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UNITED STATES DISTRICT COURT
DISTRICT OF NEVADA
SOUTHERN DIVISION

COMMODITY FUTURES TRADING COMMISSION, Plaintiff, vs. DANIEL SHAK, an individual, Defendant.	Case No.

COMPLAINT FOR INJUNCTIVE RELIEF, CIVIL MONETARY PENALTIES, AND OTHER EQUITABLE RELIEF

Plaintiff Commodity Futures Trading Commission (the "CFTC" or "Commission") alleges as follows:

I. SUMMARY

1. From at least February 26, 2015 through March 1, 2018 (the "Relevant Period"), Defendant Daniel Lawrence Shak ("Shak") engaged in a manipulative and deceptive scheme while placing orders for and trading gold and silver futures contracts on the Commodity Exchange, Inc. In furtherance of his scheme, Shak repeatedly engaged in manipulative or deceptive acts and practices by "spoofing" (bidding or offering with the intent to cancel the bid or offer before execution). On hundreds of occasions during the Relevant Period, Shak entered large

orders for gold or silver futures that he intended to cancel before execution, while placing orders on the opposite side of the gold or silver futures market. In placing the spoof orders, Shak intentionally or recklessly sent false signals of increased supply or demand that were designed to trick market participants into executing against orders on the opposite side of the market, which he actually wanted filled. Shak's spoof orders allowed him to fill orders on the opposite side of the market sooner, at a better price, and/or in larger quantities than they otherwise would have been filled.

2. By virtue of this conduct, as further described herein, Shak has engaged in acts and practices that violate 7 U.S.C. §§ 6c(a)(5)(C), 9(1), and 17 C.F.R. § 180.1(a)(1), (3) (2021).

3. The Commission brings this action pursuant to 7 U.S.C. § 13a-1, to enjoin Shak's unlawful acts and practices and to compel Shak's compliance with the Commodity Exchange Act (the "Act"), 7 U.S.C. § 1-26 and Commission Regulations (the "Regulations"), 17 C.F.R. § 1-190 (2021). In addition, the Commission seeks civil monetary penalties and other equitable relief, including but not limited to disgorgement, and trading and registration prohibitions, as the Court deems necessary and appropriate.

II. JURISDICTION AND VENUE

4. This Court has jurisdiction over this action under 28 U.S.C. § 1331 (federal question jurisdiction) and under 28 U.S.C. § 1345, which provides that district courts have original jurisdiction over civil actions commenced by the United States or by any agency expressly authorized to sue by Act of Congress. 7 U.S.C. § 13a-1(a) authorizes the Commission to seek injunctive relief in any proper district court of the United States against any person whenever it shall appear to the Commission that such person has engaged, is engaging, or is about to engage in any act or practice constituting a violation of any provision of the Act or any rule, regulation, or order thereunder.

5. Venue properly lies with this Court pursuant to 7 U.S.C. § 13a-1(e), because Shak maintains a residence in the District of Nevada and thus can be found here, and because Shak transacted business in this district by trading commodity futures from his residence in this District.

III. PARTIES

6. Plaintiff **Commodity Futures Trading Commission** is the independent federal regulatory agency charged by Congress with the administration and enforcement of the Act and the rules, Regulations, and orders promulgated thereunder. One of its core responsibilities is to protect the public interest by deterring and preventing disruptions to market integrity. *See* 7 U.S.C. § 5(b). The Commission is headquartered at Three Lafayette Centre, 1155 21st Street NW, Washington, DC 20581.

7. Defendant **Daniel Lawrence Shak** is an individual who maintains a residence in Las Vegas, Nevada. From at least April 1993 to August 2016, Shak was registered with the Commission as a floor broker. Shak was registered with the Commission as a floor trader from August 2016 to December 2018.

IV. OTHER RELEVANT ENTITIES

8. The **Commodity Exchange, Inc.** ("COMEX") is a commodity exchange that is registered with the Commission as a designated contract market under 7 U.S.C. § 7, and defined as a "registered entity" under 7 U.S.C. § 1a(40). Among other commodities, COMEX lists silver and gold futures for trading. COMEX's headquarters is located in New York, New York.

9. **CME Group Inc.** ("CME") is a Delaware corporation with its principal place of business in Chicago, Illinois. CME is the holding company that owns COMEX and operates (including during the Relevant Period) an electronic trading platform known as Globex located in Aurora, Illinois.

V. LEGAL BACKGROUND

A. Spoofing

10. 7 U.S.C. § 6c(a)(5)(C) provides that "[i]t shall be unlawful for any person to engage in any trading, practice, or conduct on or subject to the rules of a registered entity that . . . is, is of the character of, or is commonly known to the trade as, 'spoofing' (bidding or offering with the intent to cancel the bid or offer before execution)."

B. Manipulative or Deceptive Devices

11. 7 U.S.C. § 9(1) provides that "[i]t shall be unlawful for any person, directly or indirectly, to use or employ, or attempt to use or employ, in connection with any swap, or a contract of sale of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the Commission shall promulgate."

12. 17 C.F.R. § 180.1(a) (2021) provides that "[i]t shall be unlawful for any person, directly or indirectly, in connection with any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity, to intentionally or recklessly: (1) [u]se or employ, or attempt to use or employ, any manipulative device, scheme, or artifice to defraud; . . . [or] (3) [e]ngage, or attempt to engage, in any act, practice, or course of business, which operates or would operate as a fraud or deceit upon any person."

VI. MARKET AND PRODUCT BACKGROUND

A. Fundamentals of Gold and Silver Futures Markets

13. A futures contract is an agreement to buy or sell a commodity for delivery or cash settlement in the future at a specified price. Like all commodity futures markets, the markets for gold and silver futures enable producers or consumers of gold or silver to hedge the price of those

commodities. For market participants generally, the gold and silver futures markets serve as a means for investment in gold and silver, which is commonly used to assume or shift price risk or to speculate on price.

14. A futures contract traded on an exchange has standard, non-negotiable contract specifications, such as the quality, quantity, and physical delivery time and location for the given product.

15. The gold futures contract ("Gold contract") is traded on COMEX. The standard contract unit for the Gold contract (one "lot," in trading terminology) equals 100 troy ounces of gold. The contract price is quoted in dollars per ounce, with a minimum price change (commonly referred to as a "tick") of $0.10 per ounce. Because one Gold contract equals 100 ounces, a one-tick change in the quoted price results in a $10 change in the actual price of a single lot ($0.10 per ounce x 100 ounces).

16. The silver futures contract ("Silver contract") is traded on COMEX. The standard contract unit for the Silver contract equals 5,000 troy ounces of silver. The contract price is quoted in dollars per ounce, with a minimum price change of $0.005 per ounce for outright contracts. Because one Silver contract equals 5,000 ounces, a one-tick change in the quoted price for an outright contract results in a $25 change in the actual price of a single lot ($0.005 per ounce x 5,000 ounces).

17. Gold contracts are traded for delivery on a monthly basis for the current calendar month; the next two calendar months; any February, April, August, or October for the nearest 23 months; and any June or December for the nearest 72 months. Silver contracts are traded for delivery on a monthly basis for the current calendar month; the next two calendar months; any January, March, May, and September for the nearest 23 months; and any July or December for the

nearest 60 months. Traders and other market participants typically refer to a futures contract according to the delivery month, so the Gold contract with a delivery month of February 2017 would be referred to as the February 2017 Gold contract.

18. The Gold and Silver contracts can be traded on CME's Globex electronic trading platform between 5:00 p.m. Central Time on Sunday evening and 4:00 p.m. Central Time on Friday afternoon, with a 60-minute break each day beginning at 4:00 p.m. Central Time.[1]

B. Operation of CME's Electronic Trading Platform (Globex)

19. CME's electronic trading platform, Globex, is an open-access marketplace that allows traders to view the book of visible orders and prices for futures contracts, and enter their own orders to buy or sell futures contracts. An "order," in the context of electronic exchange trading, is a request submitted to the exchange to buy (that is, "bid") or sell (that is, "offer" or "ask") a certain number of a specified futures contract. An order may be for one or more lots. Orders are entered into the exchange's order book, and when there is a willing buyer and seller for a contract at a specified price, a transaction occurs and the orders are "filled" or "executed" or "hit."[2] At any time before an order is fully filled, a trader may "cancel" the order. When an order is canceled, the contracts that have not yet been bought or sold are pulled from the order book.

[1] All times described in this Complaint are expressed in Central Time, unless otherwise stated.

[2] CME employs a matching algorithm to match bids and offers for execution on Globex. In certain markets, like the gold and silver futures markets at issue here, the matching algorithm applies a First-In-First-Out ("FIFO") priority-in-time method to orders entered at the same price level of the order book. The first orders placed at a price level are the first to be executed. As a general matter, if there are multiple orders at a price level, the orders will be filled in the order they were placed. The orders that are first in line to be filled at a given price level are said to be at the "front of the queue," and the last orders at a given price level are said to be at the "back of the queue." As a general matter, the orders at the back of the queue will be filled only if all of the other orders at the same price level have already been filled.

20. When a bid or offer is submitted through Globex, it becomes part of the list of orders reflected in the "order book" for a particular futures contract. Traders often consider information in the order book when making trading decisions. Traders are able to see the "visible" portion of the order book (also known as "market depth") for at least ten price levels on the buy side and for at least ten price levels on the sell side for all market participants. Only the total numbers of orders and contracts at various price levels are visible, not the identities of the traders who placed the orders.

21. For example, if the "best bid" (the highest price at which any trader is willing to buy) for a Gold contract is 12500, and the "best ask" (the lowest price at which any trader is willing to sell) is 12501, then on the buy side, the visible order book displays the lots available at price levels of 12500, 12499, 12498, 12497, and so forth until reaching the tenth-highest price level at 12491.[3] On the sell side, the book displays the lots available at price levels of 12501, 12502, 12503, 12504, and so forth until reaching the tenth-lowest price level at 12510. The "bid-ask spread" is the difference between the best ask and best bid price levels; accordingly, the bid-ask spread in the example above is 1 (12501 less 12500).

[3] Globex displays the price for futures contracts without decimal points. In this example, the best bid is equal to a contract price of $1250.00 per ounce of gold, and the best ask is equal to a contract price of $1250.10 per ounce of gold. Globex displays the price of silver in a similar fashion. For example, a price of $19.005 per ounce of silver would be displayed in Globex as 19005.

22. To illustrate, the chart below shows an example of how the first five levels of the visible order book in a Gold contract at a hypothetical moment in time could be visualized:

Price	Buy Orders	Buy Lots	Sell Orders	Sell Lots
12505			17	18
12504			21	22
12503			21	23
12502			12	12
12501			**6**	**11**
12500	**4**	**4**		
12499	13	13		
12498	17	23		
12497	26	36		
12496	17	25		

23. An "aggressive" order is an order that crosses, or aggresses, the bid-ask spread in order to execute a trade. An aggressive buy order is a bid placed at the best ask price or higher, i.e., an order to buy at a price at which at least one other trader is currently willing to sell. An aggressive sell order is an offer placed at the best bid price or lower, i.e., an order to sell at a price at which at least one other trader is currently willing to buy. Using the example above, an aggressive buy order would be placed at 12501 (or higher if the best ask moved up) and an aggressive sell order would be placed at 12500 (or lower if the best bid moved down).

24. A "passive" or "resting" order, by contrast, does not cross the bid-ask spread. A resting buy order is a bid placed at the best bid price or lower, i.e., an order to buy at a price that is lower than the price that other traders are currently willing to sell. A resting sell order is placed at the best ask price or higher, i.e., an order to sell at a price that is higher than the price that other traders are currently willing to buy. Using the example above, a resting buy order would be placed at 12500 or lower and a resting sell order would be placed at 12501 or higher.

25. An iceberg order is an order in which the size of the order is not fully visible to other market participants. For example, a trader may place an iceberg order for 100 Gold or Silver contracts, with only one contract visible on the order book to other market participants.

C. How Futures Markets Respond to Order Activity

26. All else being equal, in futures markets—including the gold and silver futures markets—prices will generally rise when there is more interest in buying a particular contract (i.e., the demand side) than there is in selling (i.e., the supply side); conversely, prices will generally fall when supply exceeds demand (i.e., there is more interest in selling than buying).

27. Many market participants incorporate these general supply and demand concepts into their trading decisions. Market participants consider, for example, liquidity and market depth—i.e., the volume of lots and orders at various prices of the visible order book—to determine whether there is generally more interest to buy or to sell in the market at any given time, and thus whether a corresponding price change is likely. Market participants also consider "order book balance" or "order book pressure"—i.e., the ratio of lots and orders on the bid side of the market to the lots and orders on the offer side of the market. Many market participants use automated trading systems that analyze the market for imbalances in the order book or changes in the order book balance, and use that information to inform trading decisions.

28. For instance, if there are substantially more lots and/or orders on the bid side than on the offer side, or if there is a large influx of orders on the bid side of the market, market participants may reasonably believe that there is more interest or increased interest to buy than to sell, and thus infer that a price increase is likely. These market participants may then trade accordingly, and some may attempt to buy lots before the expected price increase. In such a case, these market participants would place aggressive buy orders (i.e., at a higher price than the currently resting buy orders in the market), making execution of resting sell orders more likely.

29. Spoofing and related manipulative or deceptive trading strategies seek to take advantage of these market fundamentals and market participants' reactions to them. This might be done, for example, by placing one or more resting orders (which the trader intends to execute) on the sell side of the market, and then placing one large order or a series of relatively large orders (which the trader intends to cancel before execution) on the buy side. The large orders on the buy side might create an order book imbalance and convey a false appearance that there is more interest to buy than to sell in the market. This might deceive other market participants into trading at a time, price, or quantity they otherwise would not have, in a way that benefits the trader. In this example, the trader's large buy orders could deceive other market participants into placing aggressive orders to buy, thus moving the price higher and allowing the trader's sell orders to be executed sooner, at a better price, and/or in larger quantities than they otherwise would have been executed. Once the trader executes his desired sell orders, he would cancel the larger orders on the other side of the market.

VII. SHAK'S MANIPULATIVE AND DECEPTIVE SCHEME

30. During the Relevant Period, Shak held accounts at a futures commission merchant whose headquarters is in New York, New York (the "Futures Trading Accounts"). Shak entered orders and executed trades in the Futures Trading Accounts on his own behalf. Shak was directly or indirectly responsible for all of the orders placed in the Futures Trading Accounts. Upon information and belief, Shak directly placed the overwhelming majority of orders in the Futures Trading Accounts. To the extent that any other individual placed an order through the Futures Trading Accounts during the Relevant Period, they did so pursuant to authority granted to them by Shak. During the Relevant Period, all trading through the Futures Trading Accounts was done manually, by submitting orders, cancelations, and modifications using a computer mouse or keyboard.

31. During the Relevant Period, Shak engaged in a manipulative and deceptive scheme (the "Scheme") that consisted of spoofing the gold and silver futures markets on CME's Globex electronic trading platform. Shak's Scheme followed a general pattern: (i) placing a small order (between one and twenty-five lots) for Gold or Silver futures that he intended to execute ("Genuine Orders"); (ii) before or after entering a Genuine Order, placing one or more larger resting orders on the opposite side of the market, which he placed with the intent to cancel ("Spoof Orders"); and (iii) canceling his Spoof Orders, typically after his Genuine Order was filled. Shak engaged in more than 700 distinct Spoof Events—more than 400 Spoof Events in Gold futures, and more than 300 distinct Spoof Events in Silver futures.[4] These 700-plus Spoof Events encompassed 1,808 individual Spoof Orders.

32. When he engaged in the Scheme, Shak knew or was reckless to the fact that his Spoof Orders would send false signals of increased supply or demand (i.e., increased selling or buying interest) into the market and would deceive or trick other market participants.

A. Shak's Spoof Orders Deceived Other Market Participants

33. Shak's Genuine Orders and Spoof Orders were active simultaneously on opposite sides of the market, but, as noted above, the Spoof Orders encompassed a far greater total volume than the Genuine Orders. On several occasions, Shak placed his Genuine Orders as iceberg orders. In those instances, market participants saw only one or two visible lots of Shak's iceberg Genuine Orders, and saw much larger Spoof Orders by Shak on the other side of the market.

[4] The Commission identified Spoof Events by analyzing Shak's trading activity to find all instances in which Shak created a large imbalance in a single trading account, with a large imbalance defined as an instance in which the visible working lots on one side of the market were at least 19 lots more and four times greater than the visible working lots on the other side of the market. For both sides, the imbalance was calculated within the top five levels of the market. In order for a trading pattern to be defined as a Spoof Event, Shak had to have placed or modified orders on both sides of the market.

Consequently, Shak's use of iceberg Genuine Orders made the imbalance created by his Spoof Orders seem even greater than it was. In total, the median ratio of visible Spoof Order lots to visible Genuine Order lots during Spoof Events was approximately 50-to-1.

34. Shak's Scheme was designed to benefit financially from market participants' reaction to his Spoof Orders. By entering orders that he intended to cancel, Shak deceived other traders about supply and demand, misleading market participants about the likely direction of the commodity's price. Shak intended his spoofing activity to put pressure on the price in the direction of his Genuine Orders, and did so with the knowledge that the price pressure would trick other market participants into filling his Genuine Orders at his desired price.

35. The following is a simplified explanation of how his Scheme was intended to work and often did work, using a hypothetical example of Spoof Orders on the buy side. Shak placed Spoof Orders to buy that resulted in an increase in demand in the order book (i.e., the Spoof Orders created or added to an order book imbalance in which orders to buy outweigh orders to sell, or otherwise altered the status quo by increasing demand). This increase was visible to other market participants and led them to conclude that the price was likely to rise. This conclusion, in turn, impacted market participants' decisions, including prompting some to attempt to purchase contracts before the predicted rise in price happened.

36. In such a case, these participants placed orders to buy which enabled orders on the opposite side of the Spoof Orders—including Shak's Genuine Orders—to sell sooner, at a better price, or in larger quantities than they otherwise would. This could occur through other market participants placing aggressive orders to buy (i.e., orders at a higher price than the pre-existing best bid, which crossed the bid-ask spread to directly fill Shak's Genuine Orders). It could also occur through other market participants placing additional resting orders at the best bid, which

might allow Shak to place aggressive Genuine Orders to sell, and to match those Genuine Orders sooner or in larger quantities than he otherwise would have been able to do. Even in instances when the Spoof Orders did not cause a change in the bid-ask spread, or allow Shak to fill his Genuine Orders at a better price than existed before he began spoofing, his Spoof Orders created price pressure that could halt or deter price movement that might have occurred had the Spoof Orders not been placed. In an example involving Spoof Orders to buy, those Spoof Orders could create upward price pressure that could prevent or slow a drop in the bid-ask spread.

B. Shak Placed Spoof Orders With the Intent to Cancel Them Before They Were Executed and Took Steps to Ensure That Happened

37. At the time Shak placed his Spoof Orders, he intended to cancel them before execution. Shak designed the Scheme to ensure his Spoof Orders were canceled prior to execution while his Genuine Orders were executed at a high rate, and he took steps to protect his Spoof Orders from execution.

38. *First*, Shak canceled the Spoof Orders relatively rapidly. As illustrated in the table below, the median cancelation time for all of his Spoof Orders was 11.8 seconds, and for Spoof Orders at the top level of the book (i.e., those in most danger of being hit), the median cancellation time was 10.7 seconds. By contrast, on those rarer occasions when Shak canceled his Genuine Orders, the median cancelation time was 55.4 seconds. This means that Shak allowed Genuine Orders to rest prior to cancelation for a significantly longer period than his Spoof Orders. The consistently faster cancelation times for Shak's Spoof Orders reflect his intent to cancel them from the outset.

Cancelations of Event Orders (values are approximate)	
	Median Time to Cancelation
Shak's Spoof Orders (All)	11.8 seconds
Shak's Spoof Orders (Top Level of Book)	10.7 seconds
Shak's Genuine Orders	55.4 seconds

39. *Second*, Shak acted quickly to cancel his Spoof Orders after receiving a fill on his Genuine Orders. In Spoof Events where Shak received a complete fill on his Genuine Order, the median time between the fill of his Genuine Order and the first cancelation of a Spoof Order was 2.3 seconds. As a manual trader, Shak clicked his mouse or made a keystroke in order cancel each individual Spoof Order, which makes the quick cancelation times for his Spoof Orders even more noteworthy.

40. *Third*, and relatedly, in some instances Shak placed Spoof Orders in a sequence intended to minimize the possibility that that the Spoof Orders would get filled. In several Spoof Events that involved multiple Spoof Orders, the Spoof Order closest to the best bid or best offer—and thus at greatest risk of being filled—was the last Spoof Order placed and/or the first Spoof Order canceled, while the Spoof Order furthest from the best bid or best offer—and thus at least risk of being filled—was the first Spoof Order placed and/or the last Spoof Order canceled. In some cases, Shak canceled his Spoof Orders in price sequence—starting with the Spoof Order closest to the best bid or best offer and proceeding in price sequence until reaching the Spoof Order furthest from the best bid or best offer. In other words, Shak placed and canceled Spoof Orders such that the Spoof Orders at greatest risk of being hit rested on the order book for a

shorter amount of time, while the Spoof Orders that were at the least risk of being hit rested on the order book for a longer amount of time.

41. *Fourth*, in other instances, Shak canceled Spoof Orders when they received a partial fill or when the best bid or best offer moved closer to them such that those Spoof Orders were at greater risk of being hit. By contrast, in some instances where the bid-ask spread moved away from his Spoof Orders after his Genuine Order was filled, meaning that the Spoof Orders were at an even lower risk of being hit than usual, Shak left those Spoof Orders on the market for relatively longer periods of time. These patterns suggest that Shak was monitoring the market to ensure that his Spoof Orders did not get fills, acting quickly to cancel his Spoof Orders when fills appeared more likely to occur in the future, and acting less quickly to cancel his Spoof Orders when it appeared that the risk of them getting filled was more remote.

42. Shak's Scheme worked as designed, as reflected in vastly diverging rates in which Shak's Genuine and Spoof Orders were partially or fully filled (the "hit rate"). As shown in the table below, Shak placed or modified 804 Genuine Orders during the Relevant Period. Of these, about 89% were hit. By contrast, approximately 2% of the 1,808 Spoof Orders were hit. Whether an order is hit is not dependent on its size; rather, orders at the same price level execute according to time priority under the FIFO matching algorithm, and larger orders can receive what is called a partial fill (i.e., only two lots of a 20-lot order could be filled, leaving eighteen lots on the market). Here, the stark contrast in hit rates illustrates Shak's success in avoiding execution of his Spoof Orders.

Shak Orders Hit in Events (percentages are approximate)			
	Total Shak Orders in Events	Number of Shak Orders Hit	Percentage of Shak Orders Hit
Genuine Orders	804	719	89%
Spoof Orders	1,808	31	2%

43. Thus, while Shak canceled almost 98% of his 1,808 Spoof Orders before even a partial fill, the Scheme enabled him to successfully fill, either partially or completely, approximately 89% of his Genuine Orders during Spoof Events. Shak's ability to avoid executions of his Spoof Orders is striking when comparing his Genuine Orders to his Spoof Orders. The stark contrast in hit rates is the result of the different intent Shak had when he placed Spoof Orders versus Genuine Orders—i.e., that he placed Genuine Orders with the intent to fill them, but placed Spoof Orders with the intent to cancel them.

44. A number of factors—the different hit rates, the disparate times to cancelation, the instances in which Shak canceled Spoof Orders as the risk that they might be filled increased, and the predictable sequence inherent in Shak's spoofing pattern, repeated over and over—demonstrate that Shak was carrying out a predetermined strategy to cancel the Spoof Orders, and that this strategy was not dependent on market conditions except insofar as those market conditions reflected or related to his intent to fill his Genuine Orders and cancel his Spoof Orders.

C. Shak Intended to Send False Information About Supply and Demand, or at Least Was Reckless to the Possibility That His Spoof Orders Would Send Such False Information

45. By engaging in the Scheme as described herein, Shak entered Spoof Orders either to intentionally send a false signal to the market that he actually wanted to buy or sell the number

of contracts specified in those orders, or while recklessly disregarding the fact that entering these orders would send such a false signal to market participants—a signal that injected false information about supply and demand into the market.

46. The risk that his Spoof Orders could mislead other market participants into believing there was genuine supply or demand was so obvious that Shak must have been aware of it. Shak knew that his Spoof Orders would appear in the order book and that traders often considered order book information in making trading decisions. Shak knew that although his Spoof Orders were visible to the rest of the market, his identity as the originator of those orders was not. Accordingly, Shak knew that other market participants could not see that the same trader had placed all of the Spoof Orders, or that the same trader had placed the Spoof Orders and the Genuine Orders, which might have tipped off market participants that his Spoof Orders were not bona fide. In instances when Shak's Genuine Orders were icebergs, Shak also knew that other market participants could not see that his Genuine Orders were iceberg orders, and did not know that only a small portion of the full order was visible to the market.

47. Shak knew or recklessly disregarded that the false information about supply and demand would trick other market participants into trading against his Genuine Orders on the opposite side of the market—allowing those Genuine Orders to fill sooner, at a better price, or in larger quantities than they otherwise would.

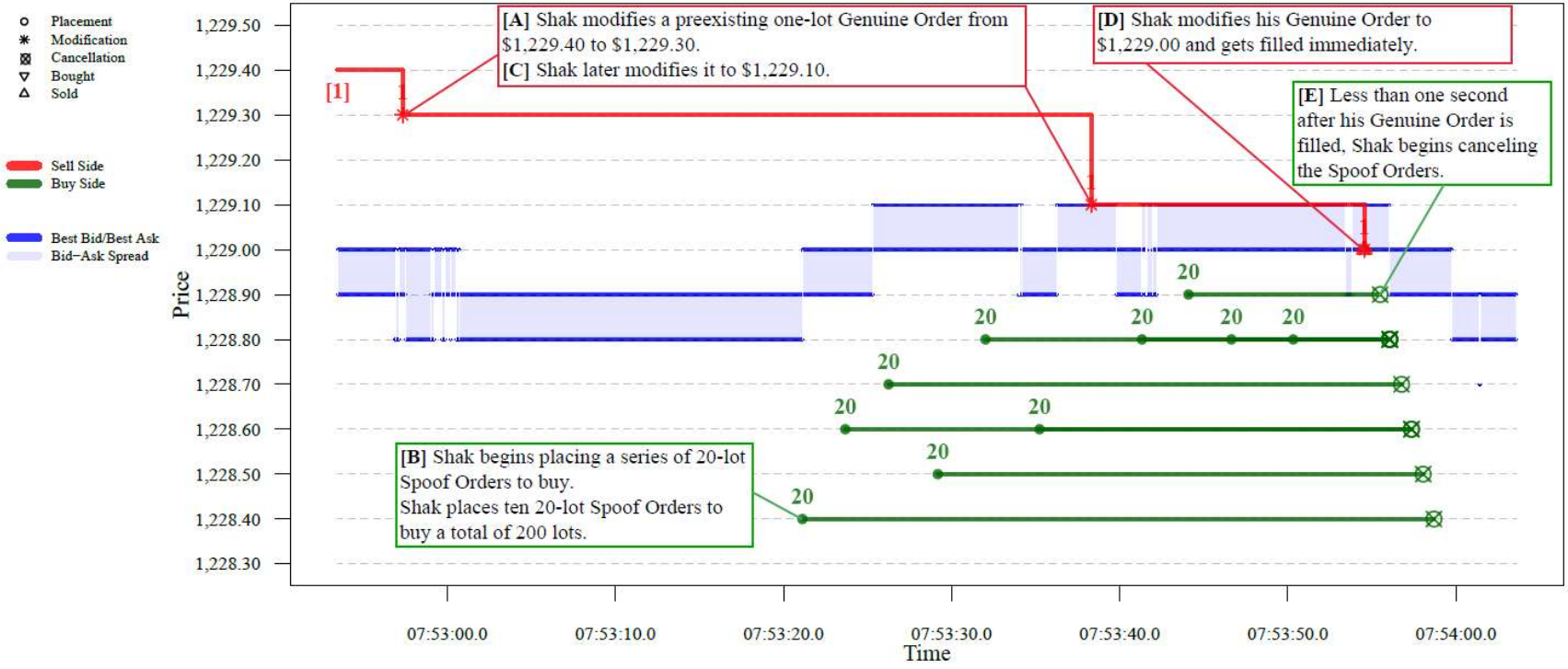
D. Examples of Shak's Spoofing Scheme

48. A few examples of Shak's spoofing activity are described below. All of these examples share a common theme that is generally consistent with Shak's spoofing activity throughout the Relevant Period: Shak placed a small Genuine Order (or Orders) on one side of the market, quickly preceded or followed by one or more Spoof Orders on the opposite side of the

market. These Spoof Orders created or exacerbated a market imbalance (and concomitant price pressure) and were cancelled within close proximity of the Genuine Order being filled.

Example 1: March 3, 2017

Chart 1 (07:52:53.486 − 07:54:03.574)



49. At 7:52:57.348 AM on March 3, 2017, Shak modified a preexisting one-lot Genuine Order to sell the April 2017 Gold contract, changing it from a price of $1,229.40 to $1,229.30.[5] At that point the bid-ask spread was at $1,228.90/$1,229.00, meaning Shak's Genuine Order was three ticks away from the best offer and would be filled if the best bid moved up by four ticks and any other orders ahead of him in the queue at $1,229.30 were filled. In other words, it would benefit Shak if the bid-ask spread moved up towards his Genuine Order, allowing him to sell at a higher price than was currently available.

50. Between 7:52:56.906 and 7:53:00.696, the bid-ask spread vacillated between $1,228.90/$1,229.00 and $1,228.80/$1,228.90, settling at $1,228.80/$1,228.90 at 7:53:00.696. Starting at 7:53:21.124, Shak began placing a series of 20-lot Spoof Orders to buy the April 2017 Gold contract, starting at $1,228.40 and moving closer to the best bid. Between 7:53:21.124 and 7:53:50.324, Shak placed ten 20-lot Spoof Orders to buy a total of 200 lots, in the following sequence:

- $1,228.40
- $1,228.60
- $1,228.70
- $1,228.50
- $1,228.80
- $1,228.60
- $1,228.80
- $1,228.90
- $1,228.80
- $1,228.80.[6]

51. In total, Shak placed one 20-lot Spoof Order at each of $1,228.40, $1,228.50, $1,228.70, and $1,228.90; two 20-lot Spoof Orders at $1,228.60, and four 20-lot Spoof Orders at $1,228.80. As Shak was placing these Spoof Orders—and perhaps in response to the false signals

[5] Chart 1 at [A].
[6] Chart 1 at [B].

of demand they conveyed—the bid-ask spread ticked up, vacillating between $1,228.90/$1,229.00 and $1,229.00/$1,229.10. Although Shak placed Spoof Orders at $1,228.80 and $1,228.90, he waited to place those Spoof Orders until the best bid was above those price levels, at which point they would be at less risk of being filled.

52. At 7:53:38.312, in the midst of placing the 20-lot Spoof Orders, Shak modified his Genuine Order down to a price of $1,229.10, which was at that time the best offer.[7] After allowing the Genuine Order to rest at that price for approximately 16 seconds, Shak modified that order again to a price of $1,229.00 at 7:53:54.558.[8] Because the best bid at that point in time was $1,229.00, Shak's one-lot Genuine Order to sell became an aggressive order that crossed the bid-ask spread and filled immediately at 7:53:54.558.

53. Less than a second after the Genuine Order was filled, Shak began canceling his 20-lot Spoof Orders.[9] He started by canceling his Spoof Order at $1,228.90 at 7:53:55.488, and cancelled the last Spoof Order at 7:53:58.693. Shak canceled all ten Spoof Orders in the span of a little more than three seconds, meaning that on average it took approximately 300 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the order closest to the bid-ask spread and at greatest risk of being hit, and ending with the order furthest from the bid-ask spread and at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them. Moreover, the swiftness with which Shak canceled his Spoof Orders, and the order in which he did so, allowed him to avoid being filled on his Spoof Orders. A little more than one

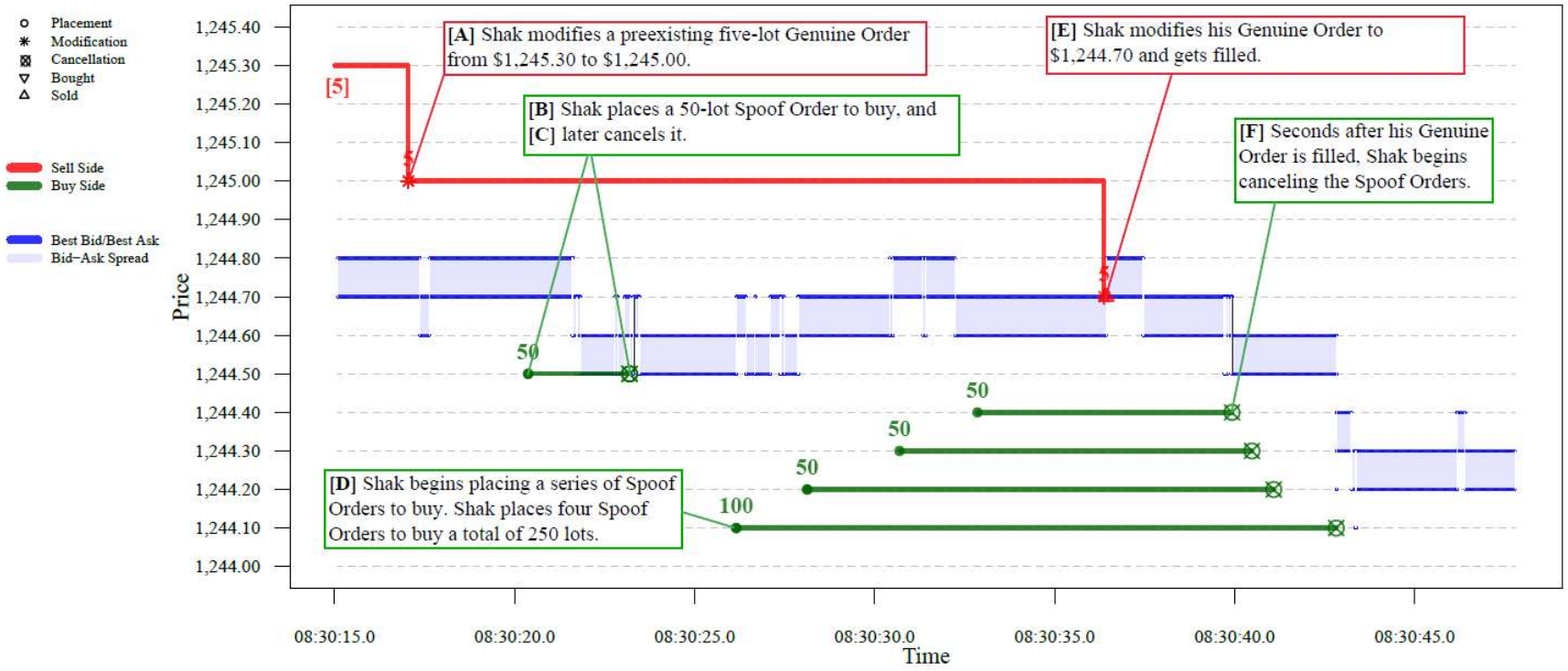
[7] Chart 1 at [C].
[8] Chart 1 at [D].
[9] Chart 1 at [E].

second after he canceled his last Spoof Order, the best offer dropped to $1,228.90, meaning that his Spoof Order to buy at that price level might have been filled if he had not canceled it so quickly.

54. In summary, while waiting for a fill on one-lot Genuine Order to sell, Shak placed upward pressure on the price by placing ten Spoof Orders to buy a total of 200 lots, which, at the time he entered the orders he intended to cancel, and, in fact, did cancel without any lots being filled. When Shak began placing his Spoof Orders, the best price he could have filled his Genuine Order at was $1,228.80 (i.e. he would have to have sold lower than he wanted). As he began placing Spoof Orders to buy, the bid-ask spread moved up such that his Genuine Order could ultimately be fully filled at $1,229.00. In other words, Shak's spoofing allowed him to fill his Genuine Order at a better price than he otherwise might have obtained if he had not placed the Spoof Orders.

Example 2: March 24, 2017

Chart 2 (08:30:15.082 − 08:30:47.777)



55. At 8:30:17.046 AM on March 24, 2017, Shak modified a preexisting five-lot Genuine Order to sell the April 2017 Gold contract, changing it from a price of $1,245.30 to $1,245.00.[10] At that point in time the bid-ask spread was at $1,244.70/$1,244.80, meaning Shak's Genuine Order was two ticks away from the best offer and would be filled if the best bid moved up by three ticks and any other orders ahead of him in the queue at $1,245.00 were filled. In other words, it would benefit Shak if the bid-ask spread moved up towards his Genuine Order, allowing him to sell at a higher price than was currently available.

56. At 8:30:20.375, Shak placed a 50-lot Spoof Order to buy at $1,244.50.[11] Shak canceled that order at 8:30:23.191, a few seconds after the best bid momentarily dropped to $1,244.50, putting the Spoof Order at greater risk of being hit.[12] This suggests that he did not intend to fill this Spoof Order but was instead using it to send false signals of increased demand in order to trick market participants into executing against the Genuine Order that he actually wanted filled.

57. Starting at 8:30:26.155, Shak began placing a series of Spoof Orders to buy, starting at $1,244.10 and moving closer to the best bid. Between 8:30:26.155 and 8:30:32.855, Shak placed four Spoof Orders to buy a total of 250 lots, in the following sequence:

- 100-lot order at $1,244.10
- 50-lot order at $1,244.20
- 50-lot order at $1,244.30
- 50-lot order at $1,244.40.[13]

58. At 8:30:36.372, after he finished placing the Spoof Orders, Shak modified his Genuine Order down to a price of $1,244.70, which was at that time the best offer. After less than

[10] Chart 2 at [A].
[11] Chart 2 at [B].
[12] Chart 2 at [C].
[13] Chart 2 at [D].

100 milliseconds, another trader crossed the bid-ask spread (perhaps in response to the false signals of demand conveyed by Shak's Spoof Orders) and filled Shak's Genuine Order at 8:30:36.432.[14]

59. Seconds after the Genuine Order was filled, Shak began canceling his Spoof Orders.[15] He started by canceling his Spoof Order at $1,244.40 at 8:30:39.924, and cancelled the last Spoof Order at 8:30:42.819. Shak canceled all four remaining Spoof Orders in the span of a little less than three seconds, meaning that on average it took approximately 750 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the order closest to the bid-ask spread and at greatest risk of being hit, and ending with the order furthest from the bid-ask spread and at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them. Moreover, the swiftness with which Shak canceled his Spoof Orders, and the order in which he did so, allowed him to avoid being filled on his Spoof Orders. Less than one second after he canceled his last Spoof Order, the best offer dropped to $1,244.20, meaning that his Spoof Orders at $1,244.40, $1,244.30, and $1,244.20 might have been filled if he had not canceled them so quickly.

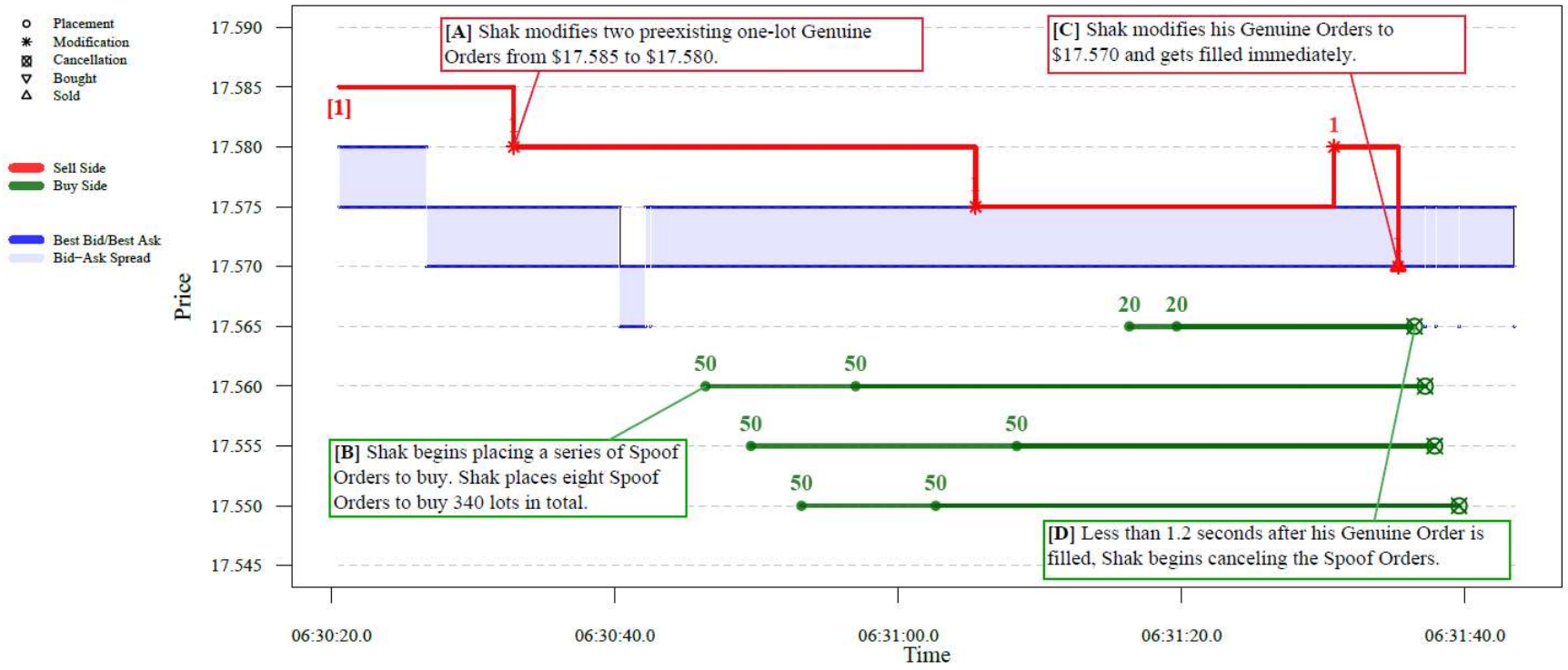
60. In summary, while waiting for a fill on a five-lot Genuine Order to sell, Shak placed upward pressure on the price by placing five Spoof Orders to buy a total of 300 lots, which he intended to cancel, and which he did cancel without any lots being filled. Shak took additional steps to ensure that his Spoof Orders would not be filled, including leaving the Spoof Orders

[14] Chart 2 at [E].
[15] Chart 2 at [F].

closest to the best bid on the order book for the shortest period of time, and quickly canceling one of his Spoof Orders after the best bid moved to the same price level, putting that Spoof Order at increased risk of being hit. At 8:30:26.155, when Shak began placing the series of Spoof Orders to buy, the best price he could have filled his Genuine Order at was $1,244.50 (i.e. he would have to have sold lower than he wanted). As he began placing Spoof Orders to buy, the market moved such that his Genuine Order could ultimately be fully filled at $1,244.70. In other words, Shak's spoofing allowed him to fill his Genuine Order at a better price than he otherwise might have obtained if he had not placed the series of Spoof Orders.

Example 3: September 18, 2017

Chart 3 (06:30:20.529 − 06:31:43.479)



61. At 6:30:32.856 AM on September 18, 2017, Shak modified two one-lot Genuine Orders to sell the December 2017 Silver contract, changing them from a price of $17.585 to $17.580.[16] At that point in time the bid-ask spread was at $17.570/$17.575, meaning Shak's Genuine Orders were one tick away from the best offer and two ticks away from the best bid, and would be filled if the best bid moved up by two ticks and any other orders ahead of him in the queue at $17.580 were filled. In other words, it would benefit Shak if the bid-ask spread moved up towards his Genuine Order, allowing him to sell at a higher price than was currently available.

62. At 6:30:40.323, the bid-ask spread dropped, reaching $17.565/$17.570 before rising back to $17.570/$17.575 at 6:30:42.173. Shortly thereafter, Shak began placing a series of Spoof Orders to buy the December 2017 Silver contract. Between 6:30:46.389 and 6:31:19.636, Shak placed eight Spoof Orders to buy a total of 340 lots, in the following sequence:

- 50-lot order at $17.560
- 50-lot order at $17.555
- 50-lot order at $17.550
- 50-lot order at $17.560
- 50-lot order at $17.550
- 50-lot order at $17.555
- 20-lot order at $17.565
- 20-lot order at $17.565.[17]

63. In total, Shak placed two 50-lot Spoof Orders at each of $17.550, $17.555, and $17.560; and two 20-lot Spoof Orders at $17.565. Although Shak placed Spoof Orders at $17.565, he waited until the best bid was above that price level to place those Spoof Orders.

64. While he was placing the Spoof orders, at 6:31:05.446, Shak modified his Genuine Orders to a price of $17.575, which was at that time the best offer. At 6:31:30.746, Shak modified the Genuine Orders again, moving them to a price of $17.580. After allowing the

[16] Chart 3 at [A].
[17] Chart 3 at [B].

Genuine Orders to rest at that price for approximately 4.5 seconds, Shak modified the Genuine Orders again to a price of $17.570 at 6:31:35.275. Because the best bid at that point in time was $17.570, Shak's Genuine Orders became aggressive orders that crossed the bid-ask spread and filled immediately at 6:31:35.275.[18]

65. Less than 1.2 seconds after the Genuine Orders was filled, Shak began canceling his Spoof Orders.[19] He started by canceling his Spoof Orders at $17.565 at 6:31:36.432, and cancelled the last Spoof Order at 6:31:39.576. Shak canceled all eight Spoof Orders in the span of a little more than three seconds, meaning that on average it took approximately 400 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the orders closest to the bid-ask spread and thus the order and at greatest risk of being hit, and ending with the order furthest from the bid-ask spread and at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them.

66. In summary, while waiting for a fill on two one-lot Genuine Orders to sell, Shak placed upward pressure on the price by placing eight Spoof Orders to buy a total of 340 lots, which he intended to cancel, and which he did cancel without any lots being filled. Shak took additional steps to ensure that his Spoof Orders would not be filled, including leaving the Spoof Orders closest to the best bid on the order book for the shortest period of time.

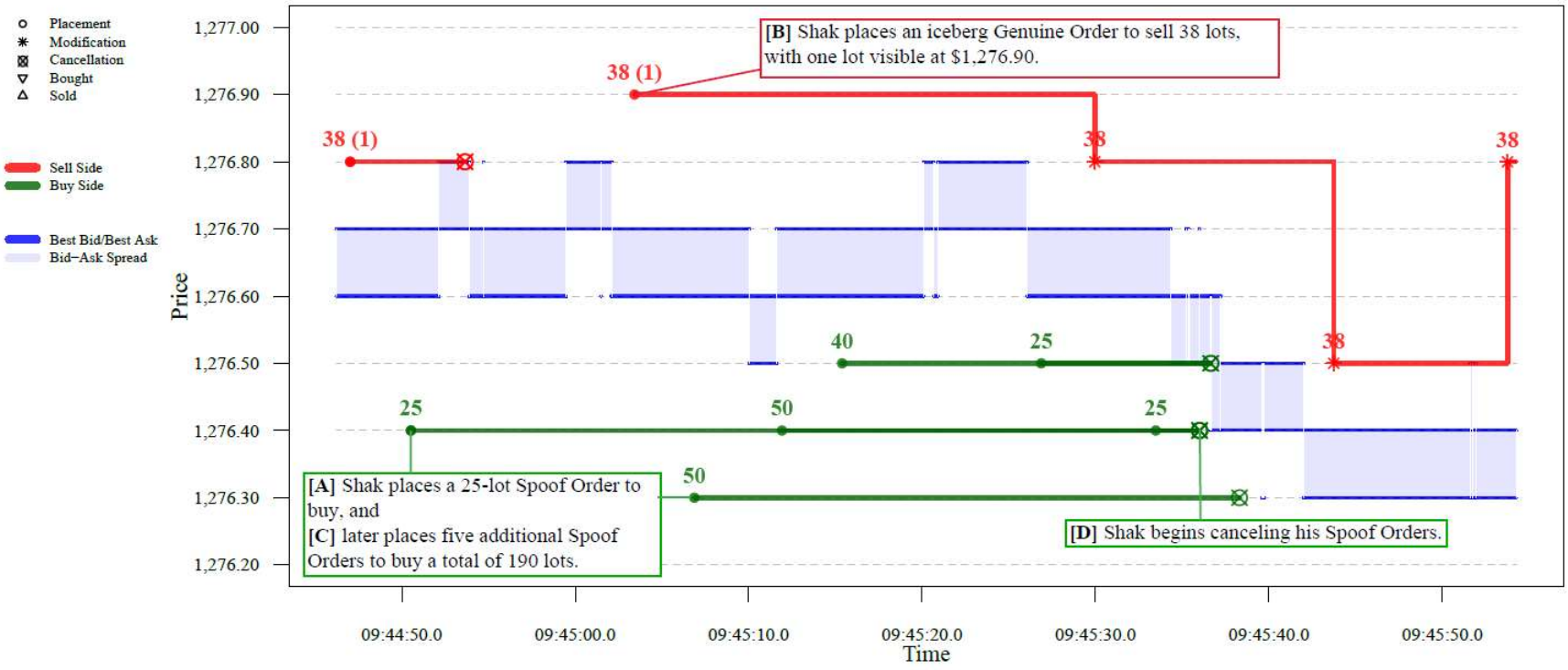
67. Although Shak's Spoof Orders did not actually move the bid-ask spread—it remained at $17.570/$17.575 from the time he began placing his Spoof Orders until he filled his

[18] Chart 3 at [C].
[19] Chart 3 at [D].

Genuine Orders at $17.570—that is irrelevant. Shak placed the Spoof Orders with the intent to cancel them, with the intent to convey false signals of demand to the marketplace, and with the intent to apply upward price pressure in order to get a better price on his Genuine Orders. Indeed, shortly before Shak placed his Spoof Orders, the bid-ask spread momentarily dropped to $17.565/$17.570. If Shak had not placed his Spoof Orders, the bid-ask spread may have dropped further, meaning that Shak's spoofing may have allowed him to fill his Genuine Orders at a better price or more quickly than he could have if he had not placed the Spoof Orders.

Example 4: October 5, 2017[20]

Chart 4A (09:44:46.238 - 09:45:54.252)



[20] Orders with parentheses are iceberg orders—the first number is the total number of lots in the order, and the number within the parentheses is the number of orders that was visible to the marketplace.

68. At 9:44:50.525, Shak placed a 25-lot Spoof Order to buy the December 2017 Gold contract at $1,276.40.[21] At 9:45:03.418. Shak placed an iceberg Genuine Order to sell 38 lots of the December 2017 Gold contract, with one lot visible to the market at $1,276.90.[22] At that point in time the bid-ask spread was at $1,276.60/$1,276.70, meaning Shak's Genuine Order was two ticks away from the best offer and three ticks away from the best bid, and would be filled if the best bid moved up by three ticks and any other orders ahead of him in the queue at $1,276.90 were filled. In other words, it would benefit Shak if the bid-ask spread moved up towards his Genuine Order, allowing him to sell at a higher price than was currently available.

69. At 9:45:06.867, Shak began placing more Spoof Orders to buy the December 2017 contract. Between 9:45:06.867 and 9:45:33.476, Shak placed five Spoof Orders to buy a total of 190 lots, in the following sequence:

- 50-lot order at $1,276.30
- 50-lot order at $1,276.40
- 40-lot order at $1,276.50
- 25-lot order at $1,276.50
- 25-lot order at $1,276.40.[23]

70. Including the 25-lot Spoof Order Shak placed at 9:44:50.525, Shak placed one order for a total of 50 lots at $1,276.30, three orders for a total of 100 lots at $1,276.40, and two orders for a total of 65 lots at $1,276.50.

71. Despite Shak's attempt to apply upward price pressure by placing Spoof Orders to buy in order to drive prices up towards his Genuine Order, the bid-ask spread actually dropped while Shak was in the process of placing his Spoof Orders. At 9:45:36.34.320, the best bid

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[21] Chart 4A at [A].

[22] Chart 4A at [B]. Prior to placing his 25-lot Spoof Order, Shak placed an iceberg Genuine Order to sell 38 lots of the December 2017 Gold contract at 9:44:47.025 AM, which he canceled after placing the 25-lot Spoof Order, at 9:44:53.645.

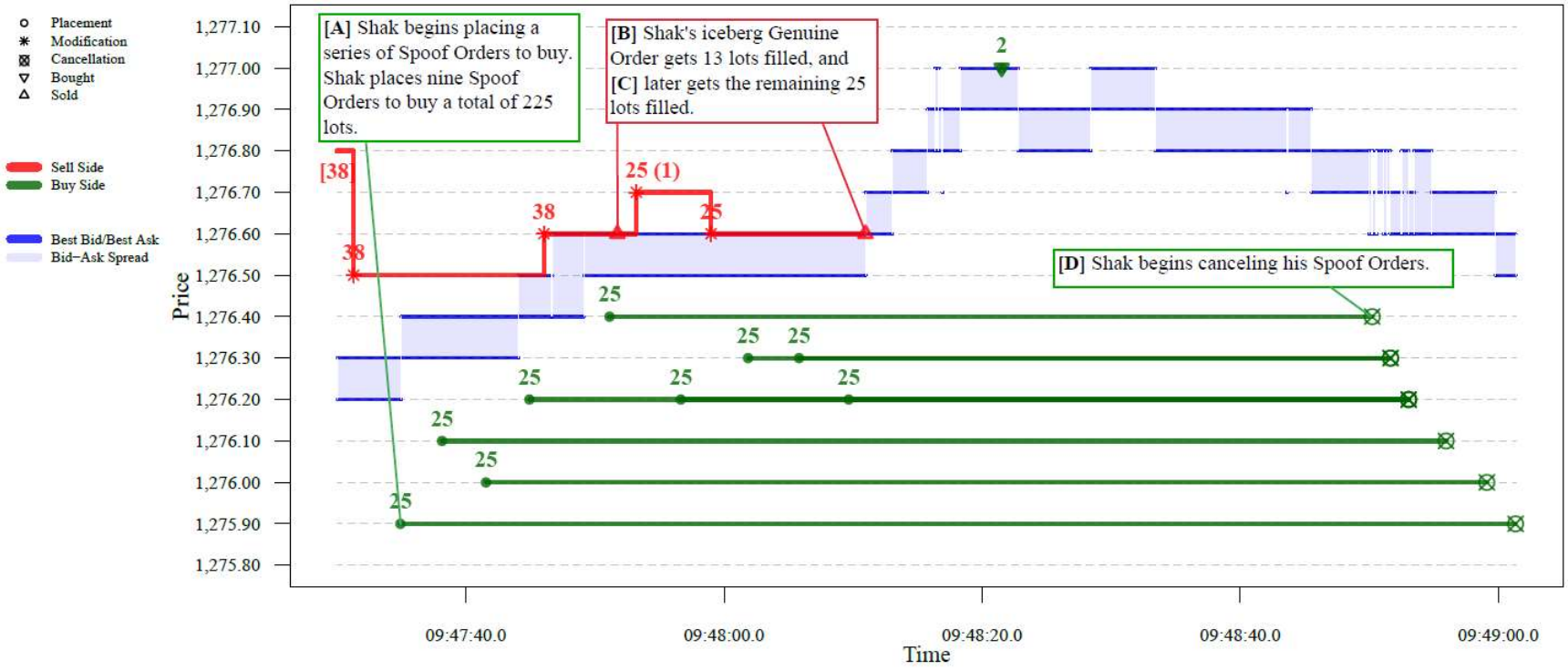
[23] Chart 4A at [C].

moved to $1,276.50, putting Shak's Spoof Orders at that price level at increased risk of being hit, before temporarily moving back up to $1,276.60 and then dropping back down to $1,276.50 at 9:45:35.382. Shak acted quickly, starting to cancel his Spoof Orders less than 2 seconds after the best bid first dropped to $1,276.50, and less than 700 milliseconds after the best bid dropped to that level a second time.[24] Shak canceled his orders at $1,276.40 at 9:45:36.004, the orders at $1,276.50 at 9:45:36.646, and the orders at $1,276.30 at 9:45:38.302. After Shak canceled these orders, the bid-ask spread dropped to $1,276.30/$1,276.40 from 9:45:39.598 to 9:45:39.710, then moved up to $1,276.40/$1,276.50 briefly, and returned to $1,276.30/$1,276.40 from 9:45:41.995 to 9:45:51.595, meaning that Shak's Spoof Orders might have been hit had he not acted quickly to cancel them.

72. Around the same time that Shak was canceling the Spoof Orders, he made several modifications to his iceberg Genuine Order to move it closer to the bid-ask spread, moving it from $1,276.90 to $1,276.80 at 9:45:29.963, and from $1,276.80 to $1,276.50 at 9:45:43.739. In other words, Shak canceled his Spoof Orders as the market got closer to them but modified his iceberg Genuine Order multiple times to bring it closer to the bid-ask spread. This suggests that he did not intend to fill the Spoof Orders but was instead using them to send false signals of increased demand in order to trick market participants into executing against the Genuine Order that he actually wanted filled. Although Shak's attempt to do so was initially unsuccessful, he tried again a short time later, this time with greater success.

[24] Chart 4A at [D].

Chart 4B (09:47:30.054 - 09:49:01.332)



73. At 9:47:27.738 the bid-ask spread momentarily bottomed out at $1,276.00/$1,276.10, before rising to $1,276.20/$1,276.30 at 9:47:27.936. Shortly thereafter, Shak began placing a series of Spoof Orders to buy the December 2017 contract. Between 9:47:34.921 and 9:48:09.661, Shak placed nine Spoof Orders to buy a total of 225 lots, in the following sequence:

- 25-lot order to buy at $1,275.90
- 25-lot order to buy at $1,276.10
- 25-lot order to buy at $1,276.00
- 25-lot order to buy at $1,276.20
- 25-lot order to buy at $1,276.40
- 25-lot order to buy at $1,276.20
- 25-lot order to buy at $1,276.30
- 25-lot order to buy at $1,276.30
- 25-lot order to buy at $1,276.20.[25]

74. In total, Shak placed three 25-lot orders at $1,276.20, two 25-lot orders at $1,276.30, and one 25-lot order at each of the other price levels. The bid-ask spread was at $1,276.20/$1,276.30 when Shak began placing his Spoof Orders. Although Shak placed Spoof Orders at $1,276.20 and $1,276.30, he did not do so until the bid-ask spread moved above those price levels (perhaps in response to the false signals of demand conveyed by Shak's Spoof Orders). At that point, Shak could place Spoof Orders at those price levels with less risk that they would be hit. Similarly, Shak did not place the 25-lot Spoof Order at $1,276.40 until almost two seconds after the bid-ask spread moved up to $1,276.50/$1,276.60.

75. Perhaps recognizing that the market was moving quickly upward in response to the false signals of increased demand communicated by Shak's Spoof Orders, Shak increased the price of his iceberg Genuine Order in an attempt to sell at a higher price, moving it from

[25] Chart 4B at [A].

$1,276.50 to $1,276.60 at 9:47:46.043. At 9:47:51.739, another trader or traders crossed the bid-ask spread (perhaps in response to the false signals of demand conveyed by Shak's Spoof Orders) and partially filled Shak's Genuine Order, hitting 13 lots at $1,276.60 and leaving Shak with 25 lots unfilled.[26] Despite receiving a partial fill of 13 lots, Shak's Genuine Order remained an iceberg, meaning that only one lot was visible to the rest of the market. At 9:47:53.207, Shak again modified his iceberg Genuine Order in an attempt to sell at a higher price, moving it from $1,276.60 to $1,276.70. After the order rested there for almost six seconds, Shak modified it back down to $1,276.60 at 9:47:58.990. Between 9:48:10.952 and 9:48:10.953, another trader or traders crossed the bid-ask spread (perhaps in response to the false signals of demand conveyed by Shak's Spoof Orders) and filled the remaining 25 lots of Shak's iceberg order.[27]

76. After Shak's iceberg Genuine Order filled, the market continued to move upward, with the bid-ask spread reaching a high of $1,276.90/$1,277.00 at 9:48:28.402. At that point, the Spoof Order closest to the bid-ask spread, Shak's 25-lot buy order at $1,276.40, was six ticks away from the best offer, and thus at relatively low risk of being hit. That changed, however, as the bid-ask spread dropped several times over the span of a few seconds, moving to $1,276.80/$1,276.90 at 9:48:33.455, to $1,276.70/$1,276.80 at 9:48:43.646, and $1,276.60/$1,276.70 at 9:48:49.964. Perhaps recognizing that the market was moving towards his Spoof Orders and the risk of the Spoof Orders being hit was increasing, Shak started canceling his Spoof Orders at 9:48:50.225.[28] All nine Spoof Orders were canceled in approximately 11 seconds, meaning that on average it took approximately 1.2 seconds to cancel each Spoof Order.

[26] Chart 4B at [B].
[27] Chart 4B at [C].
[28] Chart 4B at [D].

Shak canceled the first seven Spoof Orders in order by price, starting with the order closest to the bid-ask spread that was at greatest risk of being hit.[29] The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them.

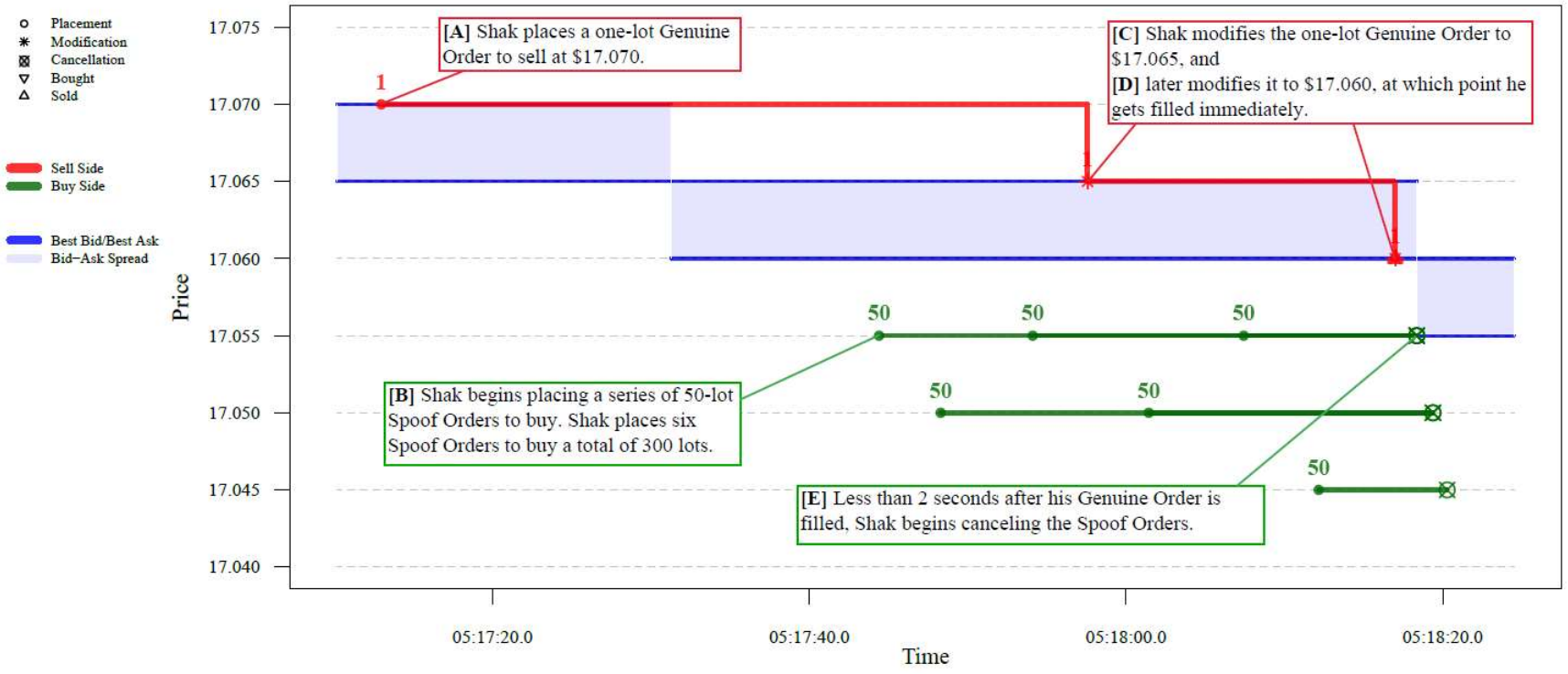
77. In summary, while waiting for a fill on a 38-lot iceberg Genuine Order to sell that had only one lot visible on the market, Shak first placed upward pressure on the price by placing six Spoof Orders for a total of 215 lots, which he intended to cancel, which he canceled without any lots being filled, and which he waited to cancel until the bid-ask spread began to move towards those orders, placing them at increased risk of being filled. After canceling those six Spoof Orders, and while still waiting for a fill on his 38-lot iceberg Genuine Order, Shak again placed upward pressure on the price by placing nine more Spoof Orders for a total of 225 lots, which he intended to cancel, and which were canceled without any lots being filled. As with the first series of Spoof Orders, Shak canceled the second series of Spoof Orders as it became apparent that the bid-ask spread was moving towards those orders, placing them at increased risk of being filled.

78. When Shak began placing the second series of Spoof Orders, the best price he could have filled his Genuine Order at was $1,276.20 (i.e. he would have to have sold lower than he wanted). As he began placing the second series of Spoof Orders , the bid-ask spread moved such that his Genuine Order could ultimately be fully filled at $1,276.60. In other words, Shak's spoofing allowed him to fill his Genuine Order at a better price, more quickly, or in a larger quantity than he otherwise might have been able to if he had not placed the Spoof Orders.

[29] The last two Spoof Orders were canceled by another trader with whom Shak had a trading partnership.

Example 5: January 22, 2018

Chart 5 (05:17:10.185 − 05:18:24.493)



79. At 5:17:12.964 AM on January 22, 2018, Shak placed a one-lot Genuine Order to sell the March 2018 Silver contract at $17.070.[30] At that point in time the bid-ask spread was at $17.065/$17.070, meaning Shak's Genuine Order was at the best offer and one tick away from the best bid, and would be filled if another trader or traders crossed the bid-ask spread and any other orders ahead of him in the queue at $17.070 were filled. In other words, it would benefit Shak if the bid-ask spread moved up towards his Genuine Order, allowing him to sell at a higher price than was currently available.

80. At 5:17:31.260 the bid-ask spread moved to $17.060/$17.065. Shortly thereafter, Shak began placing a series of Spoof Orders to buy the March 2018 Silver contract. Between 5:17:44.407 and 5:18:12.169, Shak placed six Spoof Orders to buy a total of 300 lots, in the following sequence:

- 50-lot order to buy at $17.055
- 50-lot order to buy at $17.050
- 50-lot order to buy at $17.055
- 50-lot order to buy at $17.050
- 50-lot order to buy at $17.055
- 50-lot order to buy at $17.045.[31]

81. In total, Shak placed three 50-lot Spoof Orders at $17.055, two 50-lot Spoof Orders at $17.050; and one 50-lot Spoof Order at $17.045.

82. At 5:17:57.565, Shak modified his Genuine Order to a price of $17.065, which was at that time the best offer.[32] After allowing the Genuine Order to rest at that price for approximately 20 seconds, Shak modified the Genuine Order again to a price of $17.060 at 5:18:16.998. Because $17.060 was the best bid, Shak's Genuine Order became an aggressive

[30] Chart 5 at [A].
[31] Chart 5 at [B].
[32] Chart 5 at [C].

order that crossed the bid-ask spread and filled immediately at 5:18:16.998.[33] After Shak filled his Genuine Order, the bid-ask spread ticked down again, dropping to $17.055/$17.060 at 5:18:18.365.

83. Less than 2 seconds after the Genuine Orders was filled, and one millisecond before the best bid dropped to $17.055, Shak began canceling his Spoof Orders.[34] He started by canceling his Spoof Orders at $17.055 at 5:18:18.364, which were at a higher risk of being hit by virtue of being closest to the best bid. Shak cancelled the last Spoof Order at 5:18:20.286. Shak canceled all six Spoof Orders in the span of less than two seconds, meaning that on average it took less than 350 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the orders that were at greatest risk of being hit, and ending with the order furthest from the bid-ask spread that was at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them.

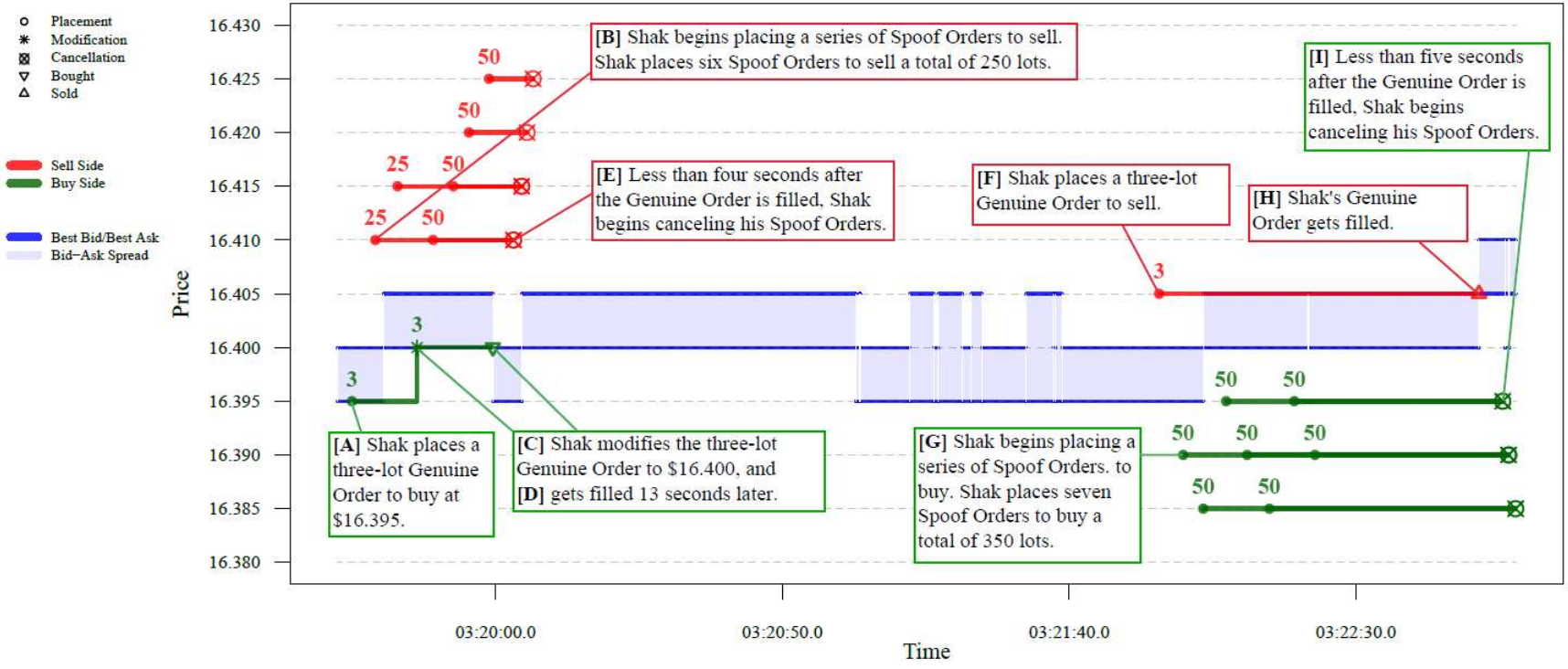
84. In summary, while waiting for a fill on a one-lot Genuine Order to sell, Shak placed upward pressure on the price by placing six Spoof Orders to buy a total of 300 lots, which he intended to cancel, and which he did cancel without any lots being filled. Shak took additional steps to ensure that his Spoof Orders would not be filled, including canceling the Spoof Orders closest to the bid-ask spread first, and acting quickly to cancel his Spoof Orders when it became apparent that the market was moving towards them.

[33] Chart 5 at [D].
[34] Chart 5 at [E].

85. Although Shak's Spoof Orders did not actually move the bid-ask spread—it remained at $17.060/$17.065 from the time he began placing his Spoof Orders until he filled his Genuine Order at $17.060—that is irrelevant. Shak placed the Spoof Orders with the intent to cancel them, with the intent to convey false signals of demand to the marketplace, and with the intent to apply upward price pressure in order to get a better price on his Genuine Orders. Indeed, shortly before Shak placed his Spoof Orders, the bid-ask spread dropped to $17.060/$17.065, and it dropped again to $17.055/$17.060 just milliseconds after Shak began canceling his Spoof Orders, and remained there thereafter. If Shak had not placed his Spoof Orders, the bid-ask spread may have dropped sooner or further, meaning that Shak's spoofing may have allowed him to fill his Genuine Order at a better price or more quickly than he could have if he had not placed the Spoof Orders.

Example 6: February 21, 2018

Chart 6 (03:19:32.448 − 03:22:57.819)



86. At 3:19:34.946 AM on February 21, 2018, Shak placed a three-lot Genuine Order to buy the March 2018 Silver contract at $16.395.[35] At that point in time the bid-ask spread was at $16.395/$16.400, meaning Shak's Genuine Order was at the best bid and would be filled if a trader or traders crossed the bid-ask spread and any other orders ahead of him in the queue at $16.395 were filled. In other words, it would benefit Shak if the market moved towards his Genuine Order, allowing him to buy at a lower price than was currently available.

87. At 3:19:39.023, Shak began placing a series of Spoof Orders to sell the March 2018 Silver contract. Between 3:19:39.023 and 3:19:58.855, Shak placed six Spoof Orders to sell a total of 250 lots, in the following sequence:

- 25-lot order at $16.410
- 25-lot order at $16.415
- 50-lot order at $16.410
- 50-lot order at $16.415
- 50-lot order at $16.420
- 50-lot order at $16.425.[36]

88. At 3:19:40.533, shortly after Shak placed his first Spoof Order, the bid-ask spread moved up to $16.400/$16.405. In the midst of placing his Spoof Orders, at 3:19:46.312, Shak modified his Genuine Order to the best bid, $16.400.[37] After the modified Genuine Order rested on the order book for approximately 13 seconds, another trader or traders crossed the bid-ask spread (perhaps in response to the false signals of supply conveyed by Shak's Spoof Orders) and filled Shak's Genuine Order at 3:19:59.508.[38]

89. Less than four seconds after the Genuine Orders were filled, Shak began canceling his Spoof Orders.[39] He started by canceling his Spoof Orders at $16.410 at 3:20:03.105, and

[35] Chart 6 at [A].
[36] Chart 6 at [B].
[37] Chart 6 at [C].
[38] Chart 6 at [D].
[39] Chart 6 at [E].

cancelled the last Spoof Order at 3:20:06.537. Shak canceled all six Spoof Orders in the span of approximately three and a half seconds, meaning that on average it took less than 600 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the orders at the best bid that were at greatest risk of being hit, and ending with the order furthest from the bid-ask spread that was at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them.

90. A few minutes after successfully placing and canceling Spoof Orders on the sell side of the market in order to fill a three-lot Genuine Order on the buy side of the market, Shak reversed course and placed Spoof Orders on the buy side of the market in order to fill a three-lot Genuine Order on the sell-side of the market.

91. At 3:21:55.679 AM on February 21, 2018, Shak placed a three-lot Genuine Order to sell the March 2018 Silver contract at $16.405.[40] At that point in time the bid-ask spread was $16.395/$16.400, meaning Shak's Genuine Order was one tick away from the best offer and two ticks away from the best bid, and would be filled if the best bid moved up by two ticks and any other orders ahead of him in the queue at $16.405 were filled. In other words, it would benefit Shak if the bid-ask spread moved up towards his Genuine Order, allowing him to sell at a higher price than was currently available.

92. At 3:21:59.867, Shak began placing a series of Spoof Orders to buy the March 2018 Silver contract. Between 3:21:59.867 and 3:22:22.838, Shak placed seven Spoof Orders to buy a total of 350 lots, in the following sequence:

[40] Chart 6 at [F].

- 50-lot order at $16.390
- 50-lot order at $16.385
- 50-lot order at $16.395
- 50-lot order at $16.390
- 50-lot order at $16.385
- 50-lot order at $16.395
- 50-lot order at $16.390.[41]

93. Although Shak placed Spoof Orders at $16.395, he waited until the best bid was above that price level to place those Spoof Orders.

94. At 3:22:03.367, shortly after Shak placed his first two Spoof Orders—and perhaps in response to the false signals of demand they conveyed—the bid-ask spread moved up to $16.400/$16.405, meaning that Shak's Genuine Order was now at the best offer. At 3:22:51.442, another trader crossed the bid-ask spread (perhaps in response to the false signals of demand conveyed by Shak's Spoof Orders) and filled Shak's Genuine Order.[42]

95. Less than five seconds after the Genuine Order was filled, Shak began canceling his Spoof Orders.[43] He started by canceling his Spoof Orders at $16.395 at 3:22:55.576, and cancelled the last Spoof Order at 3:22:57.819. Shak canceled all seven Spoof Orders in the span of approximately two and a half seconds, meaning that on average it took less than 400 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the orders at the best bid that were at greatest risk of being hit, and ending with the order furthest from the bid-ask spread that was at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them.

[41] Chart 6 at [G].
[42] Chart 6 at [H].
[43] Chart 6 at [I].

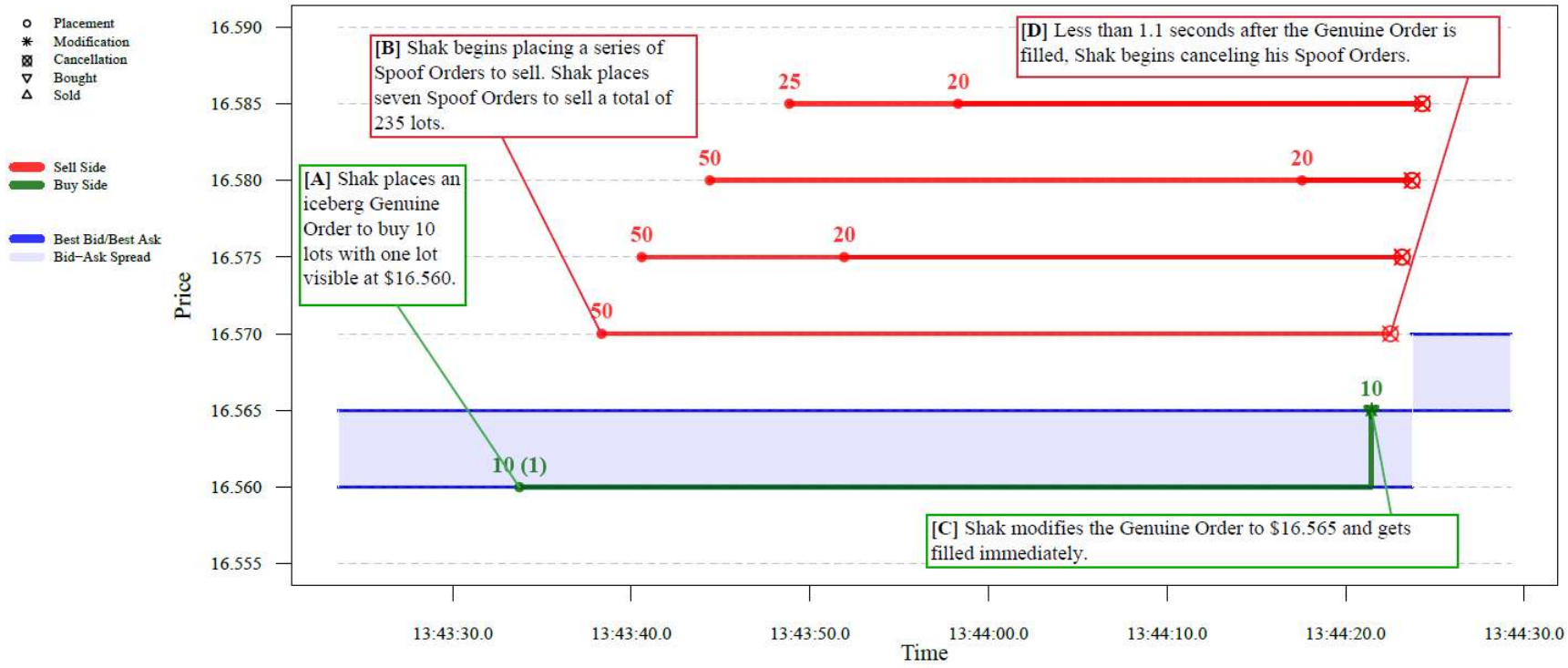
96. In summary, while waiting for a fill on a three-lot Genuine Order to buy, Shak placed downward pressure on the price by placing six Spoof Orders to sell a total of 250 lots, which he intended to cancel, and which he did cancel without any lots being filled. Although Shak's Spoof Orders to sell did not actually move the bid-ask spread—it remained at $16.400/$16.405 for most of the time those Spoof Orders were on the market—that is irrelevant. Shak placed the Spoof Orders with the intent to cancel them, with the intent to convey false signals of supply to the marketplace, and with the intent to apply downward price pressure in order to get a better price on his Genuine Orders. Indeed, approximately 500 milliseconds after Shak placed his first Spoof Order, the bid-ask spread moved up to $16.400/$16.405, and might have risen further if Shak had not placed additional Spoof Orders. In addition, the trader or traders that crossed the bid-ask spread to fill Shak's Genuine Order to buy may have done so in response to the false signals of supply conveyed by Shak's Spoof Orders. In other words, Shak's spoofing on the sell side of the market may have allowed him to fill his Genuine Order to buy at a better price, more quickly, or in a larger quantity than he could have if he had not placed the Spoof Orders.

97. A few minutes later, while waiting for a fill on a three-lot Genuine Order to sell, Shak placed upward pressure on the price by placing seven Spoof Orders to buy a total of 350 lots, which he intended to cancel, and which he did cancel without any lots being filled. When Shak began placing his Spoof Orders to buy, the best price he could have filled his Genuine Order at was $16.395 (i.e. he would have to have sold lower than he wanted). As he began placing Spoof Orders to buy, the bid-ask spread moved up such that his Genuine Order could ultimately be fully filled when another trader or traders placed aggressive buy orders at $16.405. In other words, Shak's spoofing on the buy side of the market allowed him to fill his Genuine Order to sell

at a better price, more quickly, or in a larger quantity than he could have if he had not placed the Spoof Orders.

Example 7: February 26, 2018

Chart 7 (13:43:23.611– 13:44:29.223)



98. At 1:43:33.731 PM on February 26, 2018, Shak placed an iceberg Genuine Order to buy 10 lots of the March 2018 Silver contract, with one lot visible to the market at a price of $16.560.[44] At that point in time the bid-ask spread was at $16.560/$16.565, meaning Shak's Genuine Order was at the best bid and would be filled if a trader or traders crossed the bid-ask spread and any other orders ahead of him in the queue at $16.560 were filled. In other words, it would benefit Shak if the market moved towards his Genuine Order, allowing him to buy at a lower price than was currently available.

99. At 1:43:38.337, Shak began placing a series of Spoof Orders to sell the March 2018 Silver contract. Between 1:43:38.337 and 1:44:17.560, Shak placed seven Spoof Orders to sell a total of 235 lots, in the following sequence:

- 50-lot order at $16.570
- 50-lot order at $16.575
- 50-lot order at $16.580
- 25-lot order at $16.585
- 20-lot order at $16.575
- 20-lot order at $16.585
- 20-lot order at $16.580.[45]

100. After placing these Spoof Orders, Shak modified his Genuine Order to a price of $16.565 at 1:44:21.442. Because the best offer at that point was $16.565, Shak's Genuine Order became an aggressive order that crossed the bid-ask spread. Although Shak's Genuine Order was an iceberg, because it was modified to become an aggressive order and because there were sufficient orders on the book at the best offer, Shak's Genuine Order immediately filled completely at 1:44:21.442.[46]

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[44] Chart 7 at [A].
[45] Chart 7 at [B].
[46] Chart 7 at [C].

101. Less than 1.1 seconds after the Genuine Order was filled, Shak began canceling his Spoof Orders.[47] He started by canceling his Spoof Order at $16.570 at 13:44:22.511, and cancelled the last Spoof Order at 13:44:24.297. Shak canceled all seven Spoof Orders in less than two seconds, meaning that on average it took less than 300 milliseconds to cancel each Spoof Order. Shak canceled the Spoof Orders in order by price, starting with the orders at the best bid that were at greatest risk of being hit, and ending with the order furthest from the bid-ask spread that was at the least risk of being hit. The fact that Shak prioritized canceling the Spoof Orders that were at greatest risk of being hit suggests that he did not want those orders to be filled, and to the contrary, placed all of the Spoof Orders with the intent to cancel them. Moreover, the swiftness with which Shak canceled his Spoof Orders, and the order in which he did so, allowed him to avoid being filled on his Spoof Orders. Less than two seconds after he canceled his Spoof Order at $16.570, and before he finished canceling the rest of his Spoof Orders, the best offer rose to $16.570, meaning that his Spoof Order at that price would have been at increased risk of being hit if he had not canceled it so quickly.

102. In summary, while waiting for a fill on a ten-lot iceberg Genuine Order to buy, Shak placed downward pressure on the price by placing seven Spoof Orders to sell a total of 235 lots, which he intended to cancel, and which he did cancel without any lots being filled. Although Shak's Spoof Orders did not actually move the bid-ask spread—it remained at $16.560/$16.565 from the time he began placing his Spoof Orders until he filled his Genuine Orders aggressively at $16.565—that is irrelevant. Shak placed the Spoof Orders with the intent to cancel them, with the intent to convey false signals of supply to the marketplace, and with the intent to apply downward price pressure in order to get a better price on his Genuine Orders. Indeed, the bid-ask

[47] Chart 7 at [D].

spread rose to $16.565/$16.570 immediately after Shak removed the downward price pressure by canceling his Spoof Orders. In other words, Shak's spoofing may have allowed him to fill his Genuine Orders at a better price or more quickly than he could have if he had not placed the Spoof Orders.

VIII. VIOLATIONS OF THE ACT

COUNT I

VIOLATIONS OF 7 U.S.C. § 6c(A)(5)(C)

Spoofing

103. Paragraphs 1 to 102 are re-alleged and incorporated herein by reference.

104. By reason of the conduct described above, Shak engaged in trading, practices, or conduct on or subject to the rules of a registered entity that is, is of the character of, or is commonly known to the trade as, "spoofing" (bidding or offering with the intent to cancel the bid or offer before execution).

105. In placing each Spoof Order, Shak acted with the intent to cancel the bid or offer before execution.

106. By reason of the foregoing, Shak violated 7 U.S.C. § 6c(a)(5).

107. Each Spoof Order constitutes a separate and distinct violation of 7 U.S.C. § 6c(a)(5)(C).

COUNT II

VIOLATIONS OF 7 U.S.C. § 9(1), AND 17 C.F.R. § 180.1(A)(1), (3)

Use of a Manipulative and Deceptive Device, Scheme, or Artifice

108. Paragraphs 1 to 102 are re-alleged and incorporated herein by reference.

109. By reason of the conduct described above, Shak, in connection with a contract for future delivery on a registered entity, intentionally or recklessly: (1) used or employed, or attempted to use or employ, manipulative devices, schemes, or artifices to defraud; or (2) engaged, or attempted to engage, in acts, practices, or courses of business, which operated or would have operated as a fraud or deceit upon market participants.

110. In the conduct described above, Shak acted intentionally or recklessly.

111. By reason of the foregoing, Shak violated 7 U.S.C. § 9(1) and 17 C.F.R. § 180.1(a)(1) and (3).

112. Each Spoof Order, including but not limited to those specifically alleged herein, constitutes a separate and distinct violation of 7 U.S.C. § 9(1) and 17 C.F.R. § 180.1(a)(1) and (3).

IX. RELIEF REQUESTED

WHEREFORE, the Commission respectfully requests that the Court, as authorized by 7 U.S.C. § 13a-1, and pursuant to its own equitable powers:

A. Find that Shak violated 7 U.S.C. §§ 6c(a)(5)(C), 9(1), and 17 C.F.R. § 180.1(a)(1), (3) (2021);

B. Enter an order of permanent injunction enjoining Shak, and his affiliates, agents, servants, employees, successors, assigns, attorneys, and all persons in active concert with him who receive actual notice of such order by personal service or otherwise, from violating 7 U.S.C. §§ 6c(a)(5)(C), 9(1) and 17 C.F.R. § 180.1(a)(1) and (3);

C. Enter an order of permanent injunction enjoining Shak, and his affiliates, agents, servants, employees, successors, assigns, attorneys, and all persons in active concert with him, from directly or indirectly:

1. Trading on or subject to the rules of any registered entity (as that term is defined in 7 U.S.C. § 1a(40));

2. Entering into any transactions involving "commodity interests" (as that term is defined in 17 C.F.R. § 1.3 (2021)) for their own personal account or for any account in which they have a direct or indirect interest;

3. Having any commodity interests traded on their behalf;

4. Controlling or directing the trading for or on behalf of any other person or entity, whether by power of attorney or otherwise, in any account involving commodity interests;

5. Soliciting, receiving or accepting any funds from any person for the purpose of purchasing or selling any commodity interests;

6. Applying for registration or claiming exemption from registration with the Commission in any capacity, and engaging in any activity requiring such registration or exemption from registration with the Commission, except as provided for in 17 C.F.R. § 4.14(a)(9) (2021); and

7. Acting as a principal (as that term is defined in 17 C.F.R. § 3.1(a) (2021)), agent or any other officer or employee of any person (as that term is defined in 7 U.S.C. § 1a(38)), registered, exempted from registration or required to be registered with the Commission except as provided for in 17 C.F.R. § 4.14(a)(9) (2021).

D. Enter an order directing Shak, as well as any third-party transferee and/or successors thereof, to disgorge, pursuant to such procedure as the Court may order, all benefits received including, but not limited to, salaries, commissions, loans, fees, revenues, and trading profits derived, directly or indirectly, from acts or practices which constitute violations of the Act and Regulations as described herein, including pre-judgment and post-judgment interest;

E. Enter an order requiring Shak to make full restitution to every person who has sustained losses proximately caused by the violations described herein, including pre-judgment and post-judgment interest;

F. Enter an order directing Shak to pay civil monetary penalties to be assessed by the Court, in an amount not to exceed the penalty prescribed by 7 U.S.C. § 13a-1(d)(1), as adjusted for inflation pursuant to the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, Pub. L. 114-74, 129 Stat. 584 (2015), title VII, Section 701, *see* Regulation 143.8, 17 C.F.R. § 143.8 (2021), for each violation of the Act and Regulations, as described herein;

G. Enter an order requiring Shak to pay costs and fees, as permitted by 28 U.S.C. §§ 1920 and 2412(a)(2); and

H. Enter an order providing for such other and further relief as this Court may deem necessary and appropriate under the circumstances.

Respectfully submitted,

Date: August 5, 2022

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