply chains of minerals from conflict-affected and high-risk areas in order to enhance public confidence in the measures being taken by companies whose manufactured products contain Conflict Minerals.

**Cautionary Statement Regarding Forward-Looking Statements**

Except for historical information, the matters discussed in this press release are forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These statements relate to, among other things, future prospects, developments and business strategies and involve certain risks and uncertainties. The words “anticipate,” “believe,” “could,” “will,” “plan,” “expect” and “would” and similar terms and phrases, including references to assumptions, have been used in this press release to identify forward-looking statements. These forward-looking statements are made based on management’s expectations and beliefs concerning future events affecting Orbotech and are subject to uncertainties and factors relating to Orbotech’s operations and business environment, the previously announced acquisition of Orbotech by KLA, the manner in which the parties plan to effect the transaction, including the share repurchase program, the ability to raise additional capital necessary to complete the repurchase program within the time frame expected, the expected benefits, synergies and costs of the transaction, management plans relating to the transaction, including with respect to the Company’s ownership interest in Frontline, the expected timing of the completion of the transaction, the parties’ ability to complete the transaction considering the various closing conditions, including conditions related to regulatory and Orbotech shareholder approvals, the plans, strategies and objectives of management for future operations, product development, product extensions, product integration, complementary product offerings and growth opportunities in certain business areas, the potential future financial impact of the transaction, and any assumptions underlying any of the foregoing. Actual results may differ materially from those referred to in the forward-looking statements due to a number of important factors, including but not limited to the possibility that expected benefits of the transaction may not materialize as expected, that the transaction may not be timely completed, if at all, that KLA-Tencor may not be able to successfully integrate the solutions and employees of the two companies or ensure the continued performance or growth of Orbotech’s products or solutions, the risk that the Company may not achieve its revenue expectations within and for 2018 (including, without limitation, due to shifting move-in dates); cyclicalities in the industries in which the Company operates, the Company’s supply chain management and production capacity, order cancelation (often without penalty), timing and occurrence of product acceptance (the Company defines ‘bookings’ and ‘backlog’ as purchase arrangements with customers that are based on mutually agreed terms, which, in some cases for bookings and backlog, may still be subject to completion of written documentation and may be changed or cancelled by the

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customer, often without penalty), fluctuations in product mix within and among divisions, worldwide economic conditions generally, especially in the industries in which the Company operates, the timing and strength of product and service offerings by the Company and its competitors, changes in business or pricing strategies, changes in the prevailing political and regulatory framework in which the relevant parties operate, including as a result of the United Kingdom's prospective withdrawal from the European Union (known as "Brexit") and political uncertainty in the United States, or in economic or technological trends or conditions, including currency fluctuations, inflation and consumer confidence, on a global, regional or national basis, the level of consumer demand for sophisticated devices such as smart mobile devices, automotive electronics, flexible applications and devices, augmented reality/virtual reality and wearable devices, high-performance computing, liquid crystal display and organic light emitting diode screens and other sophisticated devices, the Company's global operations and its ability to comply with varying legal, regulatory, exchange, tax and customs regimes, the timing and outcome of tax audits, including the best judgment tax assessment issued by the Israel Tax Authority with respect to the audit of tax years 2012-2014 in Israel and the related criminal investigation, the Company's ability to achieve strategic initiatives, including related to its acquisition strategy, the Company's debt and corporate financing activities; the timing, final outcome and impact of the criminal matter and ongoing investigation in Korea, including any impact on existing or future business opportunities in Korea and elsewhere, any civil actions related to the Korean matter brought by third parties, including the Company's customers, which may result in monetary judgments or settlements, expenses associated with the Korean matter, and ongoing or increased hostilities in Israel and the surrounding areas. The foregoing information should be read in connection with the Company's Annual Report on Form 20-F for the year ended December 31, 2017, and subsequent SEC filings. The Company is subject to the foregoing and other risks detailed in those reports. The Company assumes no obligation to update the information in this press release to reflect new information, future events or otherwise, except as required by law.

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Appendix A

Reported individual smelters or refiners

<u>Conflict Mineral</u>	<u>RMI compliant</u>	<u>Total</u>
Tin	73	83
Tantalum	40	43
Tungsten	42	46
Gold	108	150
Total	263	322