Exhibit 1

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

IN RE XL FLEET CORP. SECURITIES LITIGATION	Case No. 1:21-cv-02002-JLR

DECLARATION OF
DR. ADAM WERNER
March 10, 2023

TABLE OF CONTENTS

I. INTRODUCTION 1
II. PROFESSIONAL BACKGROUND AND EXPERIENCE 1
III. SUMMARY OF OPINIONS AND FINDINGS 3
IV. BACKGROUND 4
A. About XL Fleet 4
B. About XL Fleet Common Stock 7
C. Summary of Plaintiffs' Allegations 7
V. EFFICIENCY OF THE MARKET FOR XL FLEET STOCK 8
A. Market Efficiency in Finance Academia and Economic Theory 8
B. The Legal Foundation and Application of Market Efficiency 11
C. The *Cammer* Factors and Their Application in This Case 12
1. Cammer Factor 1: Average Weekly Trading Volume 12
2. Cammer Factor 2: Analyst Coverage 13
3. Cammer Factor 3: Market Makers and Listing on the NYSE 15
4. Cammer Factor 4: SEC Form S-3 Eligibility 17
5. Cammer Factor 5: Price Reaction to New Information 19
D. The *Unger/Krogman* Factors Considered 36
1. Market Capitalization 36
2. Float 37
3. Bid-Ask Spread 37
VI. OTHER XL FLEET SECURITIES 38
VII. COMMON DAMAGE METHODOLOGY 39
A. Section 10(b) Damages Methodology 39
VIII. CONCLUSION 42
IX. LIMITING FACTORS AND OTHER ASSUMPTIONS 42

I, Adam Werner, declare and state, under penalty of perjury, that the following is true and correct to the best of my knowledge, information, and belief. If called to testify, I could and would testify competently to the following facts.

I. INTRODUCTION

1. I was asked by Glancy Prongay & Murray LLP, counsel for the Plaintiffs, to determine whether the publicly-traded common stock of XL Fleet Corp., ("XL Fleet" or the "Company") traded in an efficient market during the period from September 18, 2020 through March 31, 2021, inclusive (the "Class Period").[1]

2. In addition, I have been asked to opine on whether damages in this matter are subject to a common methodology that can be calculated on a class-wide basis for all Class members in connection with their claims under Section 10(b) and Section 20(a) of the Securities Exchange Act of 1934 (the "Exchange Act") and U.S. Securities & Exchange Commission ("SEC") Rule 10b-5 adopted thereunder (collectively, "Section 10(b)").

3. I understand that as an expert witness in this proceeding, my duty in providing my declaration is to the Court and that this duty overrides any obligation to the parties who have engaged me, from whom I have received instructions or compensation. I confirm that I have complied with this duty.

II. PROFESSIONAL BACKGROUND AND EXPERIENCE

4. I am currently a Lecturer in economics at the Orfalea College of Business at California Polytechnic State University San Luis Obispo (Cal Poly) where I have taught

[1] To the extent that there were other publicly-traded XL Fleet securities outstanding that were derivatives of XL Fleet common stock (*e.g.* warrants, units composed of stock and warrants, or options), the efficiency of the market for the publicly-traded common stock can be extrapolated to these other securities. References herein to XL Fleet stock are to the publicly-traded common stock of XL Fleet (f/k/a Pivotal Investment Corporation II).

managerial economics to graduate students, and international finance, macroeconomics, and intermediate microeconomics to undergraduates. I am also an affiliated expert at Crowninshield Financial Research, Inc. ("Crowninshield"). Prior to accepting my lecturer position at Cal Poly and being affiliated with Crowninshield, I spent 16 years working for consulting firms including Cornerstone Research, CRA International, and NERA. I have been retained by both plaintiffs and defendants to consult on matters pertaining to market efficiency, materiality and loss causation, damages, investment banking, financial valuation, security issuance, bankruptcy, and options backdating. My expert opinions have been accepted in Federal, State, and Bankruptcy courts within the United States as well as courts in Australia and Canada. I have lectured frequently to attorneys on the topic of damage estimation and settlements in securities class actions. I have also spoken on the estimation of capital rates in emerging economies at a conference organized by the University of Texas School of Law.

5. I hold a Ph.D. in Finance (1999) from Northwestern University's Kellogg Graduate School of Management. While at Kellogg, I taught M.B.A. classes in corporate finance, and futures and options. I was also awarded a University Scholarship during my time at Kellogg. Prior to graduate school, I served as a Research Assistant at the Federal Reserve Bank of Cleveland. My full Vitae including prior testimony is attached as Exhibit-1 to this declaration.

6. A list of documents I reviewed in forming my opinion in this matter is set forth in Exhibit-2 to this declaration.

7. Crowninshield is currently being compensated at $750 per hour for my ongoing work on this matter. Additional Crowninshield consultants have assisted me with my work at rates ranging from $250 per hour to $500 per hour. This compensation is not contingent on the outcome of this matter.

III. SUMMARY OF OPINIONS AND FINDINGS

OPINION 1: XL Fleet stock traded in an efficient market throughout the Class Period.

8. My opinion is based on the following observations, analyses, and findings from the Class Period:

a. The average weekly trading volume of XL Fleet stock as a percentage of shares outstanding was 52.4%, higher than the 2% required to meet the strong-presumption-of-efficiency benchmark set forth by the court in *Cammer v. Bloom*;[2]

b. At least two securities analysts covered XL Fleet and there were at least 259 news stories, press releases, and SEC filings published about the Company;

c. XL Fleet stock traded on the NYSE and had numerous market makers with at least 82 firms making a market in XL Fleet stock during the Class Period;

d. A high number of institutional investors owned XL Fleet stock, as indicated by public filings;

e. XL Fleet was eligible to file an S-3 registration statement with the SEC throughout the Class Period;

f. Event study analysis indicates that a cause-and-effect relationship existed between the release of new Company-specific information and movements in the price of XL Fleet stock (*i.e.,* the stock price exhibited statistically significant abnormal returns);

g. The market capitalization of XL Fleet stock averaged $1.3 billion over the Class Period, which was larger than the total market capitalization of at least 67.3% of all other publicly traded companies in the U.S.;

[2] *Cammer* v. *Bloom*, 711 F. Supp. 1264 (D.N.J. 1989).

h. XL Fleet's float averaged $1.1 billion and was larger than the total market capitalization of at least 65.4% of all other publicly traded companies in the U.S.;

i. XL Fleet stock had an average bid-ask spread[3] of 0.14% compared to the average bid-ask spread of 0.50% for all stocks in the CRSP database.[4]

OPINION 2: With expert assistance, the finder of fact in this matter will be able to compute damages using a common class-wide methodology that applies to the calculation of damages for each and every Class member.

IV. BACKGROUND

A. About XL Fleet

9. Prior to December 2020, the publicly-traded company that became XL Fleet was a Special Purpose Acquisition Company ("SPAC") called Pivotal Investment Corporation II ("Pivotal").[5] As Pivotal, the Company "was organized to effect a merger, capital stock exchange, asset acquisition or other similar business combination with one or more businesses or entities."[6] On September 17, 2020, Pivotal entered into an Agreement and Plan of Reorganization with XL

[3] A bid-ask spread is the price at which a market maker (intermediary) is willing to buy and sell a security. For example, if one is making a market in Company Y's security, one might be willing to buy (bid) security of Company Y at $10 per share and sell (ask) the same security at $10.15 per share. In this instance, the bid-ask spread would be $0.15, or approximately 1.5%.

[4] The Center for Research in Security Prices is a widely-used and generally accepted database for obtaining daily data on publicly-traded securities.

[5] According to the SEC, "A blank check company is a development stage company that has no specific business plan or purpose or has indicated its business plan is to engage in a merger or acquisition with an unidentified company or companies, other entity, or person. … A type of blank check company is a 'special purpose acquisition company,' or SPAC for short. A SPAC is created specifically to pool funds in order to finance a merger or acquisition opportunity within a set timeframe. For more information, see our Investor Bulletin on SPACS." ("Blank Check Company," https://www.investor.gov/introduction-investing/investing-basics/glossary/blank-check-company, last accessed on December 2, 2022).

[6] Pivotal Investment Corporation II, Form S-4/A filed on December 1, 2020, p. 6.

Hybrids, Inc.[7] Following the business combination, which was completed on or about December 21, 2020, the merged entity changed its name to XL Fleet Corp.[8]

10. The merged entity, XL Fleet, was slated to be a "provider of fleet electrification solutions for commercial vehicles in North America."[9] By the end of December 2020, XL Fleet had sold "4,300 electrified powertrain systems."[10] The Company's goal was "to become the world leader in fleet electrification solutions, with a mission of accelerating the adoption of fleet electrification systems through cost effective, customer tailored and comprehensive solutions."[11]

11. XL Fleet reported revenue of $9.5 million, $7.2 million, and $20.3 million, for fiscal years ("FY") 2018, 2019, and 2020, respectively.[12]

12. During the Class Period, on March 3, 2021, the investment research firm Muddy Waters published a research report regarding XL Fleet, titled "XL Fleet Corp (NYSE XL): More SPAC Trash."[13] This report alleged, among other things, that: XL Fleet's salespeople "were pressured to inflate their sales pipelines"; XL Fleet's "customer reorder rates are in reality quite low" and "that roughly half of the customers XL touts in its investor presentation are inactive"; XL Fleet's "technology seldom — if ever — generates the advertised 25-50% fuel savings"; XL Fleet "has been subject to supply shortages for years"; XL Fleet's sales projections were

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[7] Pivotal Investment Corporation II, Form S-4/A filed on December 1, 2020.

[8] Pivotal Investment Corporation II, Form S-4/A filed on December 1, 2020.

[9] XL Fleet Corp., Form 10-K/A for the Fiscal Year Ended December 31, 2020, filed on May 17, 2021, p 1.

[10] XL Fleet Corp., Form 10-K/A for the Fiscal Year Ended December 31, 2020, filed on May 17, 2021, p 1.

[11] XL Fleet Corp., Form 10-K/A for the Fiscal Year Ended December 31, 2020, filed on May 17, 2021, p 1.

[12] Pivotal Investment Corporation II, Form S-4/A filed on December 1, 2020, p. 177; and XL Fleet Corp., Form 10-K/A for the Fiscal Year Ended December 31, 2020, filed on May 17, 2021, p. 42.

[13] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.

"exaggerated"; and XL Fleet "have not been [California Air Resources Board]-approved since 2019 and the company may not sell in California without the approval."[14]

13. Subsequently, on March 31, 2021, after the close of trading, XL Fleet announced its financial results for 4Q 2020 and FY 2020.[15] For the quarter, XL Fleet reported revenues of $10.87 million (below analysts' expectations of $12.10 million) and adjusted loss per share of $0.06 per share (above analyst expectation of $0.09 loss per share).[16] The Company also announced revenue guidance for 1Q 2021 of $1 million, which was far below analysts' expectations of $8 million.[17] Moreover, the Company backed away from its 2021 revenue guidance of $75 million and announced it was "not currently providing formal full-year 2021 financial guidance."[18] Following the earnings announcements BTIG analysts lowered their price target from $30 to $23 per share[19] and Canaccord analysts lowered their price target from $30 to $10 per share "to reflect lack of 2021 visibility."[20] The Canaccord analyst also commented that

[14] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.

[15] "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.

[16] "XL Fleet Corp reports results for the quarter ended in December - Earnings Summary," *Reuters News*, March 31, 2021.

[17] "Solid Quarter, But Next One Not Expected Until 2H21. Lowering PT to $23 (from $30)," by Gregory Lewis et al., BTIG, analyst report, March 31, 2021, p.1.

[18] "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.

[19] "Solid Quarter, But Next One Not Expected Until 2H21. Lowering PT to $23 (from $30)," by Gregory Lewis et al., BTIG, analyst report, March 31, 2021, p.1.

[20] "Lowering PT to $10 from $30 to reflect lack of 2021 visibility; maintain BUY," by Jed Dorsheimer, Canaccord Genuity, analyst report, April 1, 2021, p.1.

"Given this is the company's first quarter as a public company," the low revenue guidance "comes as a major disappointment."[21]

B. About XL Fleet Common Stock

14. At the start of the Class Period, XL Fleet stock traded on the NYSE under the trading symbol PIC. Post the completion of the merger, XL Fleet stock traded on the NYSE under the trading symbol XL.[22] XL Fleet's stock price at the start of the Class Period was $12.10 per share.[23] XL Fleet's stock price peaked at $32.59 on December 23, 2020. By April 1, 2021, the first day after the end of the Class Period, the price of XL Fleet stock fell to $7.89 per share, a loss of 75.8% from its Class Period peak.

C. Summary of Plaintiffs' Allegations

15. Plaintiffs allege that, throughout the Class Period, XL Fleet misled market participants about the "Company's business, operations, and prospects."[24] Specifically, Plaintiffs allege that:

> Defendants failed to disclose to investors that: (a) XL had materially manipulated and overstated its pipeline figures, (b) XL had been experiencing supply chain problems that impeded its ability to timely fill existing orders, (c) a large number of the customers touted by XL were inactive and no longer ordering XL products, (d) the quality and benefits of XL's technology were overstated and that technology did not provide the miles-per-gallon ("MPG") savings to customers that XL

[21] "Lowering PT to $10 from $30 to reflect lack of 2021 visibility; maintain BUY," by Jed Dorsheimer, Canaccord Genuity, analyst report, April 1, 2021, p.1.

[22] Pivotal Investment Corporation II, Form S-4/A filed on December 1, 2020.

[23] Share data obtained from the Center for Research in Security Prices ("CRSP").

[24] Amended Consolidated Class Action Complaint For Violations Of The Federal Securities Laws ("Complaint"), filed on July 20, 2021, ¶29.

represented, and (e) as a result of these omissions, Defendants' rosy assessment of XL's prospects and projections of future revenue were wildly overstated.[25]

16. Plaintiffs further allege that Defendants failed to disclose that "XL had lost its CARB [California Air Resources Board] certification in 2019 and had been unable to secure re-approval in 2020, so XL could not sell its products in California."[26]

17. Plaintiffs allege that the truth about XL Fleet's business prospects and operations was revealed via Muddy Waters' reporting and the Company's earnings announcement event where, among other things, it removed its FY 2021 guidance.[27]

V. EFFICIENCY OF THE MARKET FOR XL FLEET STOCK

A. Market Efficiency in Finance Academia and Economic Theory

18. The efficient market hypothesis is the foundation of modern finance theory. In essence, a security trades in an efficient market when all publicly available information is incorporated in the security price and any new information that impacts the economic outlook of the firm gets quickly reflected in its security price. In over 50 years' worth of academic articles, financial economists have used event study analysis to evaluate market efficiency by examining how new information affects securities prices.[28] Event studies are a set of analytical methods used to measure the response of security prices to typical corporate news events such as earnings releases, merger announcements, guidance revisions, etc., after controlling for, among other

[25] Complaint, ¶29.

[26] Complaint, ¶249(a).

[27] Complaint, ¶¶185-212.

[28] *See*, *e.g.*, "The Event Study Methodology Since 1969," by John J. Binder, *Review of Quantitative Finance and Accounting*, vol. 11, 1998, pp. 111-137.

things, market-wide factors. Campbell *et al.* [1997] provide a detailed description of the methodology and document its wide use in academic research.[29]

19. Furthermore, event study analysis has formed the basis for assessing loss causation and artificial inflation in securities class actions.[30] Gold *et al*. [2017] write that financial economists generally accept and widely use the methodology in forensic applications.[31]

20. While financial economists rely on event study analysis as direct evidence demonstrating security price response to new information, they accept other factors as tending to support the existence of an efficient market for a security. For example, financial economists have argued that trading volume is correlated with a market's efficiency such that the higher the trading volume, the more likely it is to be efficient.[32]

21. Financial economists also believe that the number of analysts that follow a company is related to the market efficiency of the company's security. This is based on the theory that:

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[29] "Event-Study Analysis," by John Campbell et al., Chapter 4 of *The Econometrics of Financial Markets*, Princeton University Press, 1997.

[30] *See*, *e.g.*, "Materiality and Magnitude: Event Studies in the Courtroom," by David I. Tabak and Frederick C. Dunbar, Chapter 19 of the *Litigation Services Handbook: The Role of the Financial Expert*, 3rd Edition, edited by Roman L. Weil et al., John Wiley & Sons, Inc., 2001.

[31] "Federal Securities Acts and Areas of Expert Analysis," by Kevin Gold et al., Chapter 27 of the *Litigation Services Handbook*: *The Role of the Financial Expert*, 6th Edition, edited by Roman L. Weil et al., John Wiley & Sons, Inc., 2017.

[32] *See*, *e.g.*, "The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency," by Brad M. Barber et al., *The Journal of Corporation Law*, 1994, p. 291.

> [a]nalysts gather and independently generate information about companies and disseminate such information to their clients (e.g., in the form of earnings forecasts and recommendations). Accordingly, it can be expected that the larger the number of analysts following a security, the more efficiently it is traded.[33]

22. Put another way, the more analysts covering a security, the more likely it is that the market for that security will timely incorporate new information in that security's price.

23. Similarly, financial economists have considered the market value of a firm and its relationship with market efficiency.[34] Larger companies tend to attract more analyst and news media coverage and gain the attention of a greater number of investors. All of these characteristics, which accompany a large market capitalization, promote, and therefore tend to support, market efficiency.

24. A narrow bid-ask spread[35] of a particular security is also often associated with efficiency. In academia, a security's bid-ask spread is frequently used as a measure of liquidity[36] or cost of trading.[37] All things equal, a narrower bid-ask spread implies that there is a sufficient demand for and supply of an asset—the number of investors willing to buy or sell a security. Thus, the cost of executing a trade is low. A lower cost of trading implies that there are fewer impediments for investors to trade on new information.

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[33] "The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency," by Brad M. Barber et al., *The Journal of Corporation Law*, 1994, p. 292.

[34] *See*, *e.g.*, "The Cross-Section of Expected Stock Returns," by Eugene F. Fama and Kenneth R. French, *The Journal of Finance*, vol. 47, no. 2, 1992, pp. 427-465 (discussing how the role of size explains returns).

[35] The bid-ask spread is the amount by which the ask price (the lowest price that a seller is willing to accept) for a share of a security exceeds the bid price (the highest price that a buyer is willing to pay).

[36] Liquidity refers to the degree to which investors can buy and sell a security in the market without affecting the price.

[37] *See*, *e.g., Trading & Exchanges: Market Microstructure for Practitioners*, by Larry Harris, Oxford University Press, 2003, pp. 420-441.

B. The Legal Foundation and Application of Market Efficiency

25. In *Cammer v. Bloom*, 711 F.Supp. 1264 (D.N.J. 1989) ("*Cammer*"), the seminal decision on demonstrating market efficiency, the court's definition of efficiency was generally consistent with how financial economists and the academic community define efficiency.[38] The *Cammer* court then related efficiency to the reliance element of securities fraud claims and the applicability of the fraud-on-the-market doctrine, stating:

> [a]s relevant here, courts have permitted a rebuttable presumption of reliance in the case of securities traded in 'efficient markets' (*i.e.*, markets which are so active and followed that material information disclosed by a company is expected to be reflected in the stock price).[39]

26. Just one year earlier, the United States Supreme Court confirmed its understanding of the efficient market theory focusing on the same fundamental characteristic of market efficiency in the context of the availability of the fraud-on-the-market doctrine for establishing the reliance element of a securities fraud claim stating:

> The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business …[40]

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[38] *Cammer*, 711 F.Supp. at 1276, n. 17 (quoting *Securities Fraud and Commodities Fraud*, by Alan Bromberg & Lewis Lowenfels, §8.6 (Aug. 1988)) ("An efficient market is one which rapidly reflects new information in price.")); *id*. at 1280, n. 25 (quoting "Efficient Capital Markets: A Review of Theory and Empirical Work," by Eugene F. Fama, *The Journal of Finance*, vol. 25, no. 2, 1970) ("A market in which prices always 'fully reflect' available information is called 'efficient'").

[39] *Cammer*, 711 F.Supp. at 1273, n. 11.

[40] *Basic, Inc. v. Levinson*, 485 U.S. 224, 241 (1988); and *Amgen Inc. v. Conn. Ret. Plans & Trust Funds*, 568 U.S. 455, 458 (2013) ("[t]he fraud-on-the market premise is that the price of a security traded in an efficient market will reflect all publicly available information about a company . . .").

27. In advance of laying out a number of criteria that courts should examine in determining market efficiency, the *Cammer* court credited financial experts such as Bromberg and Lowenfels. The *Cammer* court explicitly acknowledged the importance of a listing on a developed exchange and the implications of such a listing for market efficiency:

> We think that, at a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System.[41]

C. The *Cammer* Factors and Their Application in This Case

28. The *Cammer* court applied five factors to determine market efficiency.[42] Widely-accepted academic finance literature provides the economic basis for these factors as indicia of market efficiency. The five factors considered are (1) a security's/firm's average weekly trading volume; (2) analyst coverage; (3) number of market makers; (4) eligibility to file an SEC Form S-3; and (5) price reaction to new information.

1. Cammer Factor 1: Average Weekly Trading Volume

29. The first *Cammer* factor examines whether a security's "average weekly trading volume … [would be] in excess of a certain number of shares."[43] More specifically, the court credited Bromberg who recognized that "turnover measured by average weekly trading of 2% or

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[41] *Cammer,* 711 F. Supp. at 1292.

[42] *Cammer,* 711 F. Supp. at 1286-87.

[43] *Cammer,* 711 F. Supp. at 1286 ("the reason the existence of an actively traded market, as evidenced by a large weekly volume of stock trades, suggests there is an efficient market is because it implies significant investor interest …. Such interest, in turn, implies a likelihood that many investors are executing trades on the basis of newly available or disseminated corporate information").

more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; 1% would justify a substantial presumption."[44]

30. During the Class Period, XL Fleet's weekly trading volume ranged between 2,573,658 and 157,012,976 shares.[45] As shown in Exhibit-3, the average weekly trading volume of XL Fleet's stock during the Class Period as a percentage of its stock outstanding was 52.4%. This level of weekly average trading volume exceeds the *Cammer* benchmark of 2% necessary for a "strong presumption" of market efficiency and exceeds the benchmark of 1% necessary for a "substantial presumption" of market efficiency.[46] Thus, one can make a strong presumption of market efficiency for XL Fleet stock during the Class Period based on average trading volume.

2. Cammer Factor 2: Analyst Coverage

31. The *Cammer* Court found that "it would be persuasive [if] a significant number of securities analysts followed and reported on a company's stock."[47] If investment professionals were closely monitoring a firm's information and subsequently making buy/sell recommendations to their clients based on that information, "the market price of the stock would be bid up or down to reflect the [company's] financial information…as interpreted by the securities analysts."[48] This suggests that the more analysts who followed a security, the greater the likelihood that a security

[44] *Cammer,* 711 F. Supp. at 1293.

[45] Volume data obtained from CRSP.

[46] This corresponds to 33,562,487 shares traded per week during the Class Period on average.

[47] *Cammer,* 711 F.Supp. at 1286.

[48] *Cammer,* 711 F.Supp. at 1286.

traded in an efficient market. Barber *et al.* [1994] found that coverage by one or two analysts strengthened the presumption of efficiency for a publicly traded stock.[49]

32. During the Class Period, at least two analyst firms following XL Fleet issued recommendations and/or research reports. These firms were BTIG and Canaccord Genuity. In addition, Institutional Investor Services ("ISS") and Glass Lewis issued analyst reports analyzing and recommending the merger.[50] Further, on March 3, 2021 and March 10, 2021, Muddy Waters published research reports about the Company.[51] In addition to these analysts, during the Class Period, there were at least three reports published about XL Fleet on *Seeking Alpha*.[52] Furthermore, XL Fleet was featured on CNBC's financial news segment "Squawk Box," as well as talked about by Jim Cramer on CNBC.[53] The various avenues of news media coverage also facilitates the flow of material information to the marketplace, which promotes efficiency. Such avenues of information dissemination include company press releases.[54]

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[49] "The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency," by Brad M. Barber et al., *The Journal of Corporation Law*, 1994.

[50] "Pivotal Investment Corporation II," by Davide Jalette and Ada Clarice Contreras, ISS, analyst report, December 17, 2020 [PIVSDNY0000078053-76] and "RE: ISS Report," Internal Company email containing the Glass Lewis report, December 17, 2020 [PIVSDNY0000058533-6].

[51] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021; and "XL Fleet: Not Denying Much, Still SPAC Trash," Muddy Waters, March 10, 2021.

[52] "XL Fleet: Latest Electric Vehicle SPAC Faces Increasing Competition," by Value Kicker, January 4, 2021; "XL Fleet Corp: A Solid Business Plan That Is Priced For Perfection," by Guney Kaya, January 5, 2021; and "XL Fleet: Still Lofty Valuation Retains Significant Downside Risk," by Pacifica Yield, March 23, 2021.

[53] See, for example, https://www.cnbc.com/video/2021/03/10/short-seller-carson-block-on-his-claims-that-xl-fleet-has-misrepresented-itself html and https://www.youtube.com/watch?v=3oqg3TAwmyE.

[54] *See*, *e.g., Cammer*, 711 F. Supp at 1283, n. 30, citing that the company "issued numerous press releases concerning its business operations …."

33. During the Class Period, over 259 news stories, press releases, and SEC filings featuring XL Fleet appeared in financial publications and newswires, including *Dow Jones Institutional News, PR Newswire*, and *Reuters.*

34. The number of analysts covering XL Fleet supports a finding of market efficiency. In addition, the wide dissemination of information about XL Fleet from company press releases and from well-regarded and widely-read sources in the news media such as *Dow Jones Institutional News, PR Newswire,* and *Reuters* also supports a finding of market efficiency.

3. Cammer Factor 3: Market Makers and Listing on the NYSE

35. The third factor considered by the *Cammer* court to indicate market efficiency is that a security had numerous market makers.[55] The *Cammer* court stated, "the existence of market makers and arbitrageurs would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level."[56]

36. Market makers are financial intermediaries who trade in a particular security, standing ready to buy and sell with individual investors, institutions, and other market makers. A large number of market makers implies that many market participants are trading that particular stock, and generally provides a high degree of liquidity and lower transaction costs. A large number of market makers for a security indicates that many market participants are trading in that security, thereby increasing liquidity and decreasing trading costs. A large number of market makers for a particular security supports a finding of market efficiency.

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[55] *See*, *e.g.,* "The Fraud-on-the-Market Theory and The Indicators of Common Stocks' Efficiency," by Brad M. Barber et al., *The Journal of Corporation Law*, 1994, p. 291.

[56] *Cammer*, 711 F. Supp. at 1286-1287.

37. Market making data from Bloomberg is available on a monthly basis. During the Class Period, there were at least 82 market makers for XL Fleet stock, including well known firms, such as: Barclays, Goldman Sachs, Morgan Stanley, and UBS. *See* Exhibit-4 for a list of market makers during the Class Period. Again, citing Bromberg and Lowenfels, the *Cammer* court noted that "[t]en market makers for a security would justify a substantial presumption that the market for the security is an efficient one; five market makers would justify a more modest presumption."[57]

38. As the *Cammer* court considered market-making infrastructure as indicative of the efficiency of a security's market, that XL Fleet traded on the NYSE during the Class Period further supports a finding of market efficiency. The NYSE is one of the most renowned, most liquid, and most efficient stock trading forums in the world. Securities on the NYSE are traded under the supervision of a lead market maker or "Designated Market Maker" ("DMM"), formerly known as a specialist.[58] DMMs are responsible for maintaining a fair and orderly market for each security to which they are assigned.[59]

39. The *Cammer* court explicitly acknowledged the importance of an NYSE listing and the implications of such a listing for market efficiency, explaining that market efficiency can reasonably be presumed for securities traded there.

> "We think that, at a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock

[57] *Cammer*, 711 F. Supp at 1293 (quoting Bromberg & Lowenfels, Securities Fraud and Commodities Fraud §8.6 (1988))

[58] "Fact Sheet; Designated Market Makers," *NYSE Euronext*, 2012.

[59] "Organization and Functioning of Securities Markets," by Frank K. Reilly and Keith C. Brown, *Equity and Fixed Income CFA Program Curriculum*, vol. 5, Pearson Custom Publishing, 2008.

Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System."[60]

40. Relatedly, another indication of market efficiency is the presence of institutional investors – sophisticated and professional full-time investors – in the market, as economists presume them "to be better informed about the securities they hold and better able to interpret new information than individual investors."[61]

41. During the Class Period, at least 180 unique institutional investors owned XL Fleet common stock.[62] That XL Fleet stock was listed and traded on the NYSE combined with the presence of at least 180 sophisticated professional investors strongly supports a finding that XL Fleet stock traded in an efficient market during the Class Period.

4. Cammer Factor 4: SEC Form S-3 Eligibility

42. The fourth *Cammer* factor is a firm's ability to file a Form S-3 Registration Statement. For a company to be eligible to file a Form S-3, the Securities and Exchange Commission ("SEC") requires 12 months of filings and at least $75 million of float. A company with less than $75 million of float and 12 months of filings is eligible to file a Form S-3 registration so long as the company has "a class of common equity securities listed and registered on a national securities exchange, and the issuers do not sell more than the equivalent of one-third of their public

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[60] *Cammer*, 711 F. Supp. at 1292 (quoting Bromberg and Lowenfels [1988], §8.6).

[61] "The Fraud-On-The-Market Theory and The Indicators of Common Stocks' Efficiency," by Brad M. Barber et al., *The Journal of Corporation Law*, 1994, p. 292. For discussion of the role of institutional investors in incorporating information into equity prices, *see*, *e.g.*, "The Influence of Analysts, Institutional Investors, and Insiders on the Incorporation of Market, Industry, and Firm-Specific Information into Stock Prices," by Joseph D. Piotroski and Darren T. Roulstone, *The Accounting Review*, vol. 79, no. 4, 2004, pp. 1119-1151.

[62] According to filings that reported holdings, there were 180 unique institutions that held shares of XL Fleet common stock as of at least one of the following reporting periods: September 30, 2020, December 31, 2020, and March 31, 2021. There may have been additional institutions that held XL Fleet common stock during the Class Period, though not on the quarterly reporting dates.

float in primary offerings over any period of 12 calendar months."[63] Despite the fact that the SEC has loosened the $75 million float requirement, courts continue to focus on the $75 million float benchmark when analyzing this *Cammer* factor.[64]

43. The *Cammer* court noted that S-3 registration eligibility is indicative of market efficiency because the filing requirement ensured that financial data are available to market participants, and the public float requirement indicated that many market participants would have examined the information.[65]

> Proposed Form S-3 recognizes the applicability of the efficient market theory to the registration statement framework with respect to those registrants which usually provide high quality corporate reports, including Exchange Act reports, and whose corporate information is broadly disseminated, because such companies are widely followed by professional analysts and investors in the market place. Because of the foregoing observations made by the SEC, the existence of Form S-3 status is an important factor weighing in favor of a finding that a market is efficient.[66]
>
> The 'public float' aspect of the Form S-3 requirements ensures that enough investors have in fact read the previously filed document.[67]
>
> Again, it is the number of shares traded and value of shares outstanding that involve the facts which imply efficiency.[68]

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[63] "Revisions to The Eligibility Requirements for Primary Securities Offerings on Forms S-3 And F-3," SEC Release No. 33-8878, December 19, 2007.

[64] *See*, *e.g.*, *Nguyen v. Radient Pharm. Corp.*, 287 F.R.D. 563, 573 (C.D. Cal. 2012).

[65] *Cammer*, 711 F. Supp. at 1284-85.

[66] *Cammer*, 711 F. Supp. at 1284-85.

[67] *Cammer*, 711 F. Supp. at 1285.

[68] *Cammer*, 711 F. Supp. at 1287.

44. XL Fleet was eligible for S-3 registration for all Class Period trading days. During the Class Period, XL Fleet float ranged in value from $230.5 million to $3.61 billion, which was well above the minimum requirement for S-3 registration. The Company also regularly filed financial reports with the SEC throughout the Class Period. Therefore, to the extent that S-3 registration eligibility indicates company characteristics associated with market efficiency, XL Fleet clearly possessed those particular characteristics throughout the Class Period.

5. Cammer Factor 5: Price Reaction to New Information

45. The fifth factor cited in *Cammer* suggests "it would be helpful to . . . [have] empirical facts showing a cause-and-effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price."[69] To demonstrate this cause-and-effect relationship, I conducted an event study investigating whether the market for XL Fleet common stock was efficient, specifically with respect to allegation-related information that was released to the market during the Class Period. A significant reaction would demonstrate market efficiency, not only generally, but also specifically with respect to the information at issue in this case. Furthermore, if the allegation-related information events do elicit statistically significant price reaction(s), this would be evidence that the price of XL Fleet stock was impacted by the allegation-related information.

46. The event study is the paramount tool for testing market efficiency. Professor Fama states that:

> The cleanest evidence on market-efficiency comes from event studies, especially event studies on daily returns. When an information event can be dated precisely and the event has a large effect on prices, the way one abstracts from expected returns to measure abnormal daily returns is a

[69] *Cammer,* 711 F. Supp. at 1287.

> second-order consideration. As a result, event studies can give a clear picture of the speed of adjustment of prices to information.[70]

47. Since the seminal papers by Ball and Brown [1968] and Fama *et al*. [1969] first introduced event study analysis to a broader audience of accounting and finance researchers, event studies have "become ubiquitous in capital markets research."[71] Campbell *et al*. [1997] provide a detailed background and description of how event studies are used in econometric analysis.[72] Gold *et al*. [2017] write about how the methodology is generally accepted and widely used in forensic applications.[73]

48. In its application, an event study can measure how much a firm's security price rises or falls in response to new information. An event study first calculates the difference between the actual return on an individual security and the return predicted by the market model. This difference is called an "abnormal return" (or residual return). It measures the impact of new, firm-specific information on a firm's security price. If the abnormal return over an event period is deemed to be statistically significant, it indicates that the security price movement was likely caused by firm-specific information and therefore cannot be attributed to market and/or industry factors, or to random volatility alone. Indeed, a cause-and-effect relationship between new material information and the reaction in the security price establishes market efficiency.

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[70] "Efficient Capital Markets: II," by Eugene F. Fama, *The Journal of Finance*, vol. 46, no. 5, 1991, p. 1607.

[71] "Event Studies: A Methodology Review," by Charles J. Corrado, *Accounting and Finance*, vol. 51, 2011, p. 207.

[72] "Event-Study Analysis," by John Campbell et al., Chapter 4 of *The Econometrics of Financial Markets*, Princeton University Press, 1997.

[73] "Federal Securities Acts and Areas of Expert Analysis," by Kevin Gold et al., Chapter 27 of the *Litigation Services Handbook: The Role of the Financial Expert*, 6th Edition, edited by Roman L. Weil et al., John Wiley & Sons, Inc., 2017.

49. Not every piece of new information will result in a statistically significant abnormal security return. To the extent that the new information may have been expected, or the valuation impact of the new information is appropriately modest, the appropriate abnormal price return should be statistically insignificant. As such, a finding of non-significance does not necessarily establish inefficiency as a modest non-significant security price reaction may be the appropriate and efficient security price reaction to a particular information event.[74]

50. For example, if a company announces earnings that are in-line with analysts' and investors' expectations, even though the announcement contains important information, it may not change the total mix of information sufficiently enough to elicit a statistically significant security price reaction on that date. Appropriate candidate events for inclusion in a market efficiency event study, therefore, are events on which company-specific information was released that is new, unexpected, not confounded by major countervailing news, and is of such import as to reasonably be expected to elicit a security price reaction over the threshold for statistical significance.

(1) **Selection of XL Fleet Market Efficiency Events**

51. In connection with this factor, the *Cammer* Court recognized the special importance of the information allegedly misrepresented that is the subject of the litigation:

> The central question under the fraud on the market theory is whether the stock price, at the time a plaintiff effected a trade, reflected the 'misinformation' alleged to have been disseminated.[75]

52. By focusing an event study on information related to the allegations in the Complaint, I have ascertained that the market for XL Fleet stock was efficient, not only generally,

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[74] "Event Studies in Securities Litigation: Low Power, Confounding Effects, and Bias," by Alon Brav and J. B. Heaton, *Washington University Law Review*, vol. 93, no. 2, 2015, p. 602.

[75] *Cammer*, 711 F.Supp. at 1282

but also with respect to the particular information at issue in this case. Consequently, the empirical behavior of XL Fleet stock following the release of allegation-related information best determines whether the market for XL Fleet stock was efficient for purposes of the fraud-on-the-market principle.

53. An event study testing market efficiency does not require a comprehensive identification of all events during the Class Period, including all of those cited in the Complaint, on which new material allegation-related information was disclosed.[76] Further, because of the high threshold for statistical significance, it is also important to note that new information may be economically significant without being statistically significant.

54. The following are amongst the event dates identified where important, relevant and material information was disclosed:

a. **September 18, 2020:** On September 18, 2020, Pivotal announced that it had "entered into a definite merger agreement" with XL Fleet.[77] The combined entity was anticipated to have an enterprise value of "approximately $1 billion" with "no material debt expected to be outstanding."[78] Media coverage of the merger announcement was positive, with many news outlets noting that the price of Pivotal rose following the announcement.[79]

[76] A comprehensive identification of all disclosures of information related to the alleged fraud is beyond the scope of this declaration and is properly addressed in an analysis of loss causation and damages.

[77] "XL Fleet, a Commercial Vehicle Electrification Solutions Leader, to List on NYSE Through Merger With Pivotal Investment Corporation II," *Business Wire*, September 18, 2020, 6:30AM.

[78] "XL Fleet, a Commercial Vehicle Electrification Solutions Leader, to List on NYSE Through Merger With Pivotal Investment Corporation II," *Business Wire*, September 18, 2020, 6:30AM.

[79] "Pivotal Investment Corp. II Shares Rise on XL Fleet Combination," *Dow Jones Institutional News*, September 18, 2020, 11:26AM and "Here's the Latest Electric-Truck Company to Go Public -- Barrons.com," *Dow Jones Institutional News*, September 18, 2020, 2:23PM.

b. **March 3, 2021:** On March 3, 2021, the investment research firm Muddy Waters published a research report regarding XL Fleet, titled "XL Fleet Corp (NYSE XL): More SPAC Trash."[80] This report alleged, among other things, that: XL Fleet's salespeople "were pressured to inflate their sales pipelines"; XL Fleet's "customer reorder rates are in reality quite low" and "that roughly half of the customers XL touts in its investor presentation are inactive"; XL Fleet's "technology seldom — if ever — generates the advertised 25-50% fuel savings"; XL Fleet "has been subject to supply shortages for years"; XL Fleet's sales projections were "exaggerated"; and XL Fleet "have not been [California Air Resources Board]-approved since 2019 and the company may not sell in California without the approval."[81]

c. **March 31, 2021:** On March 31, 2021, after the close of trading, XL Fleet announced its financial results for 4Q 2020 and FY 2020.[82] For the quarter, XL Fleet reported revenues of $10.87 million (below analysts' expectations of $12.10 million) and adjusted loss per share of $0.06 per share (above analyst expectation of $0.09 loss per share).[83] The Company also announced revenue guidance for 1Q 2021 of $1 million, which was far below analysts' expectations of $8 million.[84] XL Fleet also backed away from its 2021 revenue guidance of $75 million, announcing that it "was not currently providing formal

[80] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.

[81] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.

[82] "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.

[83] "XL Fleet Corp reports results for the quarter ended in December - Earnings Summary," *Reuters News*, March 31, 2021.

[84] "Solid Quarter, But Next One Not Expected Until 2H21. Lowering PT to $23 (from $30)," by Gregory Lewis et al., BTIG, analyst report, March 31, 2021, p.1.

full-year 2021 financial guidance."[85] Following the earnings announcements BTIG analysts lowered their price target from $30 to $23 per share[86] and Canaccord analysts lowered their price target from $30 to $10 per share "to reflect lack of 2021 visibility."[87] The Canaccord analyst also commented that "Given this is the company's first quarter as a public company," the low revenue guidance "comes as a major disappointment."[88]

(2) **Market Model**

55. A market model is used to determine how much of a company's security return on each event was driven by company-specific information as opposed to market and peer group factors. The market model involves running a regression to determine how XL Fleet stock typically behaved in relation to the overall stock market and industry-specific factors. The regression model is then used to determine how much of each event day's observed security price return can be explained by the market and industry-specific factors (the "expected return" or "explained return"). That is, a market model measures the expected return of the company's security over an event period after controlling for the overall market and industry-specific factors.

56. Next, the abnormal return (or residual return) is computed by subtracting the expected return from the observed security price return. The abnormal return is the return of the company's security after controlling for market effect and industry-specific factors.

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[85] "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.

[86] "Solid Quarter, But Next One Not Expected Until 2H21. Lowering PT to $23 (from $30)," by Gregory Lewis et al., BTIG, analyst report, March 31, 2021, p.1.

[87] "Lowering PT to $10 from $30 to reflect lack of 2021 visibility; maintain BUY," by Jed Dorsheimer, Canaccord Genuity, analyst report, April 1, 2021, p.1.

[88] "Lowering PT to $10 from $30 to reflect lack of 2021 visibility; maintain BUY," by Jed Dorsheimer, Canaccord Genuity, analyst report, April 1, 2021, p.1.

57. I ran a regression modeling the return of XL Fleet stock as a function of 1) a constant term, 2) the returns of the overall stock market, and 3) an industry index return. The regression model is formulaically expressed as follows:

$$Rs_t = \alpha + \beta_1 Rm_t + \beta_2 Ri_t + \epsilon_t$$

Where:

Rs_t= the return of the stock;

Rm_t= the return of the market index;

Ri_t= the daily return of the industry index.

58. The regression model produces a "constant" term ("α") also referred to as an "intercept" term, and one or more slope coefficient, or "beta" ("β"). The betas quantify the sensitivity of a security's return to the return on the market index ("β_1") and industry index ("β_2"). A security with a market index beta of 1.0 is expected to increase (decrease) by one percent for each one percent increase (decrease) in the market index. Similarly, a security with a market beta of 2.0 is expected to increase (decrease) by two percent for each one percent increase (decrease) in the market index.

59. To control for movements in the overall stock market, I used the CRSP NYSE/AMEX/NASDAQ/ARCA Market Index ("Market Index"), which is a generally accepted measure of the performance of the overall stock market. The Market Index incorporates payment of dividends by the constituent companies.

60. To control for industry-related factors, I examined XL Fleet's Form 10-K and Annual Report filings during the Relevant Period in order to identify the index XL Fleet compared

its stock price performance to. However, I was not able to identify a comparable industry index within XL Fleet's Form 10-K and Annual Report filings during the Class Period. Therefore, instead, I relied on XL Fleet's Global Industry Classification Standard ("GICS") identifier to identify an appropriate industry index. I obtained the GICS identifier XL Fleet from Bloomberg, which was 251010. Because GICS identifiers denote the industry sector that the associated company belongs to, I was able to determine that appropriate comparison industry for XL Fleet was the Automobiles & Components industry. Subsequently, I identified an index that reflects the appropriate comparison industry. For the purposes of my analysis, the index I used was the Dow Jones U.S. Automobiles & Parts Index ("Industry Index").

61. Exhibit-5 presents the XL Fleet return, Market Index return, and Industry Index return used in the regression model. XL Fleet's stock prices and trading volume on the event study dates are shown in Exhibit-6.[89]

62. Prior to running a regression, one must decide on an estimation period over which to measure the relationship between the security at issue and the corresponding market and industry indices. I ran the regression over the interval December 22, 2020 through December 21, 2021. In event study analysis, the choice of using a one-year regression estimation period is a widely used and generally accepted methodology.[90] The results of the regression are summarized in Exhibit-7.

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[89] In my regression analysis, I use log returns $R_1 = \ln (P_1/P_0)$ rather than normal returns $R_1 = ((P_1-P_0)/P_0)$ where P_1 = ending stock price and P_0 = beginning stock price, as security returns are considered to be log normally distributed.

[90] "Three general choices for the placement of an estimation window are before the event window, surrounding the event window, and after the event window." ("Materiality and Magnitude: Event Studies in the Courtroom," by David I. Tabak and Frederick C. Dunbar, Chapter 19 of the *Litigation Services Handbook: The Role of the Financial Expert*, 3rd Edition, edited by Roman L. Weil et al., John Wiley & Sons, Inc., 2001, p. 19.5.)

(3) ***t*-Test**

63. For each event, I conducted a statistical test called a *t*-test to determine whether XL Fleet's abnormal return was statistically significant. If the absolute value of the "*t*-statistic," which is equal to the abnormal return on an event date divided by the standard deviation of all abnormal returns in the regression estimation, is greater than the critical *t*-statistic value of ±1.96, then the security price return is deemed statistically significant. That is, there is less than a 5% chance that the abnormal return was caused by random volatility alone, which is generally accepted to be so unlikely that the random volatility explanation can be rejected. If an event date's abnormal return is deemed to be statistically significant, one can conclude that the security price return was caused by company-specific information, rather than random volatility.

64. The results of the event study are presented below and in Exhibit-8.

b. ***Event Study Results***

(1) **September 18, 2020**

65. On September 18, 2020, Pivotal announced that it had "entered into a definite merger agreement" with XL Fleet.[91] The combined entity was anticipated to have an enterprise value of "approximately $1 billion" with "no material debt expected to be outstanding."[92] Media coverage of the merger announcement was positive, with many news outlets noting that the price of Pivotal rose following the announcement.[93]

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[91] "XL Fleet, a Commercial Vehicle Electrification Solutions Leader, to List on NYSE Through Merger With Pivotal Investment Corporation II," *Business Wire*, September 18, 2020, 6:30AM.

[92] "XL Fleet, a Commercial Vehicle Electrification Solutions Leader, to List on NYSE Through Merger With Pivotal Investment Corporation II," *Business Wire*, September 18, 2020, 6:30AM.

[93] "Pivotal Investment Corp. II Shares Rise on XL Fleet Combination," *Dow Jones Institutional News*, September 18, 2020, 11:26AM and "Here's the Latest Electric-Truck Company to Go Public -- Barrons.com," *Dow Jones Institutional News*, September 18, 2020, 2:23PM.

66. On September 18, 2020, XL Fleet's share price rose 13.38% (on a logarithmic basis), on volume of 19,063,022 shares traded. The Market Index return on that date was -0.89% and the Industry Index return was 3.00%. Based on the regression model, the expected portion of the return on XL Fleet stock was -1.09%. The difference between the actual return of 13.38% and the expected return of -1.09% is an abnormal return of 14.46%.[94]

67. According to the event study, the abnormal return of 14.46% is associated with a *t*-statistic value of 3.40, which indicates that the residual return is statistically significant at the 95% confidence level. The *t*-statistic value of 3.40 indicates that the abnormal return was too severe to have been a random fluctuation. Consequently, the abnormal stock return is deemed statistically significant and is indicative of market efficiency.

(2) **March 3, 2021**

68. On March 3, 2021, short seller Muddy Waters published a report titled "XL Fleet Corp (NYSE XL): More SPAC Trash".[95] This report alleged, among other things, that: XL Fleet's salespeople "were pressured to inflate their sales pipelines"; XL Fleet's "customer reorder rates are in reality quite low" and that "that roughly half of the customers XL touts in its investor presentation are inactive"; XL Fleet's "technology seldom — if ever — generates the advertised 25-50% fuel savings"; XL Fleet "has been subject to supply shortages for years"; XL Fleet's sales projections were "exaggerated"; and XL Fleet "have not been [California Air Resources Board]-approved since 2019 and the company may not sell in California without the approval."[96] That

[94] Apparent mathematical discrepancy due to rounding.

[95] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.

[96] "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.

same day, multiple news outlets explicitly linked the decline in XL Fleet's stock price on March 3, 2021 to the publication of the Muddy Waters report.[97]

69. On March 3, 2021, XL Fleet's share price fell 14.05% (on a logarithmic basis), on volume of 34,617,148 shares traded. The Market Index return on that date was -1.48% and the Industry Index return was -3.78%. Based on the regression model, the expected portion of the return on XL Fleet stock was -3.99%. The difference between the actual return of -14.05% and the expected return of -3.99% is an abnormal return of -10.06%.

70. According to the event study, the abnormal return of -10.06% is associated with a *t*-statistic value of -2.36, which indicates that the residual return is statistically significant at the 95% confidence level. The *t*-statistic value of -2.36 indicates that the abnormal return was too severe to have been a random fluctuation. Consequently, the abnormal stock return is deemed statistically significant and is indicative of market efficiency.

(3) **April 1, 2021**

71. On March 31, 2021, after the close of trading, XL Fleet announced its financial results for 4Q 2020 and FY 2020.[98] For the quarter, XL Fleet reported revenues of $10.87 million (below analysts' expectations of $12.10 million) and adjusted loss per share of $0.06 per share (above analyst expectation of $0.09 loss per share).[99] The Company backed away from its 2021 revenue guidance of $75 million, announcing that it "was not currently providing formal 2021 full-

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[97] See, e.g., "14:04 EST XL Fleet down 16% after Muddy Waters publishes short reportShares of…" *theflyonthewall.com*, March 3, 2021; "XL Fleet shares tumble after Muddy Waters takes short position," *Reuters*, March 3, 2021; and "XL Fleet shares drop over 16% after Muddy Waters takes short position," *Postmedia*, March 3, 2021.

[98] "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.

[99] "XL Fleet Corp reports results for the quarter ended in December - Earnings Summary," *Reuters News*, March 31, 2021.

year financial guidance."[100] The Company also announced revenue guidance for 1Q 2021 of $1 million, which was far below analysts' expectations of $8 million.[101] Following the earnings announcements BTIG analysts lowered their price target from $30 to $23 per share[102] and Canaccord analysts lowered their price target from $30 to $10 per share noting "lack of 2021 visibility."[103] The Canaccord analyst also commented that "Given this is the company's first quarter as a public company," the low revenue guidance "comes as a major disappointment."[104]

72. On April 1, 2021, XL Fleet's share price fell 12.94% (on a logarithmic basis), on volume of 20,268,716 shares traded. The Market Index return on that day was 1.27% and the Industry Index return was -0.50%. Based on the regression model, the expected portion of the return on XL Fleet stock was 0.61%. The difference between the actual return of -12.94% and the expected return of 0.61% is an abnormal return of -13.56%.

73. According to the event study, the abnormal return of -13.56% is associated with a *t*-statistic value of -3.18, which indicates that the residual return is statistically significant at the 95% confidence level. The *t*-statistic value of -3.18 indicates that the abnormal return was too severe to have been a random fluctuation. Consequently, the abnormal stock return is deemed statistically significant and is indicative of market efficiency.

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[100] "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.

[101] "Solid Quarter, But Next One Not Expected Until 2H21. Lowering PT to $23 (from $30)," by Gregory Lewis et al., BTIG, analyst report, March 31, 2021, p.1.

[102] "Solid Quarter, But Next One Not Expected Until 2H21. Lowering PT to $23 (from $30)," by Gregory Lewis et al., BTIG, analyst report, March 31, 2021, p.1.

[103] "Lowering PT to $10 from $30 to reflect lack of 2021 visibility; maintain BUY," by Jed Dorsheimer, Canaccord Genuity, analyst report, April 1, 2021, p.1.

[104] "Lowering PT to $10 from $30 to reflect lack of 2021 visibility; maintain BUY," by Jed Dorsheimer, Canaccord Genuity, analyst report, April 1, 2021, p.1.

c. ***Cause-and-Effect Analysis: News and Non-News Days***

74. While *Cammer* does not provide specific tests, indicia, or factors on which the court relied in determining the existence of a cause-and-effect relationship for a security and its incorporation of information, economists perform various tests, utilizing statistical methodologies, that can provide probative quantitative evidence concerning the existence of a cause-and-effect relationship consistent with an efficient market. In order to test this proposition, one must first examine whether or not a stock's price reacts differently on days in which new information is revealed ("news days") versus all other days ("non-news days"). A key component of such a test is defining what is news.

75. In performing a news vs. no-news test, it is important to use an objective filter to identify "news days" in order to remove any potential subjective biases that may impact the results of the test. To remain as objective as reasonably possible, I broadly defined "news days" as any day with news releases about a subject company that can be identified through the news aggregating database Factiva. Such a broad definition of news is highly objective but produces many "news days" as a result, due to the frequent news coverage of XL Fleet by news media sources. In order to isolate a test sample of news days that would be more likely than not to contain valuation-relevant information, I focused on the frequency of news releases on each day during the Class Period. The idea that the frequency of news releases on a particular topic is an indicator of its import has been established in content analysis studies, for example:

> "The *frequency* with which a symbol, idea, reference or topic occurs in a stream of messages is taken to indicate the *importance, of attention to*, or *emphasis on* that symbol, idea, reference, or topic in the messages."[105]

76. Given that a higher number of news releases is linked to a higher likelihood of trading and market activity, in an efficient market, one would expect days with a higher number of news releases to be more likely to exhibit atypical security price movements.

77. To identify days with the highest number of news releases, or "high information flow days", I began with the news articles published during the Class Period for XL Fleet that I obtained from Factiva. I then determined the effective trading date that each article was published, a process that utilizes the article publishing dates provided by Factiva for each news article.[106] Then, to identify my high information flow and low information flow test groups, I separated the Class Period days based on the number of news articles published each day. I established a rank for each day in the Relevant Period according to the number of news articles published each day from the largest number of news articles to the smallest number of news articles. The top 10% of days with the most news articles published were placed in the high information flow group. The remaining 90% of days were placed in the low information flow group. There are 134 days in the Class Period. Thus, the 13 days with the largest number of new articles published fall within the top 10% and are considered high information flow days. The remaining 121 days are low information flow days.

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[105] *Content Analysis: An Introduction to Its Methodology*, by Klaus Krippendorff, 2nd edition, 2004, p. 59 (emphasis in original).

[106] If an article was published on a weekend or non-trading holiday, the effective date of the article was set to the next available trading date.

78. See Appendix-A for additional details of the methodology I applied to identify high information flow and low information flow days.

79. After the high information flow and lesser information flow dates have been identified, statistical analysis is used to compare the stock price reactions on high information flow days to the stock price reactions on low information flow days. As explained by Ferrillo, Dunbar and Tabak in their article published in 2004 in the *St. John's Law Review*, if the proportion of significant price movements on news days is statistically significantly different than on non-news days, "then the evidence would show that, on average, the stock price reacts to news announcements."[107]

80. The use of tests comparing security price reaction on news dates to non or lesser-news dates for assessing market efficiency is supported and explained by a group of eight testifying finance experts who wrote an *Amici Curiae* brief in *Halliburton II*:

> Another way to perform an event study is to divide the days of the class period ex ante into expected news days and non-news days before examining price movements, and then compare the stock's price movements in the two categories to see if there is a statistically significant difference in price movement between the two sample sets (e.g., earnings-release dates versus non-earnings-release dates), that is statistical evidence that the market incorporates new public information into the price of the stock.[108]

81. I employed a Fisher's exact test to compare the frequency of statistically significant stock price reactions on high information flow days as compared to lesser information flow days.

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[107] "The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof from Plaintiffs in Fraud-On-The-Market Cases," Paul Ferrillo, *et al*., *St. John's Law Review* 78 (81), Winter 2004, p. 120.

[108] Brief of Testifying Economists as *Amici Curiae* in Support of Respondent, *Halliburton Co. and David Lesar v., Erica P. John Fund, Inc., FKA Archdiocese of Milwaukee Supporting Fund, Inc.*, No. 13-317, dated February 5, 2014, p. 10.

The Fisher's exact test is a commonly used and widely accepted statistical tool for testing for a difference in the frequency of statistically significant observations between two samples.[109] If the frequency of statistically significant security price reactions on high information flow days is statistically significantly greater than the frequency of statistically significant price reactions on lesser information flow days for a company, one can conclude for that company that its stock price reacted to information. Such a result would demonstrate a cause-and-effect relationship between news and reactions in the price of a company's stock, thereby demonstrating market efficiency.

82. Similar tests are commonly employed by both plaintiff and defense experts in securities litigation to test for a cause-and-effect relationship.[110] Such statistical analysis has also been accepted by courts when assessing market efficiency:[111]

> [C]ourts have ... endorsed the comparison test that [Plaintiffs' expert] used. *See, e.g., In re Alstom SA Sec. Litig.*, 253 F.R.D. 266, 280 (S.D.N.Y. 2008). This test 'involves comparing the percentage of days with news that have a statistically significant price movement to the percentage of days without news that have a statistically significant price movement.' Paul A. Ferrillo et al., *The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof from Plaintiffs in Fraud-on-the-Market Cases*, 78 St. John's L. Rev. 81, 120 (2004). If the stock price

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[109] *See, e.g.*, for example, "Reference Guide on Statistics," by David H. Kaye and David A. Freeman, in *Reference Manual on Scientific Evidence*, 3rd Edition, The National Academies Press, 2011, p. 287; "Statistical Inference About Means and Proportions with Two Populations," by David R. Anderson et al., Chapter 10 of *Statistics for Business and Economics*, 2nd Edition, West Publishing, 1984; and "Tests of Hypothesis," by Robert D. Mason et al., Chapter 9 of *Statistical Techniques in Business and Economics*, 10th Edition, Irwin McGraw-Hill, 1999.

[110] *See*, *e.g.*, "The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof from Plaintiffs in Fraud-On-The-Market Cases," by Paul A. Ferrillo et al., *St. John's Law Review*, Vol. 78, No. 1, 2004, pp. 119-122; "Use and Misuse of Event Studies to Examine Market Efficiency," by David I. Tabak, NERA White Paper, April 30, 2010; and "The Curious Incident of the Dog That Didn't Bark and Establishing Cause-and-Effect in Class Action Securities Litigation," by Michael L. Hartzmark and H. Nejat Seyhun, *Virginia Law & Business Review*, Vol. 6, No. 3, 2012, p. 415.

[111] See, e.g., *In re Polymedica Corp. Sec. Litig.*, 453 F. Supp. 2d 260 (D. Mass 2006) at 269; *In re Alston SA Sec. Litig.*, 253 F.R.D. 266 (S.D.N.Y. 2008), at 279; *Vinh Nguyen v. Radient Pharmaceuticals Corp. et al.*, 287 F.R.D. 563 (S.D.Cal. 2012), at 30; *Christel Billhofer et al. v. Flamel Technologies, S.A.* et al., 281 F.R.D. 150 (S.D.N.Y. 2012) at 163; and *In re DVI, Inc. Securities Litigation*, 249 F.R.D. (3d Cir. 2011) at 211-212.

is significantly more likely to change on News Days than on Non-News Days, that suggests a causal relationship between material news and the stock price.[112]

83. Importantly, as I noted above, not all high information flow dates are expected to cause a statistically significant stock price reaction. This is reasonable as high information flow days were selected using a broad (but objective) criteria.

(1) Fisher's Exact Test Results: High Information Flow Days vs. Lesser Information Flow Days

84. As shown in Exhibit-8, there were a total of 134 days within the Class Period on which XL Fleet stock traded and 19 of these days had statistically significant abnormal returns.

85. There were 13 days I identified as a "high information flow day" (*See* Exhibit-9).[113] Of these 13 days, 6 days (6/13= 46.2%) had statistically significant price reactions, while 13 of the 121 (13/121= 10.7%) "lesser information flow days" were statistically significant at the 95% confidence interval.[114] Thus, the frequency of statistically significant returns in XL Fleet's stock price was more than four times greater on "news days" than on "non-news days."

86. This difference in frequency is associated with a p-value of 0.34%, which is statistically significant at the 99% confidence level for a one-tail test or a two-tailed test. Therefore, the result of this statistical test demonstrates that there was a cause-and-effect relationship between the release of new, Company-specific information and reactions in XL Fleet's stock price. This demonstrates that XL Fleet stock traded in an efficient market during the Class Period.

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[112] *McIntire v. China MediaExpress Holdings*, Inc., 38 F. Supp. 3d 415 (S.D.N.Y. 2014), at 430.

[113] September 18, 2020, March 3, 2021 and March 31, 2021 were among the group of high information flow days.

[114] The conclusions of this collective analysis are robust to the exclusion of March 31, 2021.

(2) **Cause-and-Effect Summary**

87. Based on the results of my tests which examined the reaction of XL Fleet's stock price to new information, during the Class Period, XL Fleet stock traded in an efficient market.

D. The *Unger/Krogman* Factors Considered

88. In addition to evaluating market efficiency using the *Cammer* factors, I also analyzed three factors considered by the Fifth Circuit Court of Appeals in *Unger v. Amedisys*, 401 F.3d 316 (5th Cir. 2005), and the district court in *Krogman v. Sterritt*, 202 F.R.D. 467 (N.D. Tex. 2001) as indicative of market efficiency.

1. Market Capitalization

89. Economists have often considered the market value of a firm and its relationship with market efficiency when attempting to determine market efficiency. Larger companies tend to attract more analyst and news media coverage and gain the attention of greater numbers of investors, including very large institutional investors. All these characteristics, which accompany a large market capitalization, promote market efficiency.

90. The court in *Krogman* held that "[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations."[115] In addition, some investors such as pension funds are often restricted to owning securities whose market capitalization is sufficiently high.

91. During the Class Period, XL Fleet's average market capitalization was $1.29 billion (*See* Exhibit-6), putting XL Fleet in the 4th decile of U.S. companies by size – XL Fleet's market

[115] *Krogman*, 202 F.R.D. 467 at 478.

capitalization was larger than the market capitalization of at least 67.3% of all other publicly-traded companies in the United States.[116]

92. Consistent with the *Unger*/*Krogman* opinions, XL Fleet's market capitalization throughout the Class Period is further evidence of market efficiency during the Class Period.

2. Float

93. XL Fleet's stock float averaged $1.12 billion during the Class Period. While float excludes shares held by insiders and affiliated corporate entities, XL Fleet's stock float was still larger than the total market capitalization of at least 65.4% of all other publicly traded companies in the U.S. The size of XL Fleet's float is indicative of market efficiency.[117]

94. Float can also be analyzed as a percentage of total shares outstanding as well as in absolute share and value terms. On average during the Class Period, there were 67.60 million shares of stock in XL Fleet's float and 77.43 million shares of stock outstanding, resulting in an average float of 92.5% of stock outstanding.

95. The magnitude of XL Fleet's float is indicative of the efficiency of the market for its stock during the Class Period.

3. Bid-Ask Spread

96. A narrow bid-ask spread of a particular security is also often associated with efficiency. A narrow bid-ask spread implies that there is a large number of investors willing to buy or sell a security, thus the cost of executing a trade is lower, all else equal.

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[116] Using averaged month-end data from CRSP for September 2020 through March 2021, I grouped public companies into deciles, so that the 1st decile contains the largest 10% of all public companies listed on the NYSE, American Stock Exchange, NASDAQ, and ARCA while the 10th decile contains the smallest 10%.

[117] Using averaged month-end data from CRSP for September 2020 through March 2021, I grouped public companies into deciles, so that the 1st decile contains the largest 10% of all public companies listed on the NYSE, American Stock Exchange, NASDAQ, and ARCA while the 10th decile contains the smallest 10%.

97. I obtained from CRSP the daily closing bid and ask quotes for XL Fleet stock during the Class Period. I measured the percentage bid-ask spread as the difference between the bid and ask quotes, divided by the average of the bid and ask quotes.[118] Exhibit-6 presents XL Fleet's bid-ask spread data.

98. The average bid-ask spread for XL Fleet's stock during the Class Period was 0.14% (*See* Exhibit-6). By comparison, the average month-end bid-ask spread over the course of the Class Period for all stocks in the CRSP database was 0.50%.[119]

99. XL Fleet's average bid-ask spread was narrower than the average level among all other CRSP stocks. The bid-ask spread measure favors a finding of market efficiency.

VI. OTHER XL FLEET SECURITIES

100. In addition to its common stock, during the Class Period, XL Fleet also possessed units (listed on the NYSE as PIC.U),[120] warrants (initially listed on the NYSE as PIC WS and later listed as XL WS), and there was a market for XL Fleet's call and put options.[121] Warrants, call option, and put option securities are derivative securities, meaning that the value of these securities relies on and is linked to the value of another asset. In this case, the warrants, call option, and put option securities are derivatives of XL Fleet common stock. That is, as the underlying value of XL Fleet common stock changes, so too will the value of the derivative securities. Similarly, because the units were composed of common stock and warrants, the units are also a derivative of XL Fleet

[118] "Price Reversals, Bid-Ask Spreads, and Market Efficiency," by Allen B. Atkins and Edward A. Dyl, *Journal of Financial and Quantitative Analysis*, vol. 25, no. 4, 1990.

[119] This calculation is based upon averaged month-end data from CRSP for September 2020 through March 2021.

[120] Each unit consisted of one share of common stock and one-third of one warrant.

[121] XL Fleet Corp., Form 10-K/A for the Fiscal Year Ended December 31, 2020, filed on May 17, 2021 and Bloomberg.

common stock. Because XL Fleet common stock traded in an efficient market, its trading prices reflected available information. As the price of the XL Fleet common stock responds and reacts to information, so too would the prices of derivative securities. Therefore, it is reasonable to assume (absent evidence to the contrary) that the efficiency of the market for XL Fleet common stock can be extrapolated to XL Fleet units, warrants, call options, and put options.

VII. COMMON DAMAGE METHODOLOGY

101. Plaintiffs' counsel has asked me to opine on whether per share out-of-pocket damages could be measured for each Class member under Section 10(b) of the Exchange Act using a common methodology for all Class members.[122]

A. Section 10(b) Damages Methodology

102. The methodology a financial economist can employ to calculate individual and class-wide damages stemming from various alleged misrepresentations and omissions will accommodate alternative potential determinations of liability. Economic analysis can be used to estimate the relationship between specific statements or sets of statements and the subsequent effect on prices, in the case of affirmative statements, omissions, and/or corrective disclosures. As such, class-wide damages in response to the specific misrepresentations and omissions ultimately established by the Plaintiffs can be calculated in a straightforward manner common to all Class members. Out-of-pocket damages can be measured as the difference between the amount of security price inflation at purchase and the amount of inflation in the security price at sale taking into account formulaic prescriptions in relevant case law and statutes, including, for example, the

[122] It should be noted that I have not conducted a loss causation analysis at this time and reserve the right to address such issues at the appropriate stage. The loss causation analysis that will be necessary to actually calculate damages in the current case requires the full development of the record.

Private Securities Litigation Reform Act of 1995 (the "PSLRA") (15 U.S.C. § 78u-4(e)) and the holding in *Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336 (2005).

103. Assuming a verdict for the Plaintiffs on the allegations of fraud, Section 10(b) per security damages can be measured as follows:

i. First, valuation tools, which would include event study analysis such as that described herein, and potentially other empirical analyses if necessary, would be used to establish that the disclosure(s) correcting the alleged misrepresentations and omissions caused the price of XL Fleet's stock to fall. This analysis, after controlling for potentially confounding non-fraud-related information, would determine if the alleged misrepresentations and omissions had caused the security prices to be artificially inflated, and that the corrective disclosure(s) caused the inflation to dissipate, in turn causing investor losses. This analysis would be used to measure the effect of a disclosure(s) on XL Fleet's stock price and would apply on a class-wide basis.

ii. Second, an inflation ribbon would be constructed, indicating how much artificial inflation caused by the alleged misrepresentations and omissions was in the price of XL Fleet's stock on each day during the Class Period. An inflation ribbon is a time series of the difference between the actual security price observed in the marketplace, and the estimated price that the security would have traded at each day had there been full disclosure from the outset of the Class Period, or but-for price. Construction of the inflation ribbon generally employs event study analysis, combined with widely used and generally accepted valuation tools and models. The inflation ribbon is often constructed by working chronologically backwards from the final corrective disclosure to the start of the Class Period, accounting for the alleged fraud-related residual price declines as they occurred. The difference between the inflation prior to a corrective disclosure and the inflation after that corrective disclosure is equal to the amount of inflation that is dissipated due to the corrective disclosure. Should it be determined that a disclosure(s) is not corrective, the methodology

described herein can accommodate such a change and adjust per security damages accordingly. This analysis is commonly referred to as the "backcasting" method and would also apply on a class-wide basis.

iii. Third, the measure of per security damages generally applied in 10b-5 cases is the reduction in the inflation ribbon over an investor's holding period (the economic/inflation loss). That is, for each Class member, per security damages would be calculated as the difference between the inflation on Class Period date shares were purchased and the inflation on the date those same securities were subsequently sold (if during the Class Period) or held (if at the end of the Class Period). Pursuant to the PSLRA, for any securities sold during the 90-day period after the end of the Class Period, per security damages would be calculated as the lesser of the reduction in the dollar inflation over the investor's holding period (the economic/inflation loss), or the decline in the security price (the investment loss), where the terminal security price is deemed to be the average price from the final corrective disclosure date to the sale date. Also pursuant to the PSLRA, for any securities held 90 days or more beyond the final corrective disclosure, damages would equal the lesser of the reduction in the dollar inflation over the investor's holding period (the economic/inflation loss) or the decline in the security price (the investment loss), where the terminal security price is deemed to be the average price over the 90 days following the final corrective disclosure. The calculation of each Class member's damages would be a mechanical arithmetical exercise, conducted the same way for all Class members, applying the results of the Class-wide analyses described above to each Class member's trading data.

104. Consequently, each Class member's per security damages under Section 10(b) can be computed in the same way, common to all Class members, using readily available daily pricing information, in accordance with widely used and generally accepted methodologies and the PSLRA.

105. I have not yet been asked to calculate damages for any of the claims alleged on behalf of the Class. However, the methodology described above is generally accepted and widely used for calculating damages under Section 10(b) consistently on a class-wide basis in securities class actions. To the extent that there are specific issues complicating the quantification of artificial inflation and damages, such as potential confounding information, these issues relate to the merits of the damages model – not whether damages can be calculated on a class-wide basis pursuant to a common methodology for the Class.

VIII. CONCLUSION

106. Based on my analyses explained in detail above, I conclude that XL Fleet stock traded in an efficient market with regard to publicly disclosed information during the Class Period.

107. I also conclude that with expert assistance, the finder of fact in this matter will be able to compute damages using a common class-wide methodology that applies to the calculation of damages for each and every Class member.

IX. LIMITING FACTORS AND OTHER ASSUMPTIONS

108. My analyses and opinions are based on the information available as of the date of this declaration. Should any additional data or information become available subsequent to the submission of this declaration, I reserve the right to supplement or amend this declaration based on this new information.

Dated: March 10, 2023

Adam Werner, PhD
Affiliated Expert,
Crowninshield Financial Research

Exhibit-1
Curriculum Vitae
Adam Werner, Ph.D.

EDUCATION

1998	Northwestern University, Kellogg Graduate School of Management Ph.D. in Finance
1992	Oberlin College B.A. in Economics with Honors

TEACHING EXPERIENCE

2014 – Present	Cal Poly San Luis Obispo Orfalea College of Business San Luis Obispo, CA Lecturer in Economics

BUSINESS EXPERIENCE

2015 – Present	Crowninshield Financial Research
2018 – 2021	Pismo Beach Planning Commission
2009 – 2015	Gnarus Advisors/Berkeley Economic Consulting
2008 – 2009	LitiNomics
2004 – 2008	CRA International
2000 – 2003	National Economic Research Associates, Inc.
1998 – 2000	Cornerstone Research
1992 – 1993	Federal Reserve Bank

PAPERS AND PUBLICATIONS

"The Impact of Underwriter Reputation on Equity Offering: An Empirical Study." Thesis, 1999.

"The Long-Run Performance of Underwriters and its Impact on Seasoned Equity Offerings." 1999.

"Dynamic Measures of Underwriter Reputation: A Study of IPO's." 1999.

"CAFE Economics: A Note on the Limits and Effectiveness of Fuel Economy Regulation." With Stephen Sheppard, 1992.

"Validation of Aggregate Damage Estimates in Securities Class Actions." with Narinder Walia, Law360, 2021.

"Trading Models Underestimate Securities Class Damages." with Narinder Walia, Law360, 2019.

"More 'Dark Pools" Deepen Litigation Issues." Law360, 2013.

"Recent Trends in Securities Class Action Litigation: Will Enron and Sarbanes-Oxley Change the Tides." with Elaine Buckberg, Todd Foster and Ronald Miller, 2003.

"The Effects of the PSLRA and Subsequent Events on Securities Litigation." With Fred Dunbar and Todd Foster, prepared for the New York City Bar Association, 2003.

"The Energy Tax: Who Pays?" joint with Mark Schweitzer, in Federal Reserve Bank of Cleveland's Economic Commentary, 1993.

PRESENTATIONS

"Cause or Effect: Are Settlement Statistics Driving Down Settlements?" Presentation to Robbins Geller Rudman & Dowd, LLP in San Diego, CA on October 10, 2013, Wolf Popper, LLP in New York, NY on September 18, 2013, Abraham, Fruchter & Twersky, LLP in New York, NY on September 17, 2013, Robbins Geller Rudman & Dowd, LLP in Melville, NY on September 11, 2013, Entwistle & Cappucci, LLP in New York, NY on September 10, 2013, and Faruqi & Faruqi, LLP in New York, NY on September 10, 2013.

"The Economics of Securities Litigation." Sidley & Austin in Los Angeles, CA on March 14, 2007.

"The Global Cost of Capital." Panel discussion on valuing assets in foreign countries at the University of Texas School of Law VALCON conference in Las Vegas on February 8, 2007.

"Economic Damages in Securities Fraud Matters." NERA Luncheon Seminars with Alan Cox given at the Fifth Avenue Suites Hotel in Portland, OR on November 19, 2002 and at the W Hotel in Seattle, WA on November 20, 2002.

"Shareholder Class Actions: Calculation of Damages." Presentation to Skadden, Arps, Slate, Meagher & Flom, LLP in San Francisco, CA on October 30, 2002, Marsh FINPRO in San Francisco, CA on September 18, 2002, Marsh Risk & Insurance Services in San Diego, CA on September 17, 2002 and Marsh FINPRO in Los Angeles, CA on September 13, 2002.

"Capital Formation: Class Action Litigation and Prevention." Speech and panel discussion focusing on securities class action litigation, which sometimes arise from initial public offerings and/or market volatility in the aftermarket. Presented at the 2002 CALBIO Summit in San Diego, CA on April 23, 2002.

"Shareholder Class Actions after the NASDAQ Bubble." Speech given to the Securities Litigation Sub-Committee of the Colorado Bar Association at Holland & Hart, LLP in Denver, CO on April 17, 2002.

"Trends in Litigation: How Claims and Losses Are Valued." Speech at the American Bankers Association Insurance Risk Management Annual Conference in San Diego, CA on February 4, 2002.

"Recent Trends in Securities Litigation." "Basic Economic Analysis in Securities Class Action" and "Challenging the Efficient Market Assumption in Securities Class Action Matters." presented to Cooley Godward in San Diego, CA on November 28, 2001. "Recent Trends in Securities Litigation." presentation with Marcia Mayer given at Howard, Rice, Nemerovski, Canady, Falk & Rabkin in San Francisco, CA on November 27, 2001.

"Recent Trends in Securities Litigation." presentation given to Marsh USA in Denver, CO on November 8, 2001, and Thelen, Reid & Priest in Los Angeles, CA on November 6, 2001.

"Financial Economics in Litigation." speech presented to Simpson, Thacher & Bartlett in Palo Alto, CA on July 31, 2001, Baker & McKenzie in San Diego, CA on July 18, 2001, Brobeck, Phleger & Harrison in San Francisco, CA on June 25, 2001 and to Latham & Watkins in San Francisco, CA on June 26, 2001.

"Economic Analysis in Securities Fraud Cases." Speech with Alan Cox delivered to Morrison & Forester, San Francisco, CA on July 25, 2001.

"Recent Trends: Shareholder Class Actions Five Years After the PSLRA." speech presented to Shearman & Sterling in San Francisco, CA on May 23, 2001, O'Melveny & Myers in Los Angeles, CA on May 30, 2001, and Gray, Cary, Ware & Freidenrich in San Diego, CA on June 6, 2001.

EXPERT REPORTS AND TESTIMONY

In re January 2021 Short Squeeze Trading Litigation. Issued a declaration on market efficiency and damage methodology in a securities class action (U.S.D.C. Southern District of Florida, 2023).

In re Nio, Inc. Securities Litigation. Issued a declaration (2022) a reply declaration (2022) and provided deposition testimony (2022) on market efficiency and damage methodology in a securities class action (U.S.D.C. Eastern District of New York).

Gelt Trading, LTD. v. Co-Diagnostics, Inc., et al. Issued a declaration (2022) and a reply declaration (2022) on market efficiency and damage methodology in a securities class action (U.S.D.C. District of Utah, Central Division).

6D Global Technologies, Inc. Securities Litigation. Issued a declaration on loss causation and damages in a securities class action (U.S.D.C. Southern District of New York, 2022).

In re Omega Healthcare Investors, Inc. Securities Litigation. Issued a report (2022), a rebuttal report (2022) and provided deposition testimony (2022) on market efficiency and damage methodology in a securities class action (U.S.D.C. Southern District of New York).

Securities and Exchange Commission v. Bradley C. Davis. Issued a report (2021), a rebuttal report (2021), provided deposition testimony (2021) and trial testimony (2022) on materiality in a case brought by the SEC (U.S.D.C. Central District of California).

Andrew Trampe, et. al. v. CD Projekt S.A. Issued a declaration on aggregate damages in a securities class action (U.S.D.C. Central District of California, 2022).

In re Global Brokerage, Inc. f/k/a/ FXCM Inc. Issued a report (2020), a rebuttal report (2020), provided deposition testimony (2020) and testified (2020) on market efficiency and damage methodology in a securities class action. Issued a report (2021), a rebuttal report (2021) and provided deposition testimony (2021) on loss causation and damages (U.S.D.C. Southern District of New York).

George Barney, et al. v. Nova Lifestyle, Inc., et al. Issued a report on market efficiency and damage methodology in a securities class action (U.S.D.C. Central District of California, 2021).

Peter Voulgaris, et al. v. Array Biopharma Inc., et al. Issued a report (2021) and provided deposition testimony (2021) on market efficiency and damage methodology in a securities class action (U.S.D.C. District of Colorado).

In re Innocoll Holdings Public Limited Company Securities Litigation. Issued a report (2020), a rebuttal report (2020) and provided deposition testimony (2020) on market

efficiency and damage methodology in a securities class action (U.S.D.C. Eastern District of Pennsylvania).

Michael Tietz, et al. v. Crytobloc Technologies Corp., et al. Issued a report on price impact in a securities class action (Supreme Court of British Columbia, 2020).

In re Horsehead Holding Corp. Securities Litigation. Issued a report (2020) and provided deposition testimony (2020) on market efficiency and damage methodology in a securities class action (U.S.D.C. District of Delaware).

Bing Li, et al. v. Aeterna Zentaris, Inc., et al. Issued a declaration (2016), a report (2017), and provided deposition testimony (2017) on market efficiency and damage methodology in a securities class action. Issued a declaration (2019) a reply report (2019), and provided deposition testimony (2020) on loss causation and damages (U.S.D.C. District of New Jersey).

In re Patriot National Inc. Securities Litigation. Issued a declaration (2019) and a supplemental declaration (2019) on damages in a securities class action (U.S.D.C. Southern District of New York).

Hamza Ramzan, et al. v. GDS Holdings Limited, et al. Issued a declaration on NASDAQ microstructure in a securities class action (U.S.D.C. Eastern District of Texas, Marshall Division, 2019).

Ivan Nibur, et al. v. SandRidge Mississippian Trust I, et al. Issued a declaration (2018), a reply declaration (2018), a supplemental reply declaration (2018), and provided deposition testimony (2018) on market efficiency and damage methodology in a securities class action. Issued a declaration (2019) a rebuttal declaration (2019), and provided deposition testimony (2019) on loss causation and damages (U.S.D.C. Western District of Oklahoma).

In Re Insys Theraputics, Inc. Securities Litigation. Issued a report on market efficiency and damage methodology in a securities class action (U.S.D.C. Southern District of New York, 2019).

In Re Spectrum Pharmaceuticals, Inc. Securities Litigation. Issued a declaration (2019) and provided deposition testimony (2019) on market efficiency and damage methodology in a securities class action (U.S.D.C. District of Nevada).

Amanda Beezley et al. v. Fenix Parts, Inc., et al. Issued a declaration on market efficiency and damage methodology in a securities class action (U.S.D.C. Northern District of Illinois, Eastern Division, 2019).

Wayne Mucha, et al. v. Volkswagen Aktiengesellschaft, et al. Issued a declaration regarding benefits to firms that have ADRs listed in a securities class action (U.S.D.C. Eastern District of New York, 2018).

Michael Desta, et al. v. Wins Finance Holdings Inc., et al. Issued a declaration (2018) and provided deposition testimony (2018) on market efficiency and damage methodology in a securities class action (U.S.D.C. Central District of California).

Andrew Meyer, et al. v. Concordia International Corp., et al. Issued a declaration (2018), a reply declaration (2018), and provided deposition testimony (2018) on market efficiency and damage methodology in a securities class action. Issued a declaration (2018), a reply declaration (2018), and provided deposition testimony (2018) on loss causation and damages (U.S.D.C. Southern District of New York).

In re: K12 Securities Litigation. Issued a declaration (2018) and provided deposition testimony (2018) on market efficiency and damage methodology in a securities class action (U.S.D.C. Northern District of California).

Robert Colman, et al. v. Theranos, Inc., et al. Issued a declaration on damage methodology and price impact in a securities class action (U.S.D.C. Northern District of California, San Jose Division, 2018).

In re: CytRx Corporation Securities Litigation. Issued a declaration (2017) and provided deposition testimony (2018) regarding market efficiency and damage methodology in a securities class action (U.S.D.C. Central District of California).

Lord Abbett Affiliated Fund, Inc., et al. v. American International Group, Inc. Issued a report regarding market efficiency, loss causation, and damages in a securities case (U.S.D.C. Southern District of New York, 2017).

Xiaolin Chi, et al. v. Qiao Xing Universal Resources, Inc., et al. Issued a report on damages in a securities class action (District Court of the Virgin Islands, St. Croix Division, 2017).

John Hosey v. Twitter, Inc., et al. Issued a declaration (2017) and provided deposition testimony (2017) regarding rebuttal to Defendants' Motion for Summary Judgement in a securities class action (Superior Court of the State of California, County of San Mateo).

Gwyn R. Hartman Revocable Living Trust v. Southern Michigan Bancorp, Inc. et al. Issued a report on damages arising from alleged exclusions in a proxy solicitation (U.S.D.C. Western District of Michigan, 2017).

Fred Kelsey, et al. v. Textura Corporation, et al. Issued a declaration (2017) and provided deposition testimony (2017) on market efficiency and damage methodology in a securities class action (U.S.D.C. Northern District of Illinois).

Dave Carlton, et al. v. Fred Cannon. Issued a declaration on market efficiency and damage methodology in a securities class action (U.S.D.C. Southern District of Texas, Houston Division, 2016).

James Middlemiss v. Penn West Petroleum LTD., et al. Issued a report on damages in a securities class action (Superior Court of Justice Ontario, Canada, 2016).

David Loritz, et al. v. Exide Technologies, et al. Issued a report on damages and loss causation in a securities class action (U.S.D.C. Central District of California, 2015)

Manishkumar Khunt, et al. v. Alibaba Group Holding Limited, et al. Issued a declaration on potential investor damages in a securities class action (U.S.D.C. Southern District of New York, 2015).

Biotechnology Value Fund, L.P. et al. v. Celera Corporation et al. Issued a report (2014), a reply report (2014), a supplemental report (2014), and provided deposition testimony (2014) on damages arising from a merger (U.S.D.C. Northern District of California).

In re: Hi-Crush Partners L.P. Securities Litigation. Issued a declaration (2014), a supplemental declaration (2014), and provided deposition testimony (2014) regarding market efficiency and damage methodology in a securities class action (U.S.D.C. Southern District of New York).

Ian Mausner v. MarketByte LLC, et al. Issued a declaration about investment advisor incentives and liquidity needs in a securities class action (U.S.D.C. Southern District of California, 2014).

Artes Medical, Inc. v. Lemperle et al. Provided deposition testimony on behalf of defendants about alleged damages caused by a proxy contest (Superior Court of the State of California, County of San Diego, Central District, 2013).

In re: Ebix Inc. Securities Litigation. Issued a declaration (2012) and provided deposition testimony (2013) regarding market efficiency and damage methodology in a securities class action (U.S.D.C. Northern District of Georgia, Atlanta Division).

Erik Poole and William Rhody v. Alange Energy Corp., et al. Issued a report (2012) and a reply report (2013) on market efficiency and damages in a securities class action (Superior Court of Justice Ontario, Canada).

In re: Hecla Mining Securities Litigation. Issued a declaration on investor losses in a securities class action (U.S.D.C. District of Idaho, 2012).

Mark Henning, et al. v. Orient Paper, Inc. et al. Issued a declaration (2011), a supplemental declaration (2012) and provided deposition testimony (2012) regarding market efficiency and damage methodology in a securities class action (U.S.D.C. Central District of California).

Carlos Munoz et al. v. China Expert Technology, Inc., et al. Issued a declaration (2012), a supplemental declaration (2012) and provided deposition testimony (2012) in a securities class action regarding market efficiency and damage methodology (U.S.D.C. Southern District of New York).

Theodore Dean, et al. v. China Agritech, Inc., et al. Issued a declaration (2012), a supplemental declaration (2012) and provided deposition testimony (2012) in a case regarding market efficiency and damage methodology in a securities class action (U.S.D.C. Central District of California).

Robert Michael Shenk, Derivatively on Behalf of Sirius XM Radio Inc. v. Melvin Alan Karmazin, et al. Issued an expert report (2011), a supplemental expert report (2012) and provided deposition testimony (2012) in a case involving damages in a shareholder derivative matter (U.S.D.C. Southern District of New York).

Pathway Investments Pty Ltd and Doystoy Pty Ltd v. National Australia Bank Ltd. Submitted a report on survey techniques, the efficient market hypothesis and liquidity in a securities class action (Supreme Court of Victoria at Melbourne, Australia, Commercial and Equity Division, Commercial Court, 2012).

Bruce Simmonds, Robert Grant and Gordon Moore v. Armtec Infrastructure Inc. et al. Issued a report on market efficiency and damages in a securities class action (Superior Court of Justice Ontario, Canada, 2011).

In re: BP plc. Securities Litigation. Issued a declaration regarding damages and materiality in a securities class action (U.S.D.C. Southern District of Texas, Houston Division, 2010).

In re: Tripath Technology Inc., Debtor. Issued a report (2009) and provided deposition testimony (2010) regarding damages arising from Directors' and Officers' breach of fiduciary duty in bankruptcy court (U.S.D.C. Northern District of California, San Jose Division).

David Ainslie and Muriel Marentette v. CV Technologies et al. Issued a report estimating damages in a securities class action (Superior Court of Justice, Ontario, Canada, 2010).

Harry Stackhouse, on Behalf of Himself and All Others Similarly Situated v. Toyota Motor Corporation, et al. Issued a declaration regarding the relationship between Toyota's U.S. stock price and Japanese stock price in a securities class action (U.S.D.C. Central District of California, 2010).

Phillip Elliot and William Kormos v. NovaGold Resources Inc., et al. Issued a declaration in a securities class action regarding trading volume in the U.S. versus Canada. (Superior Court of Justice, Ontario, Canada, 2010).

International Arbitration between a private equity firm and Chinese biotech company. Issued a report (2008) and testified (2009) before an International Arbitration Committee regarding the value of a private equity investment.

Arbitration between Albert Richards and Old Republic Title Insurance. Deposed regarding estimated damages incurred by plaintiff as a result of a forced sale of Russian securities due to Old Republic's breach of contract (2008).

Californians United for a Responsible Budget, et al., v. California State Public Works Board, et al. Issued a report on the cost of issuing revenue bonds to fund California prison expansion (The Superior Court for the State of California, County of Sacramento, 2008).

Arbitration between Daniel Lyons and Morgan Lyons, and Chinese Hospital Association and Sam English. Deposed regarding plaintiffs' calculated damages arising from asbestos exposure for plaintiff (2003).

Exhibit-2

Documents and Other Information Considered

CASE DOCUMENTS

- Amended Consolidated Class Action Complaint For Violations Of The Federal Securities Laws, filed July 20, 2021.
- Opinion and Order, filed on February 17, 2022.

NEWS ARTICLES AND PRESS RELEASES

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- "XL Fleet, a Commercial Vehicle Electrification Solutions Leader, to List on NYSE Through Merger With Pivotal Investment Corporation II," Business Wire, September 18, 2020, 6:30AM.
- "Pivotal Investment Corp. II Shares Rise on XL Fleet Combination," Dow Jones Institutional News, September 18, 2020, 11:26AM.
- "Here's the Latest Electric-Truck Company to Go Public -- Barrons.com," Dow Jones Institutional News, September 18, 2020, 2:23PM.
- "14:04 EST XL Fleet down 16% after Muddy Waters publishes short report shares of…" *theflyonthewall.com*, March 3, 2021.
- "XL Fleet shares drop over 16% after Muddy Waters takes short position," *Postmedia*, March 3, 2021.
- "XL Fleet shares tumble after Muddy Waters takes short position," *Reuters*, March 3, 2021.
- "XL Fleet Announces Fourth Quarter and Full-Year 2020 Financial Results," *Business Wire*, March 31, 2021, 4:15PM.
- "XL Fleet Corp reports results for the quarter ended in December - Earnings Summary," *Reuters News*, March 31, 2021.

ANALYST REPORTS

- BTIG, January 22, 2021.
- Canaccord Genuity, January 29, 2021.
- BTIG, March 31, 2021.
- Canaccord Genuity, April 1, 2021.

Exhibit-2

Documents and Other Information Considered

SEC FILINGS

- Pivotal Investment Corporation II, Form 10-K for the Fiscal Year ended December 31, 2019, filed March 30, 2020.
- Pivotal Investment Corporation II, Form 10-Q for the Quarter ended March 31, 2020, filed May 14, 2020.
- Pivotal Investment Corporation II, Form 10-Q for the Quarter ended June 30, 2020, filed August 14, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed September 18, 2020.
- Pivotal Investment Corporation II, Form 425, filed September 18, 2020.
- Pivotal Investment Corporation II, Form 425, filed September 21, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed September 21, 2020.
- Pivotal Investment Corporation II, SC 13G, filed September 28, 2020.
- Pivotal Investment Corporation II, Form 425, filed September 30, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed September 30, 2020.
- Pivotal Investment Corporation II, Form S-4, filed October 2, 2020.
- Pivotal Investment Corporation II, Form 425, filed October 26, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed October 26, 2020.
- Pivotal Investment Corporation II, Form 425, filed October 28, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed October 28, 2020.
- Pivotal Investment Corporation II, UPLOAD, filed October 29, 2020.
- Pivotal Investment Corporation II, CORRESP, filed November 10, 2020.
- Pivotal Investment Corporation II, Form 10-Q for the Quarter ended September 30, 2020, filed November 10, 2020.
- Pivotal Investment Corporation II, Form 425, filed November 12, 2020.
- Pivotal Investment Corporation II, Form S-4/A, filed November 12, 2020.
- Pivotal Investment Corporation II, Form 425, filed November 13, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed November 13, 2020.
- Pivotal Investment Corporation II, Form 425, filed November 16, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed November 16, 2020.
- Pivotal Investment Corporation II, Form 425, filed November 19, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed November 19, 2020.
- Pivotal Investment Corporation II, Form 425, filed November 23, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed November 23, 2020.
- Pivotal Investment Corporation II, Form 425, filed November 27, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed November 27, 2020.
- Pivotal Investment Corporation II, UPLOAD, filed November 30, 2020.
- Pivotal Investment Corporation II, CORRESP, filed December 1, 2020.

Exhibit-2

Documents and Other Information Considered

- Pivotal Investment Corporation II, Form S-4/A, filed December 1, 2020.
- Pivotal Investment Corporation II, Form 425, filed December 1, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed December 1, 2020.
- Pivotal Investment Corporation II, Form S-4/A, filed December 4, 2020.
- Pivotal Investment Corporation II, CORRESP, filed December 7, 2020.
- Pivotal Investment Corporation II, EFFECT, filed December 8, 2020.
- Pivotal Investment Corporation II, Form 424B3, filed December 8, 2020.
- Pivotal Investment Corporation II, Form 425, filed December 9, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed December 9, 2020.
- Pivotal Investment Corporation II, Form 425, filed December 11, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed December 11, 2020.
- Pivotal Investment Corporation II, Form 425, filed December 14, 2020.
- Pivotal Investment Corporation II, Form 425, filed December 16, 2020.
- Pivotal Investment Corporation II, Form 8-K, filed December 16, 2020.
- Pivotal Investment Corporation II, Form 25-NSE, filed December 22, 2020.
- XL Fleet Corp., Form 8-K/A, filed December 23, 2020.
- XL Fleet Corp., Form 8-K, filed December 23, 2020.
- XL Fleet Corp., SC 13G, filed December 29, 2020.
- XL Fleet Corp., SC 13G, filed December 30, 2020.
- XL Fleet Corp., SC 13D, filed December 30, 2020.
- XL Fleet Corp., SC 13G, filed December 31, 2020.
- XL Fleet Corp., Form S-1, filed January 14, 2021.
- XL Fleet Corp., UPLOAD, filed January 19, 2021.
- XL Fleet Corp., CORRESP, filed January 20, 2021.
- XL Fleet Corp., EFFECT, filed January 22, 2021.
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- XL Fleet Corp., Form 424B3, filed January 28, 2021.
- XL Fleet Corp., Form 8-K, filed January 28, 2021.
- XL Fleet Corp., SC 13G/A, filed February 1, 2021.
- XL Fleet Corp., SC 13G/A, filed February 3, 2021.
- XL Fleet Corp., SC 13G, filed February 16, 2021.
- XL Fleet Corp., Form 25-NSE, filed March 1, 2021.
- XL Fleet Corp., Form 424B3, filed March 4, 2021.
- XL Fleet Corp., Form 8-K, filed March 4, 2021.
- XL Fleet Corp., Form 424B3, filed March 31, 2021.
- XL Fleet Corp., Form 10-K for the Fiscal Year ended December 31, 2020, filed March 31, 2021.

Exhibit-2

Documents and Other Information Considered

- XL Fleet Corp., Form 8-K, filed March 31, 2021.
- XL Fleet Corp., Form DEFA14A, filed April 16, 2021.
- XL Fleet Corp., Form DEF 14A, filed April 16, 2021.
- XL Fleet Corp., Form 424B3, filed April 20, 2021.
- XL Fleet Corp., Form 8-K, filed April 20, 2021.
- XL Fleet Corp., Form 424B3, filed May 11, 2021.
- XL Fleet Corp., Form 8-K, filed May 11, 2021.
- XL Fleet Corp., Form 8-K, filed May 17, 2021.
- XL Fleet Corp., Form 10-Q for the Quarter ended March 31, 2021, filed May 17, 2021.
- XL Fleet Corp., Form 10-K/A for the Fiscal Year ended December 31, 2020, filed May 17, 2021.
- XL Fleet Corp., Form 424B3, filed May 18, 2021.
- XL Fleet Corp., Form 424B3, filed May 18, 2021.
- XL Fleet Corp., Form 424B3, filed May 18, 2021.
- XL Fleet Corp., Form 424B3, filed June 1, 2021.
- XL Fleet Corp., Form 8-K, filed June 1, 2021.
- XL Fleet Corp., Form 424B3, filed July 21, 2021.
- XL Fleet Corp., Form 8-K, filed July 21, 2021.
- XL Fleet Corp., Form 8-K, filed August 12, 2021.
- XL Fleet Corp., Form 424B3, filed August 13, 2021.
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- Barber, Brad M., Paul A. Griffin, and Baruch Lev, "The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency," *The Journal of Corporation Law*, 1994.

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- Brav, Alon, and J.B. Heaton, "Event Studies in Securities Litigation: Low Power, Confounding Effects, and Bias," *Washington University Law Review*, vol. 93, no. 2, 2015.
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- Fama, Eugene F., "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance*, vol. 25, no. 2, 1970.
- Fama, Eugene F., and Kenneth R. French, "The Cross-Section of Expected Stock Returns," *Journal of Finance*, vol. 47, no. 2, 1992.
- Ferrillo, Paul A., Frederick C. Dunbar, and David Tabak, "The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof from Plaintiffs in Fraud-on-the-Market Cases," *St. John's Law Review*, vol. 78, no. 1, 2004.
- Gold, Kevin L., Eric Korman, and Ahmer Nabi, "Federal Securities Acts and Areas of Expert Analysis," Chapter 27 of the *Litigation Services Handbook: The Role of the Financial Expert*, 6th Edition, edited by Roman L. Weil, Daniel G. Lentz, and Elizabeth A. Evans, John Wiley & Sons, Inc., 2017.
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- "XL Fleet Corp. (XL) CEO Dimitri Kazarinoff on Q4 2020 Results - Earnings Call Transcript," *Seeking Alpha*, conference call, March 31, 2021.

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- "Pivotal Investment Corporation II," by Davide Jalette and Ada Clarice Contreras, ISS, analyst report, December 17, 2020 [PIVSDNY0000078053-76].
- "RE: ISS Report," Internal Company email containing the Glass Lewis report, December 17, 2020 [PIVSDNY0000058533-6].

DATA AND DATABASES

- Bloomberg
- CRSP (Center for Research in Security Prices)
- EDGAR
- Factiva
- Refinitiv Eikon

Exhibit-2

Documents and Other Information Considered

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- *Amgen Inc. v. Conn. Ret. Plans & Trust Funds*, 568 U.S. 455, 458 (2013).
- *Basic, Inc. v. Levinson*, 485 U.S. 224, 241 (1988).
- *Cammer v. Bloom,* 711 F. Supp. 1264 (D.N.J. 1989).
- *Christel Billhofer et al. v. Flamel Technologies, S.A. et al.*, 281 F.R.D. 150 (S.D.N.Y. 2012).
- *Dura Pharmaceuticals, Inc. v. Broudo*, 544 U.S. 336 (2005).
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- *In re DVI, Inc. Securities Litigation*, 249 F.R.D. (3d Cir. 2011).
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- "Fact Sheet; Designated Market Makers," *NYSE Euronext*, 2012.
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- "XL Fleet: Latest Electric Vehicle SPAC Faces Increasing Competition," by Value Kicker, January 4, 2021.
- "XL Fleet Corp: A Solid Business Plan That Is Priced For Perfection," by Guney Kaya, January 5, 2021.
- "XL Fleet Corp (NYSE XL): More SPAC Trash," Muddy Waters, March 3, 2021.
- "XL Fleet: Not Denying Much, Still SPAC Trash," Muddy Waters, March 10, 2021.
- https://www.cnbc.com/video/2021/03/10/short-seller-carson-block-on-his-claims-that-xl-fleet-has-misrepresented-itself.html.

Exhibit-2

Documents and Other Information Considered

- https://www.youtube.com/watch?v=3oqg3TAwmyE.
- "XL Fleet: Still Lofty Valuation Retains Significant Downside Risk," by Pacifica Yield, March 23, 2021.
- Other documents cited in my report.

Exhibit-3

Average Weekly Volume

Week Ending	Shares Traded as a Percent of Outstanding Shares
9/18/2020	82.88%
9/25/2020	135.86%
10/2/2020	42.39%
10/9/2020	43.88%
10/16/2020	15.40%
10/23/2020	19.47%
10/30/2020	23.57%
11/6/2020	11.19%
11/13/2020	22.73%
11/20/2020	102.69%
11/27/2020	104.49%
12/4/2020	110.55%
12/11/2020	130.01%
12/18/2020	92.48%
12/24/2020	120.78%
12/31/2020	51.29%
1/8/2021	38.89%
1/15/2021	34.69%
1/22/2021	25.80%
1/29/2021	38.59%
2/5/2021	39.34%
2/12/2021	30.26%
2/19/2021	19.80%
2/26/2021	27.93%
3/5/2021	70.31%
3/12/2021	26.16%
3/19/2021	22.55%
3/26/2021	19.17%
3/31/2021	16.14%
Average weekly volume as percentage of outstanding shares:	***52.39%***

Source: CRSP.

Exhibit-4

XL Market Makers

October 2020 through March 2021

No.	Code	Market Maker	Total Volume
1	MSCO	MORGAN STANLEY & CO., INCORPOR	12,681,013
2	UBSS	UBS SECURITIES LLC.	4,804,420
3	INCA	INSTINET CORPORATION	4,384,963
4	IBKR	INTERACTIVE BROKERS LLC	4,380,641
5	LEHM	BARCLAYS CAPITAL INC.	4,244,631
6	NFSC	NATIONAL FINANCIAL SERVICES LL	3,471,911
7	TRBT	TRADEBOT SYSTEMS, INC.	3,185,945
8	DUST		2,270,370
9	VALX		2,169,995
10	NITE	VIRTU AMERICAS LLC	2,061,662
11	JMPT	JUMP TRADING, LLC	1,872,756
12	QLBR		1,400,026
13	GSCO	GOLDMAN SACHS	1,378,677
14	MLZQ	Bofa Securities, Inc.	1,087,207
15	ETDX	ELECTRONIC TRANSACTION CLEARING, INC.	1,028,469
16	TDSI	TD SECURITIES (USA) INC.	985,675
17	CPEM	CLEARPOOL EXECUTION SERVICES, LLC	889,551
18	VALR		733,535
19	GSCS	GOLDMAN, SACHS & CO.	649,826
20	BTIG	BTIG, LLC	613,266
21	ETEJ	ELECTRONIC TRANSACTION CLEARING, INC.	582,866
22	JNST		500,766
23	SPDR	SPEEDROUTE LLC	393,555
24	SHMR	O'CONNOR & COMPANY LLC	381,812
25	GTSW		321,722
26	SBSH	CITIGROUP GLOBAL MARKETS INC.	316,576
27	ETRS	E*TRADE CLEARING LLC	274,651
28	INJX	INSTINET, LLC	272,781
29	DBAB	DEUTSCHE BANK SECURITIES INC.	240,970
30	TRCM	TRC MARKETS LLC	211,434
31	FRET	Fox River Execution Tehnology, LLC	205,855
32	BERN	SANFORD C. BERNSTEIN AND CO. I	194,657
33	JEFF	JEFFERIES & COMPANY, INC.	171,353
34	GTSZ	GTS SECURITIES LLC	163,682
35	ETBE	Electronic Transaction Clearing, Inc.	160,802
36	FOXB		155,890
37	GSLT	GOLDMAN SACHS & CO. LLC	111,547
38	CHAS	CHARLES SCHWAB AND CO. INC.	104,516
39	WEXX	WOLVERINE EXECUTION SERVICES,	91,926
40	WCHV	Wells Fargo Securities, LLC	90,768
41	LAMP	LAMPOST CAPITAL LLC	87,221
42	GEBB	GLOBAL EXECUTION BROKERS, LP	80,727
43	VIEW	VIEWTRADE SECURITIES, INC.	79,289
44	HSBC	HSBC SECURITIES (USA) INC.	67,111
45	LIME	LIME BROKERAGE LLC	49,389

Exhibit-4

XL Market Makers

October 2020 through March 2021

No.	Code	Market Maker	Total Volume
46	IEQY	CITADEL SECURITIES LLC	46,970
47	OHOS	TWO SIGMA SECURITIES, LLC	33,823
48	MAXM	MAXIM GROUP, LLC	27,000
49	NQRB	BRUT, LLC	26,803
50	WEXM	WOLVERINE EXECUTION SERVICES, LLC	25,067
51	JONE	JONES AND ASSOCIATES INC.	24,889
52	LIWM		19,119
53	BAYT	BAYPOINT TRADING LLC	16,893
54	ETDR	ELECTRONIC TRANSACTION CLEARING, INC.	15,461
55	COHR		15,423
56	CANT	CANTOR FITZGERALD & CO.	15,000
57	WBPX	WHITE BAY PT LLC	14,545
58	WSEA	WOLVERINE SECURITIES	11,033
59	CODA		8,558
60	AGIS	AEGIS CAPITAL CORP.	8,500
61	VNDM	VANDHAM SECURITIES CORP.	6,569
62	LAFC	R. F. Lafferty & Co., Inc.	6,028
63	ITGI	ITG INC.	5,185
64	EGAW	BATS TRADING, INC.	2,700
65	SAGL	SAGETRADER, LLC	2,578
66	STFL	STIFEL NICOLAUS	2,528
67	ETFA	ELECTRONIC TRANSACTION CLEARING, INC.	1,892
68	CTLR	CUTLER GROUP, LP	1,178
69	NATL	NATIONAL SECURITIES CORP.	900
70	PICT	PICTET OVERSEAS INC.	900
71	CTDN	Citadel Securities LLC	620
72	RGLD	REGAL DISCOUNT SECURITIES, INC	500
73	DFIN	ELECTRONIC BROKERAGE SYSTEMS, LLC	449
74	DRWC		300
75	SPTD	Stock USA Investments	300
76	HAPX	HAP Trading, LLC	206
77	LSCI	LEK SECURITIES CORPORATION	140
78	ETCC	Electronic Transaction Clearing, Inc.	100
79	FLTU	FLOW TRADERS US LLC	91
80	EGXW	BATS TRADING, INC.	66
81	CTDL	Citadel Derivatives Group Llc	63
82	CUGS	Cuttone & Co., Inc.	2

Source: Bloomberg.

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
9/18/2020	13.38%	-0.89%	3.00%
9/21/2020	9.53%	-1.26%	-0.23%
9/22/2020	-4.22%	0.93%	-4.38%
9/23/2020	-1.90%	-2.43%	-7.95%
9/24/2020	-10.08%	0.20%	1.23%
9/25/2020	5.42%	1.56%	3.35%
9/28/2020	0.42%	1.64%	3.13%
9/29/2020	-2.45%	-0.40%	-0.55%
9/30/2020	-1.55%	0.69%	2.03%
10/1/2020	-1.31%	0.78%	3.71%
10/2/2020	-3.12%	-0.78%	-5.22%
10/5/2020	-0.45%	1.81%	2.55%
10/6/2020	-3.24%	-1.20%	-2.34%
10/7/2020	-2.48%	1.69%	3.03%
10/8/2020	1.91%	0.85%	0.34%
10/9/2020	2.98%	0.85%	1.14%
10/12/2020	-1.39%	1.34%	1.68%
10/13/2020	-0.37%	-0.50%	0.48%
10/14/2020	-0.75%	-0.60%	2.04%
10/15/2020	-1.61%	-0.08%	-1.46%
10/16/2020	-0.29%	-0.07%	-1.14%
10/19/2020	-0.87%	-1.43%	-1.49%
10/20/2020	-0.68%	0.38%	-0.49%
10/21/2020	-0.68%	-0.34%	0.26%
10/22/2020	0.00%	0.61%	1.24%
10/23/2020	1.36%	0.38%	-0.89%
10/26/2020	-1.36%	-1.83%	-0.88%
10/27/2020	-0.59%	-0.30%	0.25%
10/28/2020	-0.89%	-3.34%	-4.04%
10/29/2020	-0.20%	1.04%	1.49%
10/30/2020	0.20%	-1.32%	-4.30%
11/2/2020	-0.10%	1.20%	2.39%
11/3/2020	0.60%	1.86%	4.74%
11/4/2020	-0.40%	1.94%	-1.04%
11/5/2020	0.00%	2.09%	4.13%
11/6/2020	0.40%	0.00%	-1.47%
11/9/2020	-0.40%	1.06%	-0.14%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
11/10/2020	0.20%	-0.06%	-0.68%
11/11/2020	-0.10%	0.80%	0.91%
11/12/2020	0.20%	-0.97%	-1.65%
11/13/2020	0.30%	1.32%	0.66%
11/16/2020	2.44%	1.23%	0.88%
11/17/2020	1.34%	-0.15%	5.02%
11/18/2020	-0.29%	-0.91%	6.75%
11/19/2020	10.85%	0.58%	1.74%
11/20/2020	-2.87%	-0.43%	-1.46%
11/23/2020	6.73%	0.79%	5.19%
11/24/2020	-1.66%	1.50%	5.66%
11/25/2020	4.99%	0.02%	1.53%
11/27/2020	15.21%	0.40%	1.50%
11/30/2020	-3.91%	-0.58%	-2.74%
12/1/2020	-2.01%	0.96%	2.71%
12/2/2020	-1.91%	0.12%	-2.24%
12/3/2020	4.56%	0.23%	2.99%
12/4/2020	13.98%	1.04%	1.11%
12/7/2020	-1.55%	-0.02%	4.84%
12/8/2020	-1.77%	0.43%	0.81%
12/9/2020	8.88%	-0.96%	-4.88%
12/10/2020	-0.12%	0.26%	1.99%
12/11/2020	-5.82%	-0.23%	-2.46%
12/14/2020	-3.71%	-0.33%	3.25%
12/15/2020	-8.77%	1.30%	-0.40%
12/16/2020	5.18%	0.14%	-1.29%
12/17/2020	2.04%	0.79%	4.08%
12/18/2020	-0.26%	-0.21%	3.93%
12/21/2020	24.33%	-0.29%	-5.04%
12/22/2020	-10.91%	0.06%	-1.08%
12/23/2020	62.07%	0.14%	1.30%
12/24/2020	-9.02%	0.23%	1.48%
12/28/2020	-10.39%	0.38%	0.25%
12/29/2020	-9.57%	-0.37%	0.12%
12/30/2020	-6.74%	0.33%	3.43%
12/31/2020	4.00%	0.36%	1.03%
1/4/2021	-16.75%	-1.32%	2.06%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
1/5/2021	4.34%	0.90%	1.09%
1/6/2021	-4.54%	0.80%	2.87%
1/7/2021	9.79%	1.61%	6.35%
1/8/2021	-3.92%	0.47%	5.73%
1/11/2021	-2.38%	-0.57%	-5.87%
1/12/2021	1.01%	0.42%	4.55%
1/13/2021	4.98%	0.09%	0.27%
1/14/2021	-1.69%	0.00%	-0.32%
1/15/2021	-7.28%	-0.86%	-2.32%
1/19/2021	-1.80%	0.85%	2.53%
1/20/2021	-4.13%	1.20%	1.26%
1/21/2021	1.15%	-0.09%	-0.21%
1/22/2021	9.01%	-0.15%	-0.01%
1/25/2021	-5.08%	0.24%	2.54%
1/26/2021	4.17%	-0.29%	-0.15%
1/27/2021	-6.55%	-2.51%	-2.63%
1/28/2021	-2.07%	0.92%	-2.24%
1/29/2021	-0.58%	-1.78%	-4.19%
2/1/2021	6.33%	1.71%	4.85%
2/2/2021	-0.35%	1.39%	3.15%
2/3/2021	-2.67%	0.14%	-1.07%
2/4/2021	4.19%	1.12%	-0.43%
2/5/2021	-1.87%	0.61%	0.55%
2/8/2021	1.58%	0.97%	1.54%
2/9/2021	1.41%	0.10%	-1.21%
2/10/2021	-4.30%	-0.03%	-4.21%
2/11/2021	-0.35%	0.19%	0.33%
2/12/2021	3.19%	0.47%	0.47%
2/16/2021	-2.58%	-0.11%	-1.75%
2/17/2021	-2.81%	-0.23%	0.04%
2/18/2021	-6.52%	-0.66%	-1.44%
2/19/2021	-2.97%	0.27%	-0.14%
2/22/2021	-8.06%	-0.97%	-6.37%
2/23/2021	-10.80%	-0.13%	-1.98%
2/24/2021	0.62%	1.12%	5.18%
2/25/2021	-0.69%	-2.70%	-7.15%
2/26/2021	-2.58%	-0.39%	-0.48%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
3/1/2021	4.69%	2.45%	5.11%
3/2/2021	7.15%	-0.91%	-2.67%
3/3/2021	-14.05%	-1.48%	-3.78%
3/4/2021	-14.41%	-1.68%	-4.34%
3/5/2021	-7.17%	1.72%	-1.76%
3/8/2021	-6.38%	-0.59%	-3.40%
3/9/2021	10.33%	1.67%	11.95%
3/10/2021	2.38%	0.68%	0.31%
3/11/2021	6.74%	1.41%	3.23%
3/12/2021	0.47%	0.15%	0.27%
3/15/2021	4.58%	0.70%	1.21%
3/16/2021	-3.57%	-0.43%	-3.99%
3/17/2021	0.46%	0.36%	3.43%
3/18/2021	-8.44%	-1.81%	-5.53%
3/19/2021	1.58%	0.18%	0.31%
3/22/2021	-2.59%	0.48%	1.10%
3/23/2021	-7.38%	-1.21%	-1.98%
3/24/2021	-10.47%	-0.91%	-3.57%
3/25/2021	0.30%	0.65%	1.60%
3/26/2021	-4.33%	1.52%	-2.26%
3/29/2021	-3.43%	-0.53%	-1.35%
3/30/2021	-3.89%	0.00%	3.58%
3/31/2021	1.80%	0.56%	3.20%
4/1/2021	-12.94%	1.27%	-0.50%
4/5/2021	-5.20%	1.14%	4.00%
4/6/2021	10.99%	0.03%	0.39%
4/7/2021	2.95%	-0.15%	-2.64%
4/8/2021	-0.47%	0.59%	1.04%
4/9/2021	-6.14%	0.55%	-0.54%
4/12/2021	-8.54%	-0.07%	2.50%
4/13/2021	1.61%	0.39%	5.47%
4/14/2021	-5.47%	-0.29%	-2.78%
4/15/2021	-7.43%	1.00%	0.71%
4/16/2021	-1.83%	0.26%	0.16%
4/19/2021	-0.15%	-0.70%	-2.64%
4/20/2021	-5.88%	-0.91%	-0.55%
4/21/2021	10.99%	1.12%	3.29%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
4/22/2021	-1.78%	-0.73%	-2.49%
4/23/2021	6.36%	1.20%	1.66%
4/26/2021	4.25%	0.44%	1.01%
4/27/2021	-4.95%	-0.02%	-2.94%
4/28/2021	0.42%	0.01%	-1.09%
4/29/2021	-2.70%	0.35%	-2.91%
4/30/2021	-1.89%	-0.80%	3.41%
5/3/2021	-4.05%	0.20%	-2.37%
5/4/2021	-2.01%	-0.85%	-1.78%
5/5/2021	-3.17%	-0.01%	0.54%
5/6/2021	-2.45%	0.48%	-0.46%
5/7/2021	2.13%	0.86%	1.42%
5/10/2021	-7.21%	-1.24%	-5.26%
5/11/2021	4.92%	-0.66%	-1.96%
5/12/2021	-4.40%	-2.28%	-4.18%
5/13/2021	-3.16%	0.97%	-1.52%
5/14/2021	6.06%	1.74%	2.78%
5/17/2021	4.60%	-0.14%	-1.19%
5/18/2021	9.63%	-0.60%	-0.10%
5/19/2021	-0.15%	-0.38%	-1.90%
5/20/2021	-1.32%	1.11%	2.94%
5/21/2021	1.32%	-0.03%	0.29%
5/24/2021	0.44%	0.93%	2.70%
5/25/2021	-5.99%	-0.27%	-0.36%
5/26/2021	4.97%	0.45%	2.58%
5/27/2021	2.61%	0.29%	2.50%
5/28/2021	-1.30%	0.10%	-0.86%
6/1/2021	4.95%	0.17%	0.34%
6/2/2021	6.15%	0.17%	-2.00%
6/3/2021	3.94%	-0.52%	-2.12%
6/4/2021	-2.27%	0.84%	2.98%
6/7/2021	5.46%	0.16%	0.31%
6/8/2021	10.43%	0.18%	-0.05%
6/9/2021	-1.98%	-0.29%	-0.93%
6/10/2021	-3.39%	0.40%	0.57%
6/11/2021	-1.27%	0.31%	0.25%
6/14/2021	-0.93%	0.13%	0.36%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
6/15/2021	-4.69%	-0.30%	-1.91%
6/16/2021	2.07%	-0.47%	0.52%
6/17/2021	-4.18%	-0.14%	0.45%
6/18/2021	-0.13%	-1.26%	-0.02%
6/21/2021	-1.27%	1.35%	0.28%
6/22/2021	1.77%	0.49%	0.47%
6/23/2021	5.00%	-0.01%	3.92%
6/24/2021	4.54%	0.65%	2.44%
6/25/2021	-0.91%	0.32%	-0.69%
6/28/2021	2.94%	0.11%	1.12%
6/29/2021	-5.50%	0.00%	-0.59%
6/30/2021	-1.90%	0.04%	-0.21%
7/1/2021	-3.54%	0.42%	-0.05%
7/2/2021	-2.90%	0.50%	0.10%
7/6/2021	0.26%	-0.30%	-2.69%
7/7/2021	0.89%	0.11%	-2.08%
7/8/2021	-2.56%	-0.90%	0.47%
7/9/2021	-6.02%	1.28%	1.48%
7/12/2021	-3.65%	0.22%	3.10%
7/13/2021	-3.05%	-0.60%	-2.04%
7/14/2021	-1.19%	-0.24%	-1.84%
7/15/2021	2.21%	-0.39%	-0.71%
7/16/2021	-2.36%	-0.76%	-1.52%
7/19/2021	2.07%	-1.47%	-0.40%
7/20/2021	-0.15%	1.68%	2.66%
7/21/2021	3.60%	0.96%	-0.12%
7/22/2021	-1.42%	0.03%	-1.26%
7/23/2021	-3.50%	0.89%	-0.59%
7/26/2021	1.77%	0.16%	1.90%
7/27/2021	-3.57%	-0.60%	-1.68%
7/28/2021	5.45%	0.30%	0.54%
7/29/2021	-2.03%	0.45%	4.05%
7/30/2021	2.03%	-0.56%	0.64%
8/2/2021	-1.44%	-0.14%	2.19%
8/3/2021	-3.40%	0.68%	0.29%
8/4/2021	-1.36%	-0.40%	-1.44%
8/5/2021	1.66%	0.71%	0.64%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
8/6/2021	3.97%	0.08%	-1.27%
8/9/2021	-0.29%	-0.04%	1.32%
8/10/2021	6.30%	0.07%	-0.07%
8/11/2021	-3.73%	0.24%	-0.15%
8/12/2021	0.00%	0.20%	1.32%
8/13/2021	-14.85%	0.03%	-0.93%
8/16/2021	-5.03%	-0.08%	-3.28%
8/17/2021	-2.79%	-0.79%	-3.22%
8/18/2021	-0.71%	-0.89%	2.37%
8/19/2021	0.36%	-0.23%	-2.44%
8/20/2021	3.48%	0.86%	0.71%
8/23/2021	6.30%	1.05%	2.70%
8/24/2021	8.03%	0.42%	0.86%
8/25/2021	-1.19%	0.26%	0.33%
8/26/2021	0.00%	-0.65%	-1.59%
8/27/2021	2.23%	1.09%	1.69%
8/30/2021	-1.18%	0.30%	1.47%
8/31/2021	1.03%	-0.11%	0.38%
9/1/2021	-0.59%	0.20%	-0.13%
9/2/2021	0.30%	0.41%	-0.20%
9/3/2021	0.15%	-0.01%	-0.03%
9/7/2021	-0.29%	-0.42%	1.83%
9/8/2021	-4.07%	-0.35%	-0.03%
9/9/2021	0.61%	-0.29%	-0.06%
9/10/2021	-3.74%	-0.73%	-1.80%
9/13/2021	0.95%	0.20%	1.19%
9/14/2021	-2.87%	-0.62%	0.11%
9/15/2021	-1.14%	0.85%	1.73%
9/16/2021	1.78%	-0.09%	-0.09%
9/17/2021	4.86%	-0.74%	0.15%
9/20/2021	-6.48%	-1.84%	-3.82%
9/21/2021	0.65%	0.09%	0.97%
9/22/2021	2.09%	0.99%	1.90%
9/23/2021	2.51%	1.20%	1.07%
9/24/2021	-4.11%	-0.01%	1.95%
9/27/2021	9.99%	-0.10%	2.08%
9/28/2021	-9.82%	-2.10%	-1.37%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
9/29/2021	-3.61%	-0.01%	0.22%
9/30/2021	2.97%	-0.95%	-0.85%
10/1/2021	0.00%	1.06%	0.23%
10/4/2021	-7.59%	-1.30%	0.96%
10/5/2021	-0.70%	0.95%	0.01%
10/6/2021	-1.78%	0.28%	-0.07%
10/7/2021	-0.54%	0.99%	2.17%
10/8/2021	-2.93%	-0.25%	-0.17%
10/11/2021	-2.64%	-0.64%	0.37%
10/12/2021	4.48%	0.02%	1.78%
10/13/2021	0.55%	0.48%	0.25%
10/14/2021	0.90%	1.58%	0.86%
10/15/2021	-1.27%	0.57%	2.31%
10/18/2021	0.00%	0.33%	1.95%
10/19/2021	2.70%	0.68%	-0.60%
10/20/2021	-1.25%	0.39%	0.60%
10/21/2021	-0.72%	0.29%	2.74%
10/22/2021	-2.75%	-0.17%	0.85%
10/25/2021	2.93%	0.55%	8.93%
10/26/2021	-1.45%	-0.01%	-0.66%
10/27/2021	-4.50%	-0.76%	0.84%
10/28/2021	6.31%	1.12%	3.46%
10/29/2021	-1.45%	0.10%	2.80%
11/1/2021	0.36%	0.57%	6.94%
11/2/2021	1.09%	0.20%	-2.37%
11/3/2021	0.72%	0.73%	3.18%
11/4/2021	-1.26%	0.29%	1.49%
11/5/2021	-3.50%	0.40%	-0.54%
11/8/2021	6.87%	0.20%	-3.34%
11/9/2021	-4.65%	-0.29%	-9.67%
11/10/2021	-2.97%	-1.05%	2.84%
11/11/2021	4.97%	0.24%	0.18%
11/12/2021	-1.99%	0.71%	-1.84%
11/15/2021	-4.50%	-0.03%	-1.19%
11/16/2021	0.38%	0.40%	2.87%
11/17/2021	-1.54%	-0.44%	2.62%
11/18/2021	-9.34%	0.03%	0.03%

Exhibit-5

XL, Market Index, and Peer Index Returns

September 18, 2020 through December 21, 2021

Date	XL Return	Market Index Return	Industry Index Return
11/19/2021	2.31%	-0.29%	2.56%
11/22/2021	-3.60%	-0.62%	1.79%
11/23/2021	6.47%	-0.03%	-3.44%
11/24/2021	-2.66%	0.32%	0.21%
11/26/2021	-2.95%	-2.26%	-3.11%
11/29/2021	-5.26%	1.00%	3.75%
11/30/2021	2.23%	-1.93%	-0.15%
12/1/2021	-10.44%	-1.52%	-3.33%
12/2/2021	3.84%	1.53%	0.01%
12/3/2021	-7.32%	-1.14%	-5.61%
12/6/2021	6.85%	1.17%	-0.04%
12/7/2021	1.64%	2.13%	3.71%
12/8/2021	2.30%	0.43%	1.24%
12/9/2021	-3.70%	-1.08%	-5.11%
12/10/2021	-1.43%	0.61%	2.13%
12/13/2021	-4.40%	-0.99%	-4.77%
12/14/2021	1.24%	-0.77%	-0.95%
12/15/2021	-0.50%	1.49%	1.46%
12/16/2021	-6.14%	-1.01%	-3.90%
12/17/2021	1.57%	-0.63%	-0.54%
12/20/2021	-3.70%	-1.24%	-3.34%
12/21/2021	-15.10%	1.97%	3.51%

Sources: Bloomberg and CRSP.
Note: All returns are logarithmic returns.

Exhibit-6

XL Market Efficiency Statistics[1]

September 18, 2020 through March 31, 2021

Date	Closing Price	Log Return	Volume	Closing Bid	Closing Ask	Closing Bid/Ask Spread	Average Bid/Ask Spread %	Outstanding Shares	Market Capitalization
	[a]	[b]	[c]	[d]	[e]			[f]	[g]
9/18/2020	$12.10	13.38%	19,063,022	$12.06	$12.10	$0.04	0.33%	23,000,000	$278,300,009
9/21/2020	$13.31	9.53%	16,488,741	$13.30	$13.31	$0.01	0.08%	23,000,000	$306,130,010
9/22/2020	$12.76	-4.22%	3,836,287	$12.71	$12.72	$0.01	0.08%	23,000,000	$293,480,005
9/23/2020	$12.52	-1.90%	4,866,122	$12.48	$12.50	$0.02	0.16%	23,000,000	$287,960,011
9/24/2020	$11.32	-10.08%	4,065,127	$11.34	$11.38	$0.04	0.35%	23,000,000	$260,359,993
9/25/2020	$11.95	5.42%	1,991,205	$11.90	$11.94	$0.04	0.34%	23,000,000	$274,849,996
9/28/2020	$12.00	0.42%	2,148,765	$11.98	$11.99	$0.01	0.08%	23,000,000	$276,000,000
9/29/2020	$11.71	-2.45%	1,900,335	$11.71	$11.75	$0.04	0.34%	23,000,000	$269,330,001
9/30/2020	$11.53	-1.55%	1,815,920	$11.51	$11.52	$0.01	0.09%	23,000,000	$265,189,994
10/1/2020	$11.38	-1.31%	1,897,370	$11.38	$11.40	$0.02	0.18%	23,000,000	$261,740,003
10/2/2020	$11.03	-3.12%	1,986,899	$11.01	$11.03	$0.02	0.18%	23,000,000	$253,689,994
10/5/2020	$10.98	-0.45%	2,719,129	$10.94	$10.98	$0.04	0.36%	23,000,000	$252,539,989
10/6/2020	$10.63	-3.24%	2,881,774	$10.61	$10.63	$0.02	0.19%	23,000,000	$244,490,003
10/7/2020	$10.37	-2.48%	1,486,526	$10.37	$10.39	$0.02	0.19%	23,000,000	$238,509,997
10/8/2020	$10.57	1.91%	1,455,501	$10.55	$10.55	$0.00	0.00%	23,000,000	$243,109,993
10/9/2020	$10.89	2.98%	1,548,498	$10.89	$10.89	$0.00	0.00%	23,000,000	$250,470,008
10/12/2020	$10.74	-1.39%	586,573	$10.78	$10.78	$0.00	0.00%	23,000,000	$247,019,995
10/13/2020	$10.70	-0.37%	741,671	$10.68	$10.68	$0.00	0.00%	23,000,000	$246,099,996
10/14/2020	$10.62	-0.75%	1,020,397	$10.62	$10.62	$0.00	0.00%	23,000,000	$244,259,997
10/15/2020	$10.45	-1.61%	634,816	$10.45	$10.45	$0.00	0.00%	23,000,000	$240,349,996
10/16/2020	$10.42	-0.29%	558,217	$10.42	$10.42	$0.00	0.00%	23,000,000	$239,660,002
10/19/2020	$10.33	-0.87%	612,538	$10.33	$10.33	$0.00	0.00%	23,000,000	$237,589,998
10/20/2020	$10.26	-0.68%	910,054	$10.25	$10.25	$0.00	0.00%	23,000,000	$235,980,005
10/21/2020	$10.19	-0.68%	1,015,987	$10.20	$10.20	$0.00	0.00%	23,000,000	$234,369,990
10/22/2020	$10.19	0.00%	1,000,863	$10.22	$10.22	$0.00	0.00%	23,000,000	$234,369,990
10/23/2020	$10.33	1.36%	939,411	$10.35	$10.35	$0.00	0.00%	23,000,000	$237,589,998
10/26/2020	$10.19	-1.36%	1,443,343	$10.20	$10.20	$0.00	0.00%	23,000,000	$234,369,990
10/27/2020	$10.13	-0.59%	940,206	$10.13	$10.13	$0.00	0.00%	23,000,000	$232,990,003
10/28/2020	$10.04	-0.89%	1,383,247	$10.04	$10.04	$0.00	0.00%	23,000,000	$230,919,999
10/29/2020	$10.02	-0.20%	516,794	$10.04	$10.04	$0.00	0.00%	23,000,000	$230,460,011
10/30/2020	$10.04	0.20%	1,137,306	$10.03	$10.03	$0.00	0.00%	23,000,000	$230,919,999
11/2/2020	$10.03	-0.10%	519,079	$10.04	$10.04	$0.00	0.00%	23,000,000	$230,689,994
11/3/2020	$10.09	0.60%	411,347	$10.10	$10.10	$0.00	0.00%	23,000,000	$232,070,004
11/4/2020	$10.05	-0.40%	531,147	$10.06	$10.06	$0.00	0.00%	23,000,000	$231,150,004
11/5/2020	$10.05	0.00%	558,368	$10.07	$10.07	$0.00	0.00%	23,000,000	$231,150,004
11/6/2020	$10.09	0.40%	553,717	$10.09	$10.09	$0.00	0.00%	23,000,000	$232,070,004
11/9/2020	$10.05	-0.40%	1,194,363	$10.07	$10.07	$0.00	0.00%	23,000,000	$231,150,004
11/10/2020	$10.07	0.20%	407,455	$10.09	$10.09	$0.00	0.00%	23,000,000	$231,609,993
11/11/2020	$10.06	-0.10%	529,654	$10.07	$10.07	$0.00	0.00%	23,000,000	$231,380,010
11/12/2020	$10.08	0.20%	963,099	$10.08	$10.08	$0.00	0.00%	23,000,000	$231,839,998
11/13/2020	$10.11	0.30%	2,134,192	$10.12	$10.12	$0.00	0.00%	23,000,000	$232,529,992
11/16/2020	$10.36	2.44%	4,425,918	$10.37	$10.37	$0.00	0.00%	23,000,000	$238,279,992
11/17/2020	$10.50	1.34%	1,570,027	$10.49	$10.49	$0.00	0.00%	23,000,000	$241,500,000
11/18/2020	$10.47	-0.29%	4,076,748	$10.46	$10.46	$0.00	0.00%	23,000,000	$240,810,006
11/19/2020	$11.67	10.85%	9,284,545	$11.65	$11.65	$0.00	0.00%	23,000,000	$268,410,002
11/20/2020	$11.34	-2.87%	4,261,343	$11.33	$11.33	$0.00	0.00%	23,000,000	$260,820,004
11/23/2020	$12.13	6.73%	5,812,908	$12.13	$12.13	$0.00	0.00%	23,000,000	$278,990,003
11/24/2020	$11.93	-1.66%	7,207,768	$11.93	$11.93	$0.00	0.00%	23,000,000	$274,390,007
11/25/2020	$12.54	4.99%	3,964,519	$12.52	$12.52	$0.00	0.00%	23,000,000	$288,419,999
11/27/2020	$14.60	15.21%	7,048,215	$14.45	$14.45	$0.00	0.00%	23,000,000	$335,800,009
11/30/2020	$14.04	-3.91%	6,393,893	$14.06	$14.06	$0.00	0.00%	23,000,000	$322,919,999
12/1/2020	$13.76	-2.01%	4,143,990	$13.77	$13.77	$0.00	0.00%	23,000,000	$316,480,005
12/2/2020	$13.50	-1.91%	3,952,477	$13.46	$13.46	$0.00	0.00%	23,000,000	$310,500,000
12/3/2020	$14.13	4.56%	4,152,827	$14.13	$14.13	$0.00	0.00%	23,000,000	$324,990,003

Exhibit-6

XL Market Efficiency Statistics[1]

September 18, 2020 through March 31, 2021

Date	Closing Price	Log Return	Volume	Closing Bid	Closing Ask	Closing Bid/Ask Spread	Average Bid/Ask Spread %	Outstanding Shares	Market Capitalization
	[a]	[b]	[c]	[d]	[e]			[f]	[g]
12/4/2020	$16.25	13.98%	6,783,146	$16.25	$16.25	$0.00	0.00%	23,000,000	$373,750,000
12/7/2020	$16.00	-1.55%	6,666,236	$16.00	$16.00	$0.00	0.00%	23,000,000	$368,000,000
12/8/2020	$15.72	-1.77%	5,415,227	$15.70	$15.70	$0.00	0.00%	23,000,000	$361,560,006
12/9/2020	$17.18	8.88%	9,702,460	$17.18	$17.18	$0.00	0.00%	23,000,000	$395,140,007
12/10/2020	$17.16	-0.12%	3,933,060	$17.16	$17.16	$0.00	0.00%	23,000,000	$394,679,996
12/11/2020	$16.19	-5.82%	4,185,731	$16.09	$16.09	$0.00	0.00%	23,000,000	$372,370,012
12/14/2020	$15.60	-3.71%	3,229,428	$15.54	$15.54	$0.00	0.00%	23,000,000	$358,800,009
12/15/2020	$14.29	-8.77%	4,970,035	$14.29	$14.29	$0.00	0.00%	23,000,000	$328,669,999
12/16/2020	$15.05	5.18%	4,278,675	$15.05	$15.05	$0.00	0.00%	23,000,000	$346,150,004
12/17/2020	$15.36	2.04%	2,382,861	$15.36	$15.36	$0.00	0.00%	23,000,000	$353,279,992
12/18/2020	$15.32	-0.26%	6,408,946	$15.38	$15.38	$0.00	0.00%	23,000,000	$352,359,993
12/21/2020	$19.54	24.33%	23,014,098	$19.51	$19.51	$0.00	0.00%	23,000,000	$449,420,021
12/22/2020	$17.52	-10.91%	10,387,325	$17.72	$17.72	$0.00	0.00%	129,996,978	$2,277,547,114
12/23/2020	$32.59	62.07%	91,449,572	$32.55	$32.55	$0.00	0.00%	129,996,978	$4,236,601,533
12/24/2020	$29.78	-9.02%	32,161,981	$29.49	$29.49	$0.00	0.00%	129,996,978	$3,871,310,094
12/28/2020	$26.84	-10.39%	19,474,672	$26.84	$26.84	$0.00	0.00%	129,996,978	$3,489,118,909
12/29/2020	$24.39	-9.57%	14,623,644	$24.39	$24.39	$0.00	0.00%	129,996,978	$3,170,626,214
12/30/2020	$22.80	-6.74%	12,862,993	$22.80	$22.80	$0.00	0.00%	129,996,978	$2,963,930,999
12/31/2020	$23.73	4.00%	19,709,689	$23.80	$23.80	$0.00	0.00%	129,996,978	$3,084,828,228
1/4/2021	$20.07	-16.75%	13,052,561	$20.10	$20.10	$0.00	0.00%	129,996,978	$2,609,039,309
1/5/2021	$20.96	4.34%	10,173,864	$20.96	$20.96	$0.00	0.00%	129,996,978	$2,724,736,540
1/6/2021	$20.03	-4.54%	11,075,390	$20.07	$20.07	$0.00	0.00%	129,996,978	$2,603,839,559
1/7/2021	$22.09	9.79%	8,433,026	$22.10	$22.10	$0.00	0.00%	129,996,978	$2,871,633,264
1/8/2021	$21.24	-3.92%	7,819,901	$21.25	$21.25	$0.00	0.00%	129,996,978	$2,761,135,783
1/11/2021	$20.74	-2.38%	4,551,662	$20.76	$20.76	$0.00	0.00%	129,996,978	$2,696,137,294
1/12/2021	$20.95	1.01%	9,679,541	$20.95	$20.95	$0.00	0.00%	129,996,978	$2,723,436,788
1/13/2021	$22.02	4.98%	13,757,675	$22.02	$22.02	$0.00	0.00%	129,996,978	$2,862,533,515
1/14/2021	$21.65	-1.69%	9,565,370	$21.62	$21.62	$0.00	0.00%	129,996,978	$2,814,434,524
1/15/2021	$20.13	-7.28%	7,543,512	$20.13	$20.13	$0.00	0.00%	129,996,978	$2,616,839,058
1/19/2021	$19.77	-1.80%	7,308,910	$19.76	$19.76	$0.00	0.00%	129,996,978	$2,570,040,315
1/20/2021	$18.97	-4.13%	6,810,484	$18.97	$18.97	$0.00	0.00%	129,996,978	$2,466,042,583
1/21/2021	$19.19	1.15%	6,922,802	$19.15	$19.15	$0.00	0.00%	129,996,978	$2,494,642,077
1/22/2021	$21.00	9.01%	12,500,777	$20.95	$20.95	$0.00	0.00%	129,996,978	$2,729,936,538
1/25/2021	$19.96	-5.08%	11,227,808	$19.97	$19.97	$0.00	0.00%	129,996,978	$2,594,739,562
1/26/2021	$20.81	4.17%	16,899,354	$20.77	$20.77	$0.00	0.00%	129,996,978	$2,705,237,043
1/27/2021	$19.49	-6.55%	8,851,032	$19.50	$19.50	$0.00	0.00%	129,996,978	$2,533,641,071
1/28/2021	$19.09	-2.07%	5,607,974	$19.09	$19.09	$0.00	0.00%	129,996,978	$2,481,642,330
1/29/2021	$18.98	-0.58%	7,583,839	$18.99	$18.99	$0.00	0.00%	129,996,978	$2,467,342,583
2/1/2021	$20.22	6.33%	17,185,504	$20.17	$20.17	$0.00	0.00%	129,996,978	$2,628,538,806
2/2/2021	$20.15	-0.35%	6,496,436	$20.22	$20.22	$0.00	0.00%	129,996,978	$2,619,439,057
2/3/2021	$19.62	-2.67%	6,698,720	$19.59	$19.59	$0.00	0.00%	129,996,978	$2,550,540,817
2/4/2021	$20.46	4.19%	15,730,077	$20.47	$20.47	$0.00	0.00%	129,996,978	$2,659,738,051
2/5/2021	$20.08	-1.87%	5,033,964	$20.09	$20.09	$0.00	0.00%	129,996,978	$2,610,339,308
2/8/2021	$20.40	1.58%	6,548,186	$20.40	$20.40	$0.00	0.00%	129,996,978	$2,651,938,302
2/9/2021	$20.69	1.41%	9,847,963	$20.68	$20.68	$0.00	0.00%	129,996,978	$2,689,637,544
2/10/2021	$19.82	-4.30%	9,595,773	$19.87	$19.87	$0.00	0.00%	129,996,978	$2,576,540,064
2/11/2021	$19.75	-0.35%	6,371,134	$19.75	$19.75	$0.00	0.00%	129,996,978	$2,567,440,316
2/12/2021	$20.39	3.19%	6,973,377	$20.39	$20.39	$0.00	0.00%	129,996,978	$2,650,638,302
2/16/2021	$19.87	-2.58%	6,979,775	$19.90	$19.90	$0.00	0.00%	129,996,978	$2,583,040,062
2/17/2021	$19.32	-2.81%	4,649,635	$19.32	$19.32	$0.00	0.00%	129,996,978	$2,511,541,575
2/18/2021	$18.10	-6.52%	6,178,586	$18.10	$18.10	$0.00	0.00%	129,996,978	$2,352,945,351
2/19/2021	$17.57	-2.97%	7,930,652	$17.55	$17.55	$0.00	0.00%	129,996,978	$2,284,046,864
2/22/2021	$16.21	-8.06%	6,330,521	$16.21	$16.21	$0.00	0.00%	129,996,978	$2,107,250,894
2/23/2021	$14.55	-10.80%	10,947,645	$14.56	$14.56	$0.00	0.00%	129,996,978	$1,891,456,055

Exhibit-6

XL Market Efficiency Statistics[1]

September 18, 2020 through March 31, 2021

Date	Closing Price [a]	Log Return [b]	Volume [c]	Closing Bid [d]	Closing Ask [e]	Closing Bid/Ask Spread	Average Bid/Ask Spread %	Outstanding Shares [f]	Market Capitalization [g]
2/24/2021	$14.64	0.62%	5,610,646	$14.65	$14.65	$0.00	0.00%	129,996,978	$1,903,155,803
2/25/2021	$14.54	-0.69%	8,698,789	$14.55	$14.55	$0.00	0.00%	129,996,978	$1,890,156,055
2/26/2021	$14.17	-2.58%	4,724,226	$14.18	$14.18	$0.00	0.00%	129,996,978	$1,842,057,188
3/1/2021	$14.85	4.69%	8,664,348	$14.86	$14.86	$0.00	0.00%	129,996,978	$1,930,455,173
3/2/2021	$15.95	7.15%	17,422,926	$15.98	$15.98	$0.00	0.00%	129,996,978	$2,073,451,774
3/3/2021	$13.86	-14.05%	34,617,148	$13.86	$13.86	$0.00	0.00%	129,996,978	$1,801,758,070
3/4/2021	$12.00	-14.41%	16,067,399	$12.00	$12.00	$0.00	0.00%	129,996,978	$1,559,963,736
3/5/2021	$11.17	-7.17%	14,628,048	$11.17	$11.17	$0.00	0.00%	129,996,978	$1,452,066,254
3/8/2021	$10.48	-6.38%	8,463,524	$10.48	$10.48	$0.00	0.00%	129,996,978	$1,362,368,270
3/9/2021	$11.62	10.33%	8,228,954	$11.62	$11.62	$0.00	0.00%	129,996,978	$1,510,564,869
3/10/2021	$11.90	2.38%	7,955,681	$11.90	$11.90	$0.00	0.00%	129,996,978	$1,546,963,989
3/11/2021	$12.73	6.74%	6,084,174	$12.73	$12.73	$0.00	0.00%	129,996,978	$1,654,861,470
3/12/2021	$12.79	0.47%	3,278,873	$12.81	$12.81	$0.00	0.00%	129,996,978	$1,662,661,344
3/15/2021	$13.39	4.58%	4,065,476	$13.39	$13.39	$0.00	0.00%	129,996,978	$1,740,659,580
3/16/2021	$12.92	-3.57%	4,178,308	$12.92	$12.92	$0.00	0.00%	129,996,978	$1,679,560,966
3/17/2021	$12.98	0.46%	5,046,434	$12.96	$12.96	$0.00	0.00%	129,996,978	$1,687,360,715
3/18/2021	$11.93	-8.44%	5,815,205	$11.90	$11.90	$0.00	0.00%	129,996,978	$1,550,863,987
3/19/2021	$12.12	1.58%	10,205,058	$12.14	$12.14	$0.00	0.00%	129,996,978	$1,575,563,358
3/22/2021	$11.81	-2.59%	4,279,608	$11.81	$11.81	$0.00	0.00%	129,996,978	$1,535,264,365
3/23/2021	$10.97	-7.38%	5,149,835	$10.97	$10.97	$0.00	0.00%	129,996,978	$1,426,066,883
3/24/2021	$9.88	-10.47%	5,652,061	$9.88	$9.88	$0.00	0.00%	129,996,978	$1,284,370,158
3/25/2021	$9.91	0.30%	4,982,101	$9.91	$9.91	$0.00	0.00%	129,996,978	$1,288,270,032
3/26/2021	$9.49	-4.33%	4,854,605	$9.49	$9.49	$0.00	0.00%	129,996,978	$1,233,671,291
3/29/2021	$9.17	-3.43%	5,334,118	$9.16	$9.16	$0.00	0.00%	129,996,978	$1,192,072,298
3/30/2021	$8.82	-3.89%	7,297,328	$8.83	$8.83	$0.00	0.00%	139,105,704	$1,226,912,267
3/31/2021	$8.98	1.80%	9,813,806	$8.98	$8.98	$0.00	0.00%	139,105,704	$1,249,169,158
Average	$14.78	-0.12%	7,263,523	$14.77	$14.78	$0.00	0.02%	77,432,925	$1,287.3 million
Median	$13.14	-0.58%	5,511,601	$13.13	$13.14	$0.00	0.00%	129,996,978	$1,209.5 million
High	$32.59	62.07%	91,449,572	$32.55	$32.55	$0.04	0.36%	139,105,704	$4,236.6 million
Low	$8.82	-16.75%	407,455	$8.83	$8.83	$0.00	0.00%	23,000,000	$230.5 million

Source: CRSP.

Exhibit-7

XL Regression Results

Estimation Period: December 22, 2020 through December 21, 2021

Regression Statistics	
R Squared	0.564
Adjusted R Squared	0.542
Standard Error	4.26%
Observations	252

	Coefficients	Standard Error	*t*- statistic
Intercept	-0.88%	0.27%	-3.20
Market Index	1.30	0.393	3.30
Peer Index	0.31	0.128	2.47
12/22/2020	-9.77%	4.27%	-2.29
12/23/2020	62.35%	4.27%	14.61
12/24/2020	-8.91%	4.27%	-2.09
12/28/2020	-10.09%	4.27%	-2.37
4/1/2021	-13.56%	4.30%	-3.15
5/18/2021	11.32%	4.27%	2.65
8/13/2021	-13.72%	4.27%	-3.21
11/16/2021	-0.16%	4.28%	-0.04
3/3/2021	-10.06%	4.30%	-2.34
3/8/2021	-3.66%	4.28%	-0.86

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
9/18/2020	13.38%	-1.09%	14.46%	3.40	1
9/21/2020	9.53%	-2.59%	12.12%	2.85	*
9/22/2020	-4.22%	-1.05%	-3.17%	-0.74	
9/23/2020	-1.90%	-6.54%	4.64%	1.09	
9/24/2020	-10.08%	-0.23%	-9.85%	-2.31	*
9/25/2020	5.42%	2.19%	3.22%	0.76	
9/28/2020	0.42%	2.24%	-1.82%	-0.43	
9/29/2020	-2.45%	-1.57%	-0.88%	-0.21	
9/30/2020	-1.55%	0.65%	-2.20%	-0.52	
10/1/2020	-1.31%	1.30%	-2.61%	-0.61	
10/2/2020	-3.12%	-3.53%	0.40%	0.09	
10/5/2020	-0.45%	2.28%	-2.73%	-0.64	
10/6/2020	-3.24%	-3.17%	-0.07%	-0.02	
10/7/2020	-2.48%	2.26%	-4.74%	-1.11	
10/8/2020	1.91%	0.33%	1.58%	0.37	
10/9/2020	2.98%	0.58%	2.40%	0.56	
10/12/2020	-1.39%	1.39%	-2.77%	-0.65	
10/13/2020	-0.37%	-1.37%	1.00%	0.23	
10/14/2020	-0.75%	-1.02%	0.27%	0.06	
10/15/2020	-1.61%	-1.44%	-0.17%	-0.04	
10/16/2020	-0.29%	-1.33%	1.04%	0.24	
10/19/2020	-0.87%	-3.20%	2.33%	0.55	
10/20/2020	-0.68%	-0.54%	-0.14%	-0.03	
10/21/2020	-0.68%	-1.24%	0.56%	0.13	
10/22/2020	0.00%	0.30%	-0.30%	-0.07	
10/23/2020	1.36%	-0.67%	2.03%	0.48	
10/26/2020	-1.36%	-3.52%	2.16%	0.51	
10/27/2020	-0.59%	-1.20%	0.60%	0.14	
10/28/2020	-0.89%	-6.48%	5.59%	1.31	
10/29/2020	-0.20%	0.94%	-1.14%	-0.27	
10/30/2020	0.20%	-3.94%	4.14%	0.97	
11/2/2020	-0.10%	1.43%	-1.53%	-0.36	
11/3/2020	0.60%	3.03%	-2.43%	-0.57	
11/4/2020	-0.40%	1.31%	-1.71%	-0.40	
11/5/2020	0.00%	3.13%	-3.13%	-0.73	
11/6/2020	0.40%	-1.35%	1.74%	0.41	
11/9/2020	-0.40%	0.45%	-0.85%	-0.20	
11/10/2020	0.20%	-1.17%	1.37%	0.32	
11/11/2020	-0.10%	0.45%	-0.55%	-0.13	
11/12/2020	0.20%	-2.66%	2.86%	0.67	
11/13/2020	0.30%	1.04%	-0.74%	-0.18	
11/16/2020	2.44%	0.99%	1.46%	0.34	
11/17/2020	1.34%	0.50%	0.84%	0.20	
11/18/2020	-0.29%	0.06%	-0.35%	-0.08	
11/19/2020	10.85%	0.42%	10.43%	2.45	*
11/20/2020	-2.87%	-1.90%	-0.97%	-0.23	
11/23/2020	6.73%	1.78%	4.95%	1.16	
11/24/2020	-1.66%	2.85%	-4.51%	-1.06	

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
11/25/2020	4.99%	-0.38%	5.36%	1.26	
11/27/2020	15.21%	0.11%	15.10%	3.55	*
11/30/2020	-3.91%	-2.49%	-1.42%	-0.33	
12/1/2020	-2.01%	1.22%	-3.23%	-0.76	
12/2/2020	-1.91%	-1.43%	-0.48%	-0.11	
12/3/2020	4.56%	0.36%	4.21%	0.99	
12/4/2020	13.98%	0.82%	13.16%	3.09	*
12/7/2020	-1.55%	0.61%	-2.16%	-0.51	
12/8/2020	-1.77%	-0.07%	-1.69%	-0.40	
12/9/2020	8.88%	-3.66%	12.54%	2.95	*
12/10/2020	-0.12%	0.09%	-0.21%	-0.05	
12/11/2020	-5.82%	-1.94%	-3.87%	-0.91	
12/14/2020	-3.71%	-0.28%	-3.43%	-0.81	
12/15/2020	-8.77%	0.68%	-9.45%	-2.22	*
12/16/2020	5.18%	-1.11%	6.29%	1.48	
12/17/2020	2.04%	1.43%	0.61%	0.14	
12/18/2020	-0.26%	0.09%	-0.35%	-0.08	
12/21/2020	24.33%	-2.85%	27.18%	6.39	*
12/22/2020	-10.91%	-1.14%	-9.77%	-2.30	*
12/23/2020	62.07%	-0.28%	62.35%	14.65	*
12/24/2020	-9.02%	-0.11%	-8.91%	-2.09	*
12/28/2020	-10.39%	-0.30%	-10.09%	-2.37	*
12/29/2020	-9.57%	-1.32%	-8.26%	-1.94	
12/30/2020	-6.74%	0.63%	-7.37%	-1.73	
12/31/2020	4.00%	-0.09%	4.09%	0.96	
1/4/2021	-16.75%	-1.94%	-14.82%	-3.48	*
1/5/2021	4.34%	0.63%	3.71%	0.87	
1/6/2021	-4.54%	1.06%	-5.60%	-1.32	
1/7/2021	9.79%	3.21%	6.58%	1.54	
1/8/2021	-3.92%	1.53%	-5.45%	-1.28	
1/11/2021	-2.38%	-3.46%	1.08%	0.25	
1/12/2021	1.01%	1.10%	-0.09%	-0.02	
1/13/2021	4.98%	-0.68%	5.66%	1.33	
1/14/2021	-1.69%	-0.99%	-0.71%	-0.17	
1/15/2021	-7.28%	-2.72%	-4.56%	-1.07	
1/19/2021	-1.80%	1.02%	-2.83%	-0.66	
1/20/2021	-4.13%	1.07%	-5.20%	-1.22	
1/21/2021	1.15%	-1.07%	2.22%	0.52	
1/22/2021	9.01%	-1.07%	10.09%	2.37	*
1/25/2021	-5.08%	0.23%	-5.31%	-1.25	
1/26/2021	4.17%	-1.31%	5.48%	1.29	
1/27/2021	-6.55%	-4.96%	-1.59%	-0.37	
1/28/2021	-2.07%	-0.39%	-1.69%	-0.40	
1/29/2021	-0.58%	-4.51%	3.93%	0.92	
2/1/2021	6.33%	2.87%	3.46%	0.81	
2/2/2021	-0.35%	1.92%	-2.27%	-0.53	
2/3/2021	-2.67%	-1.04%	-1.63%	-0.38	
2/4/2021	4.19%	0.44%	3.75%	0.88	

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
2/5/2021	-1.87%	0.08%	-1.96%	-0.46	
2/8/2021	1.58%	0.87%	0.71%	0.17	
2/9/2021	1.41%	-1.14%	2.55%	0.60	
2/10/2021	-4.30%	-2.24%	-2.05%	-0.48	
2/11/2021	-0.35%	-0.53%	0.18%	0.04	
2/12/2021	3.19%	-0.13%	3.32%	0.78	
2/16/2021	-2.58%	-1.58%	-1.01%	-0.24	
2/17/2021	-2.81%	-1.17%	-1.64%	-0.38	
2/18/2021	-6.52%	-2.19%	-4.33%	-1.02	
2/19/2021	-2.97%	-0.57%	-2.40%	-0.56	
2/22/2021	-8.06%	-4.14%	-3.92%	-0.92	
2/23/2021	-10.80%	-1.67%	-9.13%	-2.15	*
2/24/2021	0.62%	2.21%	-1.59%	-0.37	
2/25/2021	-0.69%	-6.63%	5.94%	1.40	
2/26/2021	-2.58%	-1.53%	-1.05%	-0.25	
3/1/2021	4.69%	3.90%	0.79%	0.18	
3/2/2021	7.15%	-2.90%	10.04%	2.36	*
3/3/2021	-14.05%	-3.99%	-10.06%	-2.36	*
3/4/2021	-14.41%	-4.43%	-9.98%	-2.35	*
3/5/2021	-7.17%	0.80%	-7.97%	-1.87	
3/8/2021	-6.38%	-2.72%	-3.66%	-0.86	
3/9/2021	10.33%	5.05%	5.28%	1.24	
3/10/2021	2.38%	0.09%	2.29%	0.54	
3/11/2021	6.74%	1.96%	4.78%	1.12	
3/12/2021	0.47%	-0.60%	1.07%	0.25	
3/15/2021	4.58%	0.41%	4.17%	0.98	
3/16/2021	-3.57%	-2.69%	-0.88%	-0.21	
3/17/2021	0.46%	0.66%	-0.20%	-0.05	
3/18/2021	-8.44%	-4.97%	-3.47%	-0.81	
3/19/2021	1.58%	-0.55%	2.13%	0.50	
3/22/2021	-2.59%	0.09%	-2.68%	-0.63	
3/23/2021	-7.38%	-3.07%	-4.31%	-1.01	
3/24/2021	-10.47%	-3.19%	-7.28%	-1.71	
3/25/2021	0.30%	0.47%	-0.17%	-0.04	
3/26/2021	-4.33%	0.39%	-4.72%	-1.11	
3/29/2021	-3.43%	-1.99%	-1.44%	-0.34	
3/30/2021	-3.89%	0.25%	-4.14%	-0.97	
3/31/2021	1.80%	0.85%	0.95%	0.22	
4/1/2021	-12.94%	0.61%	-13.56%	-3.18	*
4/5/2021	-5.20%	1.86%	-7.06%	-1.66	
4/6/2021	10.99%	-0.71%	11.70%	2.75	*
4/7/2021	2.95%	-1.90%	4.85%	1.14	
4/8/2021	-0.47%	0.21%	-0.68%	-0.16	
4/9/2021	-6.14%	-0.34%	-5.80%	-1.36	
4/12/2021	-8.54%	-0.18%	-8.36%	-1.96	*
4/13/2021	1.61%	1.35%	0.25%	0.06	
4/14/2021	-5.47%	-2.13%	-3.34%	-0.78	
4/15/2021	-7.43%	0.64%	-8.07%	-1.90	

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
4/16/2021	-1.83%	-0.49%	-1.34%	-0.32	
4/19/2021	-0.15%	-2.61%	2.46%	0.58	
4/20/2021	-5.88%	-2.23%	-3.64%	-0.86	
4/21/2021	10.99%	1.61%	9.38%	2.20	*
4/22/2021	-1.78%	-2.61%	0.83%	0.20	
4/23/2021	6.36%	1.19%	5.17%	1.21	
4/26/2021	4.25%	0.01%	4.24%	1.00	
4/27/2021	-4.95%	-1.83%	-3.12%	-0.73	
4/28/2021	0.42%	-1.20%	1.63%	0.38	
4/29/2021	-2.70%	-1.34%	-1.37%	-0.32	
4/30/2021	-1.89%	-0.85%	-1.04%	-0.25	
5/3/2021	-4.05%	-1.36%	-2.69%	-0.63	
5/4/2021	-2.01%	-2.54%	0.53%	0.12	
5/5/2021	-3.17%	-0.71%	-2.46%	-0.58	
5/6/2021	-2.45%	-0.40%	-2.05%	-0.48	
5/7/2021	2.13%	0.69%	1.44%	0.34	
5/10/2021	-7.21%	-4.14%	-3.07%	-0.72	
5/11/2021	4.92%	-2.35%	7.27%	1.71	
5/12/2021	-4.40%	-5.15%	0.75%	0.18	
5/13/2021	-3.16%	-0.10%	-3.07%	-0.72	
5/14/2021	6.06%	2.26%	3.80%	0.89	
5/17/2021	4.60%	-1.43%	6.03%	1.42	
5/18/2021	9.63%	-1.69%	11.32%	2.66	*
5/19/2021	-0.15%	-1.97%	1.83%	0.43	
5/20/2021	-1.32%	1.48%	-2.81%	-0.66	
5/21/2021	1.32%	-0.83%	2.15%	0.50	
5/24/2021	0.44%	1.18%	-0.74%	-0.17	
5/25/2021	-5.99%	-1.35%	-4.64%	-1.09	
5/26/2021	4.97%	0.52%	4.45%	1.04	
5/27/2021	2.61%	0.28%	2.32%	0.55	
5/28/2021	-1.30%	-1.02%	-0.28%	-0.06	
6/1/2021	4.95%	-0.56%	5.50%	1.29	
6/2/2021	6.15%	-1.29%	7.44%	1.75	
6/3/2021	3.94%	-2.22%	6.17%	1.45	
6/4/2021	-2.27%	1.15%	-3.42%	-0.80	
6/7/2021	5.46%	-0.57%	6.03%	1.42	
6/8/2021	10.43%	-0.67%	11.09%	2.61	*
6/9/2021	-1.98%	-1.55%	-0.43%	-0.10	
6/10/2021	-3.39%	-0.18%	-3.21%	-0.75	
6/11/2021	-1.27%	-0.40%	-0.87%	-0.21	
6/14/2021	-0.93%	-0.59%	-0.34%	-0.08	
6/15/2021	-4.69%	-1.87%	-2.82%	-0.66	
6/16/2021	2.07%	-1.33%	3.40%	0.80	
6/17/2021	-4.18%	-0.92%	-3.26%	-0.77	
6/18/2021	-0.13%	-2.52%	2.40%	0.56	
6/21/2021	-1.27%	0.96%	-2.22%	-0.52	
6/22/2021	1.77%	-0.10%	1.86%	0.44	
6/23/2021	5.00%	0.34%	4.67%	1.10	

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
6/24/2021	4.54%	0.73%	3.80%	0.89	
6/25/2021	-0.91%	-0.68%	-0.23%	-0.05	
6/28/2021	2.94%	-0.39%	3.33%	0.78	
6/29/2021	-5.50%	-1.07%	-4.43%	-1.04	
6/30/2021	-1.90%	-0.90%	-1.00%	-0.24	
7/1/2021	-3.54%	-0.35%	-3.19%	-0.75	
7/2/2021	-2.90%	-0.20%	-2.70%	-0.63	
7/6/2021	0.26%	-2.12%	2.37%	0.56	
7/7/2021	0.89%	-1.39%	2.28%	0.54	
7/8/2021	-2.56%	-1.90%	-0.66%	-0.15	
7/9/2021	-6.02%	1.25%	-7.27%	-1.71	
7/12/2021	-3.65%	0.38%	-4.03%	-0.95	
7/13/2021	-3.05%	-2.30%	-0.75%	-0.18	
7/14/2021	-1.19%	-1.77%	0.58%	0.14	
7/15/2021	2.21%	-1.61%	3.82%	0.90	
7/16/2021	-2.36%	-2.35%	-0.01%	-0.00	
7/19/2021	2.07%	-2.92%	4.99%	1.17	
7/20/2021	-0.15%	2.13%	-2.28%	-0.54	
7/21/2021	3.60%	0.33%	3.27%	0.77	
7/22/2021	-1.42%	-1.24%	-0.18%	-0.04	
7/23/2021	-3.50%	0.09%	-3.59%	-0.84	
7/26/2021	1.77%	-0.07%	1.84%	0.43	
7/27/2021	-3.57%	-2.18%	-1.38%	-0.33	
7/28/2021	5.45%	-0.32%	5.77%	1.36	
7/29/2021	-2.03%	0.98%	-3.01%	-0.71	
7/30/2021	2.03%	-1.41%	3.44%	0.81	
8/2/2021	-1.44%	-0.36%	-1.08%	-0.25	
8/3/2021	-3.40%	0.09%	-3.49%	-0.82	
8/4/2021	-1.36%	-1.85%	0.48%	0.11	
8/5/2021	1.66%	0.25%	1.41%	0.33	
8/6/2021	3.97%	-1.17%	5.14%	1.21	
8/9/2021	-0.29%	-0.52%	0.23%	0.05	
8/10/2021	6.30%	-0.81%	7.11%	1.67	
8/11/2021	-3.73%	-0.61%	-3.12%	-0.73	
8/12/2021	0.00%	-0.21%	0.21%	0.05	
8/13/2021	-14.85%	-1.14%	-13.72%	-3.22	*
8/16/2021	-5.03%	-2.02%	-3.01%	-0.71	
8/17/2021	-2.79%	-2.91%	0.12%	0.03	
8/18/2021	-0.71%	-1.29%	0.58%	0.14	
8/19/2021	0.36%	-1.94%	2.30%	0.54	
8/20/2021	3.48%	0.47%	3.02%	0.71	
8/23/2021	6.30%	1.33%	4.98%	1.17	
8/24/2021	8.03%	-0.06%	8.09%	1.90	
8/25/2021	-1.19%	-0.44%	-0.76%	-0.18	
8/26/2021	0.00%	-2.22%	2.22%	0.52	
8/27/2021	2.23%	1.07%	1.16%	0.27	
8/30/2021	-1.18%	-0.03%	-1.16%	-0.27	
8/31/2021	1.03%	-0.90%	1.93%	0.45	

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
9/1/2021	-0.59%	-0.66%	0.07%	0.02	
9/2/2021	0.30%	-0.41%	0.70%	0.17	
9/3/2021	0.15%	-0.90%	1.05%	0.25	
9/7/2021	-0.29%	-0.84%	0.55%	0.13	
9/8/2021	-4.07%	-1.34%	-2.73%	-0.64	
9/9/2021	0.61%	-1.27%	1.88%	0.44	
9/10/2021	-3.74%	-2.40%	-1.34%	-0.31	
9/13/2021	0.95%	-0.25%	1.20%	0.28	
9/14/2021	-2.87%	-1.65%	-1.22%	-0.29	
9/15/2021	-1.14%	0.77%	-1.91%	-0.45	
9/16/2021	1.78%	-1.02%	2.81%	0.66	
9/17/2021	4.86%	-1.80%	6.66%	1.56	
9/20/2021	-6.48%	-4.47%	-2.02%	-0.47	
9/21/2021	0.65%	-0.46%	1.11%	0.26	
9/22/2021	2.09%	1.00%	1.08%	0.25	
9/23/2021	2.51%	1.01%	1.50%	0.35	
9/24/2021	-4.11%	-0.28%	-3.84%	-0.90	
9/27/2021	9.99%	-0.35%	10.34%	2.43	*
9/28/2021	-9.82%	-4.03%	-5.79%	-1.36	
9/29/2021	-3.61%	-0.82%	-2.79%	-0.66	
9/30/2021	2.97%	-2.39%	5.35%	1.26	
10/1/2021	0.00%	0.57%	-0.57%	-0.13	
10/4/2021	-7.59%	-2.26%	-5.33%	-1.25	
10/5/2021	-0.70%	0.35%	-1.06%	-0.25	
10/6/2021	-1.78%	-0.54%	-1.24%	-0.29	
10/7/2021	-0.54%	1.09%	-1.63%	-0.38	
10/8/2021	-2.93%	-1.26%	-1.67%	-0.39	
10/11/2021	-2.64%	-1.59%	-1.05%	-0.25	
10/12/2021	4.48%	-0.29%	4.77%	1.12	
10/13/2021	0.55%	-0.18%	0.73%	0.17	
10/14/2021	0.90%	1.45%	-0.54%	-0.13	
10/15/2021	-1.27%	0.59%	-1.85%	-0.44	
10/18/2021	0.00%	0.16%	-0.16%	-0.04	
10/19/2021	2.70%	-0.19%	2.88%	0.68	
10/20/2021	-1.25%	-0.19%	-1.06%	-0.25	
10/21/2021	-0.72%	0.36%	-1.08%	-0.25	
10/22/2021	-2.75%	-0.83%	-1.92%	-0.45	
10/25/2021	2.93%	2.64%	0.29%	0.07	
10/26/2021	-1.45%	-1.09%	-0.36%	-0.08	
10/27/2021	-4.50%	-1.60%	-2.90%	-0.68	
10/28/2021	6.31%	1.66%	4.65%	1.09	
10/29/2021	-1.45%	0.13%	-1.58%	-0.37	
11/1/2021	0.36%	2.04%	-1.67%	-0.39	
11/2/2021	1.09%	-1.36%	2.45%	0.57	
11/3/2021	0.72%	1.07%	-0.35%	-0.08	
11/4/2021	-1.26%	-0.03%	-1.23%	-0.29	
11/5/2021	-3.50%	-0.53%	-2.97%	-0.70	
11/8/2021	6.87%	-1.67%	8.55%	2.01	*

Exhibit-8

XL Event Study Results

September 18, 2020 through December 21, 2021

Date	XL LN Return	XL Explained Return	XL Residual Return	*t*-statistic[1]	
11/9/2021	-4.65%	-4.30%	-0.35%	-0.08	
11/10/2021	-2.97%	-1.35%	-1.63%	-0.38	
11/11/2021	4.97%	-0.51%	5.47%	1.29	
11/12/2021	-1.99%	-0.54%	-1.46%	-0.34	
11/15/2021	-4.50%	-1.30%	-3.20%	-0.75	
11/16/2021	0.38%	0.55%	-0.16%	-0.04	
11/17/2021	-1.54%	-0.63%	-0.91%	-0.21	
11/18/2021	-9.34%	-0.83%	-8.50%	-2.00	*
11/19/2021	2.31%	-0.45%	2.76%	0.65	
11/22/2021	-3.60%	-1.13%	-2.47%	-0.58	
11/23/2021	6.47%	-2.00%	8.47%	1.99	*
11/24/2021	-2.66%	-0.40%	-2.26%	-0.53	
11/26/2021	-2.95%	-4.79%	1.84%	0.43	
11/29/2021	-5.26%	1.60%	-6.87%	-1.61	
11/30/2021	2.23%	-3.43%	5.66%	1.33	
12/1/2021	-10.44%	-3.91%	-6.53%	-1.53	
12/2/2021	3.84%	1.11%	2.73%	0.64	
12/3/2021	-7.32%	-4.13%	-3.19%	-0.75	
12/6/2021	6.85%	0.63%	6.22%	1.46	
12/7/2021	1.64%	3.06%	-1.42%	-0.33	
12/8/2021	2.30%	0.07%	2.23%	0.52	
12/9/2021	-3.70%	-3.89%	0.19%	0.04	
12/10/2021	-1.43%	0.59%	-2.01%	-0.47	
12/13/2021	-4.40%	-3.67%	-0.74%	-0.17	
12/14/2021	1.24%	-2.18%	3.42%	0.80	
12/15/2021	-0.50%	1.52%	-2.01%	-0.47	
12/16/2021	-6.14%	-3.42%	-2.73%	-0.64	
12/17/2021	1.57%	-1.87%	3.44%	0.81	
12/20/2021	-3.70%	-3.54%	-0.16%	-0.04	
12/21/2021	-15.10%	2.79%	-17.89%	-4.20	*

Note:
[1] *t*-statistics marked with a "*" are significant at the 95% confidence level.
[2] All returns are logarithmic returns.

Exhibit-9

High Information Flow Days

Date	No. of News Articles	Significant?
12/23/2020	23	Yes
3/31/2021	17	No
9/18/2020	16	Yes
3/9/2021	10	No
3/3/2021	9	Yes
3/10/2021	9	No
3/15/2021	9	No
3/4/2021	8	Yes
3/29/2021	8	No
3/17/2021	7	No
12/22/2020	6	Yes
1/14/2021	6	No
1/22/2021	6	Yes
3/22/2021	6	No

Sources: Factiva.