FIRSTRADE SECURITIES INC. - Held NMS Stocks and Options Order Routing Public Report

Generated on Thu Apr 28 2022 13:29:07 GMT-0400 (Eastern Daylight Time)

1st Quarter, 2022

January 2022

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	29.39	5.67	50.42	14.52

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	89.34	99.87	99.63	99.06	30.25	15,342.03	15.0000	7,501.95	15.0000	13,613.32	15.0000	2,784.06	14.7830
Apex Clearing Corporation	10.66	0.13	0.37	0.94	69.75	189.44	7.5000	292.21	7.5000	1,055.53	14.4934	1,403.81	8.6027

Material Aspects:

CITADEL SECURITIES LLC:

Citadel Execution Services:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed equities to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Apex Clearing Corporation:

Apex Clearing:

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed equities to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share tiered basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

January 2022

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	28.78	8.17	48.14	14.91

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	88.30	99.75	99.49	99.82	22.90	76,677.95	12.8799	39,783.85	8.4418	58,521.73	10.5478	8,223.22	13.1008
Apex Clearing Corporation	11.70	0.25	0.51	0.18	77.10	2,595.56	7.5000	722.96	6.6493	804.38	14.1504	-1,752.97	-1.0950

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed equities to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Apex Clearing Corporation:

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed equities to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share tiered basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

January 2022

Options

Summary

	Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
Γ	100.00	6.67	10.23	60.86	22.24

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	70.69	66.71	66.40	65.51	88.06	51,907.70	39.2731	135,153.02	39.1645	163,531.63	37.7767	79,339.34	23.5425
Wolverine Execution Services, LLC	19.97	23.57	24.31	25.66	1.33	23,958.80	45.6454	72,133.60	50.0403	87,921.60	52.8728	2,627.20	47.1585
Volant Execution	7.05	7.79	6.25	6.23	9.43	11,975.20	40.0000	14,672.00	40.0000	17,452.80	40.0000	10,537.20	40.0000

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
Apex Clearing Corporation	2.28	1.93	3.04	2.60	1.18	536.54	12.4140	2,461.98	12.7511	2,218.34	13.5455	52.18	14.5740

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Wolverine Execution Services, LLC

Firstrade Securities Inc. receives payment from the third party venue Wolverine Execution Services, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Wolverine Execution Services, LLC, http://www.tradewex.com/Home/Rule606

Volant Execution

Firstrade Securities Inc. receives payment from the third party venue Volant Execution, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Volant Execution, LLC, https://volanttrading.com/index.php/execution-services/

Apex Clearing Corporation:

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed options to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

February 2022

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	26.62	5.71	51.50	16.17

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	87.31	99.78	99.36	98.57	26.63	13,127.71	15.0000	4,904.92	15.0000	10,048.61	15.0000	1,950.74	14.2402
Apex Clearing Corporation	12.69	0.22	0.64	1.43	73.37	76.52	7.5000	507.90	7.5005	1,130.58	14.4495	1,185.42	7.9340

Material Aspects:

CITADEL SECURITIES LLC:

Citadel Execution Services:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed equities to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Apex Clearing Corporation:

Apex Clearing:

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed equities to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share tiered basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

February 2022

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	26.71	8.09	47.96	17.24

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	86.27	99.64	99.35	99.38	22.95	68,378.31	12.6401	40,507.60	8.7078	51,913.67	9.8818	8,452.25	13.3927
Apex Clearing Corporation	13.73	0.36	0.65	0.62	77.05	1,471.53	7.5000	763.56	6.0820	1,042.23	11.2563	592.64	0.3729

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed equities to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Apex Clearing Corporation

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed equities to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share tiered basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

February 2022

Options

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	6.90	10.44	62.08	20.57

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	48.05	44.61	44.13	43.32	65.46	37,011.73	38.3005	84,950.39	38.9534	108,396.48	36.8576	27,787.83	14.6165
Wolverine Execution Services, LLC	43.62	47.96	48.71	49.36	22.24	39,638.00	44.6434	129,147.60	45.2017	163,564.00	47.1616	37,710.80	41.3786
Volant Execution	6.88	6.70	5.61	5.52	11.67	22,460.00	40.0000	11,968.80	40.0000	16,970.80	40.0000	14,365.60	40.0000
Apex Clearing Corporation	1.46	0.73	1.56	1.79	0.63	117.87	12.4598	1,408.04	12.2941	1,742.66	13.7261	71.04	14.9547

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Wolverine Execution Services, LLC:

Firstrade Securities Inc. receives payment from the third party venue Wolverine Execution Services, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Wolverine Execution Services, LLC, http://www.tradewex.com/Home/Rule606

Volant Execution

Firstrade Securities Inc. receives payment from the third party venue Volant Execution, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Volant Execution, LLC, https://volanttrading.com/index.php/execution-services/

Apex Clearing Corporation

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed options to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

March 2022

S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	27.68	5.57	51.56	15.19

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	99.25	99.87	99.62	98.86	99.30	14,672.87	15.0000	6,162.58	15.0000	16,109.26	15.0000	2,077.09	8.5748

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
Apex Clearing Corporation	0.75	0.13	0.38	1.14	0.70	64.87	7.5000	376.64	7.5001	923.46	14.4985	-13.40	-5.6382

Material Aspects:

CITADEL SECURITIES LLC:

Citadel Execution Services:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed equities to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Apex Clearing Corporation:

Apex Clearing:

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed equities to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share tiered basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

March 2022

Non-S&P 500 Stocks

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	26.92	8.49	48.16	16.43

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	99.51	99.62	99.35	99.73	98.78	93,845.63	11.7496	57,895.54	7.2840	74,051.14	9.0904	9,935.71	3.6760
Apex Clearing Corporation	0.49	0.38	0.65	0.27	1.22	6,478.24	7.5000	1,362.69	4.7057	1,298.86	12.1912	843.63	8.7468

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed equities to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Apex Clearing Corporation

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed equities to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per share tiered basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/

March 2022

Options

Summary

Non-Directed Orders as % of All Orders	Market Orders as % of Non-Directed Orders	Marketable Limit Orders as % of Non- Directed Orders	Non-Marketable Limit Orders as % of Non- Directed Orders	Other Orders as % of Non-Directed Orders
100.00	6.77	10.88	63.37	18.97

Venues

Venue - Non-directed Order Flow	Non- Directed Orders (%)	Market Orders (%)	Marketable Limit Orders (%)	Non- Marketable Limit Orders (%)	Other Orders (%)	Net Payment Paid/Received for Market Orders(USD)	Net Payment Paid/ Received for Market Orders(cents per hundred shares)	Net Payment Paid/ Received for Marketable Limit Orders(USD)	Net Payment Paid/ Received for Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/ Received for Non- Marketable Limit Orders(USD)	Net Payment Paid/ Received for Non- Marketable Limit Orders(cents per hundred shares)	Net Payment Paid/Received for Other Orders(USD)	Net Payment Paid/ Received for Other Orders(cents per hundred shares)
CITADEL SECURITIES LLC	47.66	47.36	43.14	43.05	65.74	51,123.89	39.4167	128,152.49	39.4928	125,442.06	37.7433	25,318.60	13.1022
Wolverine Execution Services, LLC	45.13	47.75	50.64	50.83	21.96	48,219.60	45.1372	184,525.60	47.9062	187,952.00	48.2530	24,966.00	42.2044
Volant Execution	6.97	4.44	5.48	5.92	12.22	3,111.20	40.0000	18,839.60	40.0000	29,343.60	40.0000	18,577.20	40.0000
Apex Clearing Corporation	0.25	0.46	0.74	0.19	0.07	79.06	12.3339	1,018.34	12.4537	824.06	12.6332	0.00	0.0000

Material Aspects:

CITADEL SECURITIES LLC:

Firstrade Securities Inc. receives payment from the third party venue Citadel Securities, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Citadel Securities, LLC, https://www.citadelsecurities.com/rule-605-606-statements/

Wolverine Execution Services, LLC:

Firstrade Securities Inc. receives payment from the third party venue Wolverine Execution Services, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Wolverine Execution Services, LLC, http://www.tradewex.com/Home/Rule606

Volant Execution:

Firstrade Securities Inc. receives payment from the third party venue Volant Execution, LLC for directing order flow of listed options to this venue. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Volant Execution, LLC, https://volanttrading.com/index.php/execution-services/

Apex Clearing Corporation:

Firstrade Securities Inc. receives payment from the third party venue Apex Clearing Corporation for directing order flow of listed options to this venue under a fully disclosed clearing agreement. The disclosed amounts represent the total amount of payments received by Firstrade Securities Inc. Renumeration is paid on a per contract basis. For additional detailed Routing Information, please refer to: Apex Clearing Corporation, https://www.apexclearing.com/disclosures/sec-rule-606-and-607/