



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

**FORM SD
SPECIALIZED DISCLOSURE REPORT**

FLIR Systems Inc.

(Exact Name of Registrant as Specified in Its Charter)

Oregon
(State or other jurisdiction of
incorporation or organization)

0-21918
(Commission
File Number)

93-0708501
(I.R.S. Employer
Identification No.)

**27700 SW Parkway Avenue
Wilsonville, Oregon**
(Address of principal executive offices)

97070
(Zip Code)

Michael Shin
Global VP of Procurement
703-682-3360
(Name and telephone, including area code, of the person to contact in connection with this report)

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 to December 31, 2018.



Section 1 - Conflict Minerals Disclosure

ITEM 1.01 Conflict Minerals Disclosure and Report

The registrant's Conflict Minerals Report for the year ended December 31, 2018 is attached hereto as Exhibit 1.01 and is available at www.flir.com/corporate/supplier.

ITEM 1.02 Exhibit

The registrant's Conflict Minerals Report for the year ended December 31, 2018 is attached hereto as Exhibit 1.01.

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.

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.

FLIR Systems, Inc.

BY: /s/ Carol Lowe
Carol Lowe
Executive Vice President &
Chief Financial Officer

Date: May 31, 2019



Exhibit 1.01

**Conflict Minerals Report of FLIR Systems, Inc.
for the Year Ending December 31, 2018**

The following should be read in conjunction with the definitions contained in the Securities and Exchange Commission (“SEC”) instructions to Form SD and related rules.

This report for the year ended December 31, 2018 is presented to comply with Rule 13p-1 (the “Rule”) under the Securities Exchange Act of 1934 (the “Exchange Act”). The Rule was adopted by 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 term “conflict minerals” is defined as cassiterite, columbite-tantalite (coltan), gold, wolframite, and their derivatives, which are limited to tin, tantalum and tungsten. For the purposes of this report, tin, tungsten, tantalum and gold will collectively be referred to herein as the 3TGs. The Rule requires each SEC registrant to provide certain disclosures about 3TGs which are necessary to the functionality or production of products manufactured by such registrant.

Description of Company

FLIR Systems, Inc. (“FLIR,” the “Company,” “we,” “us,” or “our”) is a world leader in developing technologies that enhance perception and awareness. We design, develop, market, and distribute solutions that detect people, objects and substances that may not be perceived by human senses and improve the way people interact with the world around them. We bring these innovative technologies—which include thermal imaging systems, visible-light imaging systems, locater systems, measurement and diagnostic systems, and advanced threat-detection solutions—into daily life.

Founded in 1978, FLIR is a pioneer in advanced sensors and integrated sensor systems that enable the gathering, measurement, and analysis of critical information through a wide variety of applications in commercial, industrial, government, and consumer markets worldwide. We offer the broadest range of infrared, also known as thermal, imaging solutions in the world, with products that range from consumer-use thermal camera smartphone accessories to highly advanced aircraft-mounted imaging systems for military and search and rescue applications, with products in between serving a multitude of markets, customers, and applications.

Products Overview

We offer a wide array of sensor products, including infrared imaging cameras and systems, detector cores, CBRNE threat detectors, test and measurement instruments, radars, maritime electronics, and related products and solutions. We have evolved our product suite over time, expanding our reach into markets that are adjacent to thermal imaging, with the intent of expanding the adoption and channel development for thermal imaging technology. Examples of this evolution include our entrance into the visible-image security and surveillance market, the maritime electronics market, and the traffic monitoring and signal control market. We intend to continue this evolution as we continue to lower the cost of advanced sensing products. As the cost to own thermal technology continues to decline, the application of these sensors is expanding beyond imaging to areas such as data acquisition where thermal sensors can provide important data that can be used for a wide variety of applications. For further information about our products, please see Item 1 of our Annual Report on Form 10-K for the year ending December 31, 2018.

We conducted an analysis of our products and found that 3TGs can be found in the products described above. Therefore, substantially all the products that we manufacture are subject to the reporting obligations of the Rule.

Due Diligence Process

Reasonable Country of Origin Inquiry

With respect to 3TGs necessary to the functionality or production of products manufactured by us, or contracted by us to be manufactured, and required to be reported on Form SD for 2018, we conducted in good faith a country of origin inquiry that we believe was reasonably designed to determine whether any of the 3TGs originated in the Democratic Republic of the Congo (the “DRC”) or an adjoining country (collectively the “Covered Countries”) or were from recycled or scrap sources.

First, we identified all component suppliers and analyzed the bills of materials to identify any 3TGs that may be contained in the components provided by these suppliers. To achieve greater control and transparency over our supply chain and help identify the risk that our products contain any 3TGs that may be financing or benefiting armed groups in any Covered Country, we utilized a reporting template, the Conflict Minerals Reporting Template version 5.11 or higher (“CMRT”), and data gathered by



the Responsible Minerals Initiative (“RMI”) of the Responsible Business Alliance (“RBA”) and the Global E-Sustainability Initiative (“GeSI”). We identified and compiled a list of our suppliers from whom we needed to request information about their sourcing of 3TGs, and we requested that such identified suppliers provide us with information regarding their supply chain using the CMRT.

To gain insight into the country of origin, chain of custody, and whether they directly or indirectly finance or benefit armed groups in any Covered Country (the “Conflict Status”) of our 3TGs in our products, we relied primarily on the data reported by suppliers via the CMRT and the data from the Responsible Minerals Assurance Process (“RMAP”). RMAP is a voluntary program in which an independent third party evaluates smelter and refiner procurement activities and determines whether the smelter or refiner demonstrated that all the materials it processed originated from conflict-free sources. Pursuant to our Conflict Smelter Policy and our Supplier Code of Conduct, we require all suppliers to complete a CMRT and disclose the smelter and refiner facilities that are linked to the development of their parts and products.

Based on the information we received from our suppliers (as described below), we have reason to believe that some of the 3TGs contained in our products may have come from recycled or scrap sources.

To the extent we determined from our suppliers’ responses that the 3TGs originated (or may have originated) in the Covered Countries and may not have been from recycled or scrap sources, we exercised further due diligence as required by the Rule. In exercising due diligence, we were not able to determine whether the 3TGs that originated (or may have originated) in the Covered Countries directly or indirectly financed or benefitted armed groups.

Despite our good faith effort to determine the countries of origin and chain of custody of the 3TGs contained in our products, we have not been able to determine the exact country of origin of all of the 3TGs used in our in scope products. For the 3TGs whose country of origin has become known to us, we have been unable to determine whether such 3TGs directly or indirectly financed or benefitted armed groups in the Covered Countries.

Our ability to determine the origin and chain of custody of 3TGs and the Conflict Status is limited. Our supply chain for 3TGs is complex. In most cases, we are several steps removed from the mining and smelting or refining of 3TGs. Out of necessity, we depend on information from suppliers that may themselves purchase 3TGs from persons other than the miner, smelter or refiner of 3TGs.

Due to the breadth and complexity of our products and respective supply chain, it will take time for many of our suppliers to verify the origin of all the 3TGs they procure. By using our supply chain due diligence processes, driving accountability within the supply chain by leveraging the industry standard RMI/RMAP program and continuing our outreach efforts with suppliers, we hope to enhance the transparency within our supply chain regarding 3TGs.

Design of Due Diligence Measures

During 2018, we followed our management systems and due diligence procedures for 3TGs that we established in 2013 (our “CM Process”) with the intent to conform with the Organization for Economic Co-operation and Development (“OECD”) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, Third Edition, 2016 (“OECD Guidance”) and the related Supplements for gold, tin, tantalum and tungsten. The Guidance identifies five steps for due diligence that should be implemented and provides guidance as to how to achieve each step. We developed our due diligence process to address each of these five steps, as outlined below.

OECD Guidance Step 1 – Establish Strong Internal Management Systems

- We have adopted a Conflict Minerals Policy and Supplier Code of Conduct, which is available on our web site at <https://www.flir.com/corporate/supplier>.
- We have an internal team comprised of those employees who have responsibility for SEC reporting and compliance, and a system to notify the team of information that is relevant to supply-chain due diligence. This team is led by our Legal Department.
- We use a third-party service provider to assist us with supply-chain outreach and CMRT collection as well as with due diligence activities related to same.



- This year, we continued to put a strong emphasis on supplier education and training. To accomplish this, we utilized our third-party service provider's Learning Management System, to provide all in-scope suppliers access to Conflict Minerals training courses and learning material that includes understanding the CM regulation, filling out the CMRT, and using our third-party service provider's online portal for submission.

Our employees may anonymously report suspected violations of our Conflict Minerals Policy and Supplier Code of Conduct using our hotline which is hosted by EthicsPoint, available 24 hours a day, seven days a week.

The Company has adopted a policy to retain relevant documentation for a period of 5 years. Through our third-party service provider we retain all conflict minerals related documents, including supplier responses to CMRTs. All of this information and findings from this process are stored in a database that can be audited by internal or external parties.

OECD Guidance Step 2 – Identify and Assess Risk in the Supply Chain

- We require all suppliers that are within scope of providing products that may contain 3TGs to complete a valid and complete CMRT.
- We requested that our suppliers that provide in-scope products or parts complete a CMRT to collect information about the smelters of 3TG used in our products.
- We analyzed the suppliers' template responses for completeness and internal consistency and followed up with suppliers in an effort to resolve any discrepancies or incomplete answers that we identified.
- We relied on representations from suppliers that we considered reasonable. Our third-party service-provider also has automatic validation to flag CMRTs that contain conflicting responses or missing information. If such a CMRT was submitted, the supplier received an automated email response indicating the issues with the CMRT they provided.
- In some instances, we worked with suppliers to contact the manufacturer of products supplied to them. We considered warning signs or other circumstances that, in our view, indicated responses to the CMRT were unreliable or that the 3TGs came from a Covered Country and were not from recycled or scrap sources.

Based on the smelter lists provided by our suppliers via CMRT, we have identified 321 smelters or refiners that are on the RMI Standard Smelter List that accompanies CMRT version 5.11. Of these, 255 have been identified as conformant by the RMI through the RMAP.

Each facility that meets the RMI definition of a smelter or refiner of a 3TG mineral is assessed according to red flag indicators defined in the OECD Guidance. Our third-party service provider uses 5 factors to determine the level of risk that each smelter poses to the supply chain by identifying red flags:

1. Geographic proximity to the DRC and covered countries;
2. RMAP audit status;
3. Known mineral source country of origin;
4. Peer assessments conducted by credible third-party sources; and
5. Credible evidence of unethical or conflict sourcing.

Based on the above criteria the following facilities have been identified with red flag risks in the supply chain:

- Tony Goetz NV—CID002587
- African Gold Refinery Limited (AGR)—CID003185
- Kaloti Precious Metals—CID002563
- Universal Precious Metals Refining Zambia—CID002854
- Sudan Gold Refinery—CID002567
- Fidelity Printers and Refiners – CID002515

When these facilities were reported on a CMRT by one of our suppliers, risk mitigation activities were initiated. Through our third-party service provider along with the FLIR site supply chain organizations, suppliers that included any of the above facilities were immediately contacted and requested to take their own risk mitigation actions, including reviewing products sold to FLIR, and advise in writing if minerals from any of these smelters were used in FLIR products and, if so, work towards removal of these red-flag smelter(s) from their supply chain.



In accordance with OECD Due Diligence Guidance, risk mitigation will depend on each supplier’s specific context. Suppliers are given clear performance objectives within reasonable timeframes with clear expectations to remediate the issue with focus on elimination of these risks from the supply chain.

OECD Guidance Step 3 – Design and Implement a Strategy to Respond to Identified Risks

- Supplier terms and conditions require, whenever possible, compliance with FLIR’s Supplier Code of Conduct which requires suppliers to certify as to whether supplied products are or are not free of Conflict Minerals (“CMs”). FLIR’s standard Supplier Terms and Conditions includes language which states Suppliers are required to adhere to our conflict minerals policy.
- We notify our direct suppliers of CMs and each third-party manufacturer of our products that contain CMs of our policy on CMs.
- We are in the process of cross-referencing the smelter and refiner information provided by suppliers this year with the data made available by RMAP concerning the country of origin of the CMs processed by those facilities and their Conflict Status.

OECD Guidance Step 4 – Carry Out Independent Third-Party Audits of Supply Chain Due Diligence at Identified Points in the Supply Chain

- We rely on the RMAP initiative described above to identify smelters or refiners who are conformant with their assessment protocols, in satisfaction of the OECD framework requirements. Any smelters or refiners that were reported by our suppliers on their CMRTs who were not part of the RMAP were contacted directly by our third-party service provider to encourage them to participate in the RMAP.

OECD Guidance Step 5 – Report on Supply Chain Due Diligence

- We publicly report the results of our due diligence by publishing a CMR annually. Our reports are accessible on our website at <https://www.flir.com/corporate/supplier>.

Due Diligence Results

Survey Results

We received information from approximately 75% of our suppliers, including information on materials supplied directly to us and contained in products that we contracted to have manufactured by third parties. All final CMRT submissions were reviewed and validated to ensure no inaccuracies or inconsistencies were found. 68 suppliers did not submit a new CMRT when advised of such inaccuracies or inconsistencies and as such are still listed as invalid submissions as of April 29, 2019.

Smelters and Refiners

A majority of the responses we received from our suppliers provided aggregate data for their global supplier list on entity company-wide basis. However, some of the responses we received were incomplete or stated that the supplier had no knowledge regarding the source of the 3TGs in their products supplied to FLIR because they had merely purchased such products from a source further down the supply chain. Some suppliers who responded were able to identify smelters or refiners used by sub tier suppliers in their supply chains but not at a component level. However, their responses indicated that their own supply chain due diligence was less than complete. A minority of our suppliers provided product level CMRTs but were unable to tie individual smelters or refiners to the specific components that were delivered to us and are contained in our end products. We are therefore unable to definitively (i) determine whether any of the 3TGs reported by our suppliers were contained in our end products or (ii) validate which of the smelters and refineries included in the CMRTs of our suppliers actually supplied 3TGs for specific components used in our end products. Due to this, our list of smelters or refiners may contain more facilities than those that processed the 3TGs contained in our products.



We are continuing our review of all responses to correlate, identify and resolve the inconsistencies and missing information related to each supplier's responses. Our continuing efforts to determine the mine or location of origin of the 3TGs follow the steps outlined in the OECD Guidance described above.

Risk Mitigation and Future Due Diligence Measures

We have taken, or will take, the following steps since the period covered by this Report to mitigate the risk that our 3TGs financed or benefitted armed groups in the Covered Countries:

- Increased the response rate of suppliers to our information requests by continuing to refine our data collection process.
- Implemented a new conflict minerals procedure to clarify our processes.
- Carry out requirements outlined in FLIR's Conflict Mineral Policy Statement to identify non-compliant suppliers and take action to require suppliers remediate the issue or risk corrective action up to and including FLIR establishing alternative sources from conflict free suppliers and may include escalation to senior management to advise of suppliers using high risk practices.
- Encourage suppliers to increase the participation rate of smelters and refiners in the RMAP.
- Require new suppliers to commit to comply with our Conflict Minerals Policy and Supplier Code of Conduct before placing any orders with the supplier.
- Improve our supply chain due diligence by increasing awareness internally and externally regarding our Conflict Minerals Policy.

We will also continue to engage with the RBA and other key industry groups as part of a wider industry collaboration to develop best practices for the global supply chain and address the ongoing issue of conflict minerals.

In accordance with the Rule, a copy of this Report will be posted on the Company's website at www.flir.com/corporate/supplier

Appendix A

<u>Metal</u>	<u>Standard Smelter Name</u>	<u>Smelter Facility Location</u>
Gold	8853 S.p.A.	ITALY
Gold	Abington Reldan Metals, LLC	UNITED STATES
Gold	Advanced Chemical Company	UNITED STATES
Gold	African Gold Refinery	UGANDA
Gold	Aida Chemical Industries Co., Ltd.	JAPAN
Gold	Al Etihad Gold LLC	UNITED ARAB EMIRATES
Gold	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	UZBEKISTAN
Gold	AngloGold Ashanti Córrego do Sítio Mineração	BRAZIL
Gold	Argor-Heraeus S.A.	SWITZERLAND
Gold	Asahi Pretec Corp.	JAPAN
Gold	Asahi Refining Canada Ltd.	CANADA
Gold	Asahi Refining USA Inc.	UNITED STATES
Gold	Asaka Riken Co., Ltd.	JAPAN
Gold	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	TURKEY
Gold	AU Traders and Refiners	SOUTH AFRICA



Gold	Aurubis AG	GERMANY
Gold	Bangalore Refinery	INDIA
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES
Gold	Boliden AB	SWEDEN
Gold	C. Hafner GmbH + Co. KG	GERMANY
Gold	Caridad	MEXICO
Gold	CCR Refinery—Glencore Canada Corporation	CANADA
Gold	Cendres + Métaux S.A.	SWITZERLAND
Gold	Chimet S.p.A.	ITALY
Gold	Chugai Mining	JAPAN
Gold	Daejin Indus Co., Ltd.	KOREA, REPUBLIC OF
Gold	Daye Non-Ferrous Metals Mining Ltd.	CHINA
Gold	Degussa Sonne / Mond Goldhandel GmbH	GERMANY
Gold	Dijllah Gold Refinery FZC	UNITED ARAB EMIRATES
Gold	DODUCO Contacts and Refining GmbH	GERMANY
Gold	Dowa	JAPAN
Gold	DS PRETECH Co., Ltd.	KOREA, REPUBLIC OF
Gold	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF
Gold	Eco-System Recycling Co., Ltd.	JAPAN
Gold	Emirates Gold DMCC	UNITED ARAB EMIRATES
Gold	Fidelity Printers and Refiners Ltd.	ZIMBABWE
Gold	Fujairah Gold FZE	UNITED ARAB EMIRATES
Gold	GCC Gujrat Gold Centre Pvt. Ltd.	INDIA
Gold	Geib Refining Corporation	UNITED STATES
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CHINA
Gold	Great Wall Precious Metals Co., Ltd. of CBPM	CHINA
Gold	Guangdong Jinding Gold Limited	CHINA
Gold	Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CHINA
Gold	Hangzhou Fuchunjiang Smelting Co., Ltd.	CHINA
Gold	HeeSung	KOREA, REPUBLIC OF
Gold	Heimerle + Meule GmbH	GERMANY
Gold	Heraeus Metals Hong Kong Ltd.	CHINA
Gold	Heraeus Precious Metals GmbH & Co. KG	GERMANY
Gold	Hunan Chenzhou Mining Co., Ltd.	CHINA
Gold	Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd.	CHINA
Gold	Hwasung CJ Co., Ltd.	KOREA, REPUBLIC OF
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CHINA
Gold	International Precious Metal Refiners	UNITED ARAB EMIRATES
Gold	Ishifuku Metal Industry Co., Ltd.	JAPAN
Gold	Istanbul Gold Refinery	TURKEY
Gold	Italpreziosi	ITALY



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Gold	Japan Mint	JAPAN
Gold	Jiangxi Copper Co., Ltd.	CHINA
Gold	JSC Ekaterinburg Non-Ferrous Metal Processing Plant	RUSSIAN FEDERATION
Gold	JSC Uralelectromed	RUSSIAN FEDERATION
Gold	JX Nippon Mining & Metals Co., Ltd.	JAPAN
Gold	Kaloti Precious Metals	UNITED ARAB EMIRATES
Gold	Kazakhmys Smelting LLC	KAZAKHSTAN
Gold	Kazzinc	KAZAKHSTAN
Gold	Kennecott Utah Copper LLC	UNITED STATES
Gold	KGHM Polska Miedz Spolka Akcyjna	POLAND
Gold	Kojima Chemicals Co., Ltd.	JAPAN
Gold	Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF
Gold	Kyrgyzaltyn JSC	KYRGYZSTAN
Gold	Kyshtym Copper-Electrolytic Plant ZAO	RUSSIAN FEDERATION
Gold	L'azurde Company For Jewelry	SAUDI ARABIA
Gold	Lingbao Gold Co., Ltd.	CHINA
Gold	Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CHINA
Gold	L'Orfebre S.A.	ANDORRA
Gold	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF
Gold	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.	CHINA
Gold	Marsam Metals	BRAZIL
Gold	Materion	UNITED STATES
Gold	Matsuda Sangyo Co., Ltd.	JAPAN
Gold	Metalor Technologies (Hong Kong) Ltd.	CHINA
Gold	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE
Gold	Metalor Technologies (Suzhou) Ltd.	CHINA
Gold	Metalor Technologies S.A.	SWITZERLAND
Gold	Metalor USA Refining Corporation	UNITED STATES
Gold	Metalúrgica Met-Mex Peñoles S.A. De C.V.	MEXICO
Gold	Mitsubishi Materials Corporation	JAPAN
Gold	Mitsui Mining and Smelting Co., Ltd.	JAPAN
Gold	MMTC-PAMP India Pvt., Ltd.	INDIA
Gold	Modeltech Sdn Bhd	MALAYSIA
Gold	Morris and Watson	NEW ZEALAND
Gold	Morris and Watson Gold Coast	AUSTRALIA
Gold	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION
Gold	Nadir Metal Rafineri San. Ve Tic. A.Ş.	TURKEY
Gold	Navoi Mining and Metallurgical Combinat	UZBEKISTAN
Gold	NH Recytech Company	KOREA, REPUBLIC OF
Gold	Nihon Material Co., Ltd.	JAPAN
Gold	Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH	AUSTRIA
Gold	Ohura Precious Metal Industry Co., Ltd.	JAPAN



Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	RUSSIAN FEDERATION
Gold	OJSC Novosibirsk Refinery	RUSSIAN FEDERATION
Gold	PAMP S.A.	SWITZERLAND
Gold	Pease & Curren	UNITED STATES
Gold	Penglai Penggang Gold Industry Co., Ltd.	CHINA
Gold	Planta Recuperadora de Metales SpA	CHILE
Gold	Prioksky Plant of Non-Ferrous Metals	RUSSIAN FEDERATION
Gold	PT Aneka Tambang (Persero) Tbk	INDONESIA
Gold	PX Précinox S.A.	SWITZERLAND
Gold	QG Refining, LLC	UNITED STATES OF AMERICA
Gold	Rand Refinery (Pty) Ltd.	SOUTH AFRICA
Gold	Refinery of Seemine Gold Co., Ltd.	CHINA
Gold	Remondis Argentia B.V.	NETHERLANDS
Gold	Republic Metals Corporation	UNITED STATES
Gold	Royal Canadian Mint	CANADA
Gold	SAAMP	FRANCE
Gold	Sabin Metal Corp.	UNITED STATES
Gold	Safimet S.p.A	Italy
Gold	SAFINA A.S.	CZECH REPUBLIC
Gold	Sai Refinery	INDIA
Gold	Samduck Precious Metals	KOREA, REPUBLIC OF
Gold	SAMWON Metals Corp.	KOREA, REPUBLIC OF
Gold	SAXONIA Edelmetalle GmbH	GERMANY
Gold	SEMPSA Joyería Platería S.A.	SPAIN
Gold	Shandong Tiancheng Biological Gold Industrial Co., Ltd.	CHINA
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA
Gold	Shangdong Humon Smelting Co., Ltd.	CHINA
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CHINA
Gold	Singway Technology Co., Ltd.	TAIWAN
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION
Gold	Solar Applied Materials Technology Corp.	TAIWAN
Gold	State Research Institute Center for Physical Sciences and Technology	LITHUANIA
Gold	Sudan Gold Refinery	SUDAN
Gold	Sumitomo Metal Mining Co., Ltd.	JAPAN
Gold	SungEel HiTech	KOREA, REPUBLIC OF
Gold	T.C.A S.p.A	ITALY
Gold	Tanaka Kikinzoku Kogyo K.K.	JAPAN
Gold	The Refinery of Shandong Gold Mining Co., Ltd.	CHINA
Gold	Tokuriki Honten Co., Ltd.	JAPAN
Gold	Tongling Nonferrous Metals Group Co., Ltd.	CHINA
Gold	Tony Goetz NV	BELGIUM



Gold	TOO Tau-Ken-Altyn	KAZAKHSTAN
Gold	Torecom	KOREA, REPUBLIC OF
Gold	Umicore Brasil Ltda.	BRAZIL
Gold	Umicore Precious Metals Thailand	THAILAND
Gold	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM
Gold	United Precious Metal Refining, Inc.	UNITED STATES
Gold	Universal Precious Metals Refining Zambia	ZAMBIA
Gold	Valcambi S.A.	SWITZERLAND
Gold	Western Australian Mint trading as The Perth Mint	AUSTRALIA
Gold	WIELAND Edelmetalle GmbH	GERMANY
Gold	Yamamoto Precious Metal Co., Ltd.	JAPAN
Gold	Yokohama Metal Co., Ltd.	JAPAN
Gold	Yunnan Copper Industry Co., Ltd.	CHINA
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA
Tantalum	Asaka Riken Co., Ltd.	JAPAN
Tantalum	Changsha South Tantalum Niobium Co., Ltd.	CHINA
Tantalum	D Block Metals, LLC	UNITED STATES
Tantalum	Exotech Inc.	UNITED STATES
Tantalum	F&X Electro-Materials Ltd.	CHINA
Tantalum	FIR Metals & Resource Ltd.	CHINA
Tantalum	Global Advanced Metals Aizu	JAPAN
Tantalum	Global Advanced Metals Boyertown	UNITED STATES
Tantalum	Guangdong Rising Rare Metals-EO Materials Ltd.	CHINA
Tantalum	Guangdong Zhiyuan New Material Co., Ltd.	CHINA
Tantalum	H.C. Starck Co., Ltd.	THAILAND
Tantalum	H.C. Starck Hermsdorf GmbH	GERMANY
Tantalum	H.C. Starck Inc.	UNITED STATES
Tantalum	H.C. Starck Ltd.	JAPAN
Tantalum	H.C. Starck Smelting GmbH & Co. KG	GERMANY
Tantalum	H.C. Starck Tantalum and Niobium GmbH	GERMANY
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	Jiangxi Tuohong New Raw Material	CHINA
Tantalum	Jiujiang Janny New Material Co., Ltd.	CHINA
Tantalum	Jiujiang JinXin Nonferrous Metals Co., Ltd.	CHINA
Tantalum	Jiujiang Tanbre Co., Ltd.	CHINA
Tantalum	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	KEMET Blue Metals	MEXICO
Tantalum	KEMET Blue Powder	UNITED STATES
Tantalum	LSM Brasil S.A.	BRAZIL
Tantalum	Metallurgical Products India Pvt., Ltd.	INDIA
Tantalum	Mineracao Taboca S.A.	BRAZIL
Tantalum	Mitsui Mining and Smelting Co., Ltd.	JAPAN



Tantalum	Ningxia Orient Tantalum Industry Co., Ltd.	CHINA
Tantalum	NPM Silmet AS	ESTONIA
Tantalum	Power Resources Ltd.	MACEDONIA
Tantalum	QuantumClean	UNITED STATES
Tantalum	Resind Industria e Comercio Ltda.	BRAZIL
Tantalum	RFH Tantalum Smeltry Co., Ltd.	CHINA
Tantalum	Solikamsk Magnesium Works OAO	RUSSIAN FEDERATION
Tantalum	Taki Chemicals	JAPAN
Tantalum	Telex Metals	UNITED STATES
Tantalum	Ulba Metallurgical Plant JSC	KAZAKHSTAN
Tantalum	XinXing HaoRong Electronic Material Co., Ltd.	CHINA
Tin	Alpha	UNITED STATES
Tin	An Vinh Joint Stock Mineral Processing Company	VIET NAM
Tin	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CHINA
Tin	Chifeng Dajingzi Tin Industry Co., Ltd.	CHINA
Tin	China Tin Group Co., Ltd.	CHINA
Tin	CV Ayi Jaya	INDONESIA
Tin	CV Dua Sekawan	INDONESIA
Tin	CV Gita Pesona	INDONESIA
Tin	CV Tiga Sekawan	INDONESIA
Tin	CV United Smelting	INDONESIA
Tin	CV Venus Inti Perkasa	INDONESIA
Tin	Dongguan CiEXPO Environmental Engineering Co., Ltd.	CHINA
Tin	Dowa	JAPAN
Tin	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company	VIET NAM
Tin	EM Vinto	BOLIVIA
Tin	Estanho de Rondônia S.A.	BRAZIL
Tin	Fenix Metals	POLAND
Tin	Gejiu Fengming Metallurgy Chemical Plant	CHINA
Tin	Gejiu Kai Meng Industry and Trade LLC	CHINA
Tin	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA
Tin	Gejiu Zili Mining And Metallurgy Co., Ltd.	CHINA
Tin	Guangdong Hanhe Non-ferrous Metal Limited Company	CHINA
Tin	Guanyang Guida Nonferrous Metal Smelting Plant	CHINA
Tin	HuiChang Hill Tin Industry Co., Ltd.	CHINA
Tin	Huichang Jinshunda Tin Co., Ltd.	CHINA
Tin	Jiangxi New Nanshan Technology Ltd.	CHINA
Tin	Magnu's Minerais Metais e Ligas Ltda.	BRAZIL
Tin	Malaysia Smelting Corporation (MSC)	MALAYSIA
Tin	Melt Metais e Ligas S.A.	BRAZIL
Tin	Metallic Resources, Inc.	UNITED STATES



Tin	Metallo Belgium N.V.	BELGIUM
Tin	Metallo Spain S.L.U.	SPAIN
Tin	Mineracao Taboca S.A.	BRAZIL
Tin	Minsur	PERU
Tin	Mitsubishi Materials Corporation	JAPAN
Tin	Modeltech Sdn Bhd	MALAYSIA
Tin	Nghe Tinh Non-Ferrous Metals Joint Stock Company	VIET NAM
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND
Tin	O.M. Manufacturing Philippines, Inc.	PHILIPPINES
Tin	Operaciones Metalurgical S.A.	BOLIVIA
Tin	Pongpipat Company Limited	MYANMAR
Tin	PT Aries Kencana Sejahtera	INDONESIA
Tin	PT Artha Cipta Langgeng	INDONESIA
Tin	PT ATD Makmur Mandiri Jaya	INDONESIA
Tin	PT Babel Inti Perkasa	INDONESIA
Tin	PT Babel Surya Alam Lestari	INDONESIA
Tin	PT Bangka Prima Tin	INDONESIA
Tin	PT Bangka Serumpun	INDONESIA
Tin	PT Bangka Tin Industry	INDONESIA
Tin	PT Belitung Industri Sejahtera	INDONESIA
Tin	PT Bukit Timah	INDONESIA
Tin	PT DS Jaya Abadi	INDONESIA
Tin	PT Inti Stania Prima	INDONESIA
Tin	PT Karimun Mining	INDONESIA
Tin	PT Kijang Jaya Mandiri	INDONESIA
Tin	PT Menara Cipta Mulia	INDONESIA
Tin	PT Mitra Stania Prima	INDONESIA
Tin	PT Panca Mega Persada	INDONESIA
Tin	PT Premium Tin Indonesia	INDONESIA
Tin	PT Prima Timah Utama	INDONESIA
Tin	PT Rajawali Rimba Perkasa	INDONESIA
Tin	PT Refined Bangka Tin	INDONESIA
Tin	PT Sariwiguna Binasentosa	INDONESIA
Tin	PT Stanindo Inti Perkasa	INDONESIA
Tin	PT Sukses Inti Makmur	INDONESIA
Tin	PT Sumber Jaya Indah	INDONESIA
Tin	PT Timah (Persero) Tbk Kundur	INDONESIA
Tin	PT Timah (Persero) Tbk Mentok	INDONESIA
Tin	PT Tinindo Inter Nusa	INDONESIA
Tin	PT Tirus Putra Mandiri	INDONESIA
Tin	PT Tommy Utama	INDONESIA
Tin	Resind Industria e Comercio Ltda.	BRAZIL
Tin	Rui Da Hung	TAIWAN



Tin	Soft Metais Ltda.	BRAZIL
Tin	Super Ligas	Brazil
Tin	Thai Nguyen Mining and Metallurgy Co., Ltd.	VIET NAM
Tin	Thaisarco	THAILAND
Tin	Tin Technology & Refining	UNITED STATES OF AMERICA
Tin	Tuyen Quang Non-Ferrous Metals Joint Stock Company	VIET NAM
Tin	White Solder Metalurgia e Mineraçao Ltda.	BRAZIL
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA
Tin	Yunnan Tin Company Limited	CHINA
Tungsten	A.L.M.T. TUNGSTEN Corp.	JAPAN
Tungsten	ACL Metais Eireli	BRAZIL
Tungsten	Asia Tungsten Products Vietnam Ltd.	VIET NAM
Tungsten	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA
Tungsten	Fujian Jinxin Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Haichuang Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA
Tungsten	Ganzhou Yatai Tungsten Co., Ltd.	CHINA
Tungsten	Global Tungsten & Powders Corp.	UNITED STATES
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CHINA
Tungsten	H.C. Starck Smelting GmbH & Co.KG	GERMANY
Tungsten	H.C. Starck Tungsten GmbH	GERMANY
Tungsten	Hunan Chenzhou Mining Co., Ltd.	CHINA
Tungsten	Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji	CHINA
Tungsten	Hunan Chunchang Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Hunan Litian Tungsten Industry Co., Ltd.	CHINA
Tungsten	Hydrometallurg, JSC	RUSSIAN FEDERATION
Tungsten	Japan New Metals Co., Ltd.	JAPAN
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CHINA
Tungsten	Jiangxi Dayu Longxintai Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.	CHINA
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CHINA
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CHINA
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA
Tungsten	Kennametal Fallon	UNITED STATES
Tungsten	Kennametal Huntsville	UNITED STATES
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CHINA
Tungsten	Moliren Ltd	RUSSIAN FEDERATION
Tungsten	Niagara Refining LLC	UNITED STATES



Tungsten	Nui Phao H.C. Starck Tungsten Chemicals Manufacturing LLC	VIET NAM
Tungsten	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES
Tungsten	South-East Nonferrous Metal Company Limited of Hengyang City	CHINA
Tungsten	Tejing (Vietnam) Tungsten Co., Ltd.	VIET NAM
Tungsten	Unecha Refractory metals plant	RUSSIAN FEDERATION
Tungsten	Wolfram Bergbau und Hütten AG	AUSTRIA
Tungsten	Woltech Korea Co., Ltd.	KOREA, REPUBLIC OF
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA
Tungsten	Xiamen Tungsten Co., Ltd.	CHINA
Tungsten	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	CHINA
Tungsten	Xinhai Rendan Shaoguan Tungsten Co., Ltd.	CHINA

Appendix B

This list of potential countries of origin is populated based on publicly available information, our Reasonable Country of Origin Inquiry (RCOI) and due diligence. It is important to note that this is also based on company level responses and, therefore, it is not certain which of these countries of origin can be linked to our products.

Argentina, Australia, Austria, Benin, Bolivia (Plurinational State of), Brazil, Burkina Faso, Burundi, Cambodia, Canada, Chile, China, Colombia, Congo (Democratic Republic of the), Ecuador, Eritrea, Ethiopia, France, Germany, Ghana, Guatemala, Guinea, Guyana, Honduras, India, Indonesia, Japan, Kazakhstan, Laos, Madagascar, Malaysia, Mali, Mexico, Mongolia, Mozambique, Myanmar, Namibia, Nicaragua, Nigeria, Panama, Peru, Portugal, Russian Federation, Rwanda, Senegal, Sierra Leone, South Africa, Spain, Thailand, Togo, Uganda, United Kingdom of Great Britain and Northern Ireland, United States of America, Uzbekistan, Viet Nam, Zimbabwe