ADAMS NATURAL RESOURCES FUND, INC. Form N-CSR February 26, 2018

FORM N-CSR

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

| Invest | ment Company Act file number: 811-02736 |
|---------|--|
| ADAN | MS NATURAL RESOURCES FUND, INC. |
| (Exa | ct name of registrant as specified in charter) |
| act Pro | ntt Street, Suite 1300, Baltimore, Maryland 2 |
| | (Address of principal executive offices) |
| | |
| , | Lawrence L. Hooper, Jr. Adams Natural Resources Fund, Inc. 500 East Pratt Street, Suite 1300 Baltimore, Maryland 21202 |
| | Name and address of agent for service) |

Registrant's telephone number, including area code: (410) 752-5900

Date of fiscal year end: December 31

Date of reporting period: December 31, 2017

Item 1. Reports to Stockholders.

ADAMS NATURAL RESOURCES FUND

ANNUAL REPORT 2017

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2017 at a Glance

The Fund

a closed-end equity investment company specializing in energy and other natural resources stocks

objectives: preservation of capital, reasonable income, and opportunity for capital gain

internally-managed

annual distribution rate of at least 6%

Stock Data (12/31/17)

| NYSE Symbol | PEO |
|--------------|---------|
| Market Price | \$19.84 |

52-Week Range \$17.70 – \$20.70

Discount 14.7% Shares Outstanding 28,999,196

Summary Financial Information

| Year Ended December 31, | 2017 | 2016 |
|---|-------------|-------------|
| Net asset value per share (NASDAQ: XPEOX) | \$23.26 | \$24.02 |
| Total net assets | 674,388,286 | 685,882,029 |
| Unrealized appreciation on investments | 168,847,057 | 188,273,318 |
| Net investment income | 13,230,614 | 11,536,954 |
| Net realized gain (loss) | 19,900,174 | 20,350,872 |
| Total return (based on market price) | 4.6% | 20.2% |
| Total return (based on net asset value) | 3.0% | 22.5% |
| Ratio of expenses to average net assets | 0.78% | 0.82% |
| Annual distribution rate | 6.1% | 6.1% |

2017 Dividends and Distributions

| Paid | Amount (per share) | Туре |
|-------------------|--------------------|------------------------|
| March 1, 2017 | \$ 0.04 | Long-term capital gain |
| March 1, 2017 | 0.06 | Investment income |
| June 1, 2017 | 0.10 | Investment income |
| September 1, 2017 | 0.10 | Investment income |
| December 20, 2017 | 0.68 | Long-term capital gain |
| December 20, 2017 | 0.20 | Investment income |
| | \$ 1.18 | |

2018 Annual Meeting of Shareholders

Location: Adams Funds, 500 East Pratt Street, Suite 1300, Baltimore, MD 21202

Date: April 19, 2018 Time: 10:00 a.m. Letter from Chief Executive Officer, Mark E. Stoeckle

Dear Fellow Shareholders,

A robust economy, strong earnings growth, and expectations for pro-business policies from the Trump administration drove the stock market to record levels in 2017. Bolstered by the strength in the economy, in March the Fed raised interest rates for the third time since the financial crisis. Two additional rate hikes followed, in line with the plan it outlined at the beginning of the year. Despite a number of geopolitical issues in North Korea, Russia, and China, the stock market's volatility was at record lows during 2017. The year ended with the passage of the largest overhaul of the U.S. tax system in decades.

However, it was a disappointing year for the Energy sector, which underperformed the broader market. Oil prices, which began the year in the low \$50's a barrel, fell to the low \$40's in late June, before ending the year at \$60 a barrel. This was the first time in 20 years that energy stocks declined when the overall stock market and the price of oil increased. The Dow Jones U.S. Oil and Gas Index declined 13.4% in the first half of the year as oil prices fell, but recovered almost all the ground it lost in the second half to end the year down 1.6%. The Dow Jones U.S. Basic Materials Index advanced 25.1% for the year.

Adams Natural Resources Fund, with exposure to both Energy and Materials, produced a total return on net asset value of 3.0% and 4.6% on market price. The Fund's benchmark, which is comprised of the Dow Jones U.S. Oil and Gas Index (80% weight) and the Dow Jones U.S. Basic Materials Index (20% weight), generated a gain of 3.8%. Our peer group, the Lipper Global Natural Resources Funds Average, increased 8.1%. In line with our commitment to shareholders, the Fund distributed 6.1% in 2017.

2017 Market Recap

Beginning in 2013, rapid growth in U.S. shale oil output contributed to a global oversupply of oil. In response, oil prices fell from over \$100 a barrel in mid-2014 to below \$30 in early 2016. In an effort to reduce the global supply and raise prices, OPEC and Russia agreed to reduce oil output by 1.8 million barrels per day in 2017.

"We expect investor confidence in the energy market to continue to improve as the price of oil stabilizes."

It took longer than expected to realize the benefits from the production cuts, as crude inventories in the U.S. continued to climb in the first half of 2017. Higher U.S. oil production offset the impact of OPEC oil cuts, driving prices lower. Oil prices fell more than 20% through June due to doubts that OPEC's efforts would impact the oversupplied inventory situation.

By the third quarter, U.S. production leveled off and inventory levels began to decline. In August, Hurricane Harvey devastated the Houston area, causing a disruption to oil markets. As inventory levels came down in the third quarter, combined with the impact from the hurricanes, oil prices rose. OPEC compliance with its agreement also improved, which contributed to the increase in prices. In September through November, the price of crude oil rose more than 20% to \$57.40 a barrel, resulting in the three best months in over a year for the commodity. Energy stocks moved in line with oil prices, recovering significantly in the third quarter.

At the OPEC meeting in November, members voted to extend the production cuts through the end of 2018. This extension, coupled with increased uncertainty created by a power struggle in Saudi Arabia, the world's top exporter of crude oil, helped drive oil to a two-year high.

Natural gas had a difficult year, declining 19.5% due to excess supply created by continued efficiencies in gas drilling and higher levels of associated gas from oil drilling. The combination of a mild winter, which reduced demand for home heating fuel, and a cool summer, which led consumers to use less air conditioning, also

Letter To Shareholders (continued)

contributed to the decline in the price of natural gas. Unusually cold weather at the end of 2017 drove the price of natural gas up and could offer some support for the commodity.

Against this backdrop, the Energy Index declined 1.6%. Strength in the refining industry helped to offset the disappointing performance of drillers and equipment and service providers. Refining was the best performing industry, increasing 31.2% for the year. The industry benefited from the shutdown of oil refineries caused by Hurricane Harvey, which hit in late August. It impacted refineries along the Gulf Coast and caused a widening of the spread between the price of Brent (the global benchmark for the price of oil) and WTI. Stronger demand and improved margins drove the sector higher in the second half of the year.

Drillers represented the worst performing industry in Energy, declining 25.4%. At low oil prices, deep water off-shore projects, which require large multi-year capital commitments, are limited, thereby reducing demand for drilling. Companies that provide equipment and services to producers declined 15.5%. Large integrated companies, which include Exxon Mobil and Chevron, advanced 1.5% for the year.

In contrast to the Energy market, the Basic Materials Index advanced 25.1%, driven by a 33.3% increase in diversified chemicals and a 23.1% return in metals and mining. The sector benefited from strong economic growth, a reduction in regulations, and rising commodity prices.

Portfolio Performance

As close to 80% of the Fund's assets are invested in energy stocks, our performance reflected the difficulties of that sector. The Fund's Energy investments underperformed slightly, but the Fund benefited from its diversification as gains in Materials helped to mitigate the deterioration in oil and gas stock prices.

Refining generated the strongest returns for the Fund, increasing 30.2%. Refiners benefited from an active hurricane season, which disrupted the oil supply. Our position in Valero Energy, the world's largest independent refiner, delivered solid returns for the year. Valero has one of the best management teams in the industry and they remain focused on improving efficiency and profitability. Additionally, with a strong position along the Gulf Coast, Valero should benefit from rising U.S. export activity.

Exploration and production (E&P) companies weighed on the Fund's performance. Concerns over the oil/gas production ratio coming from wells in the Permian Basin negatively impacted some companies with a significant presence in the region. While the wells are producing more gas than initially planned, the level of oil production is unchanged. As a result, we continue to favor firms with exposure to the Permian Basin.

Given the volatility in the oil market, we chose to increase our exposure to non-crude based commodities. Demand for liquified natural gas (LNG), the cleanest burning fossil fuel, has increased, driven by transportation efficiencies and increased sensitivity to global warming. To capitalize on these trends, we initiated a position in Cheniere Energy, the largest U.S.-based LNG company. We expect the company to benefit from the continued global growth in the LNG market.

In Materials, we outperformed the sector, driven by our investments in diversified chemicals. Two of the top performing and largest positions in the Fund were LyondellBasell Industries and DowDuPont. LyondellBasell benefited from strong margins in its core businesses, which are essential components in the production of plastics. The expected synergies created by the merger of Dow and DuPont drove the performance of both companies during the year.

Outlook for 2018

We anticipate a continuation of the current conditions of strong U.S. and global economic growth and slowly rising interest rates in 2018. The underlying fundamentals remain strong for companies, which, combined with the new tax legislation, should lead to higher profitability and sustain the economic expansion.

While the Energy sector moved higher in the second half of 2017, the stock performance of energy companies significantly underperformed the broader market and also lagged price trends in oil. As oil prices

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Letter To Shareholders (continued)

fell to the low \$40's in mid-2017, E&P companies committed to demonstrating capital discipline by improving returns, reducing debt, and generating cash. This has become a key focus for investors in the sector.

We expect investor confidence in the energy market to continue to improve as the recovery in oil prices appears sustainable, driven by higher global demand and continued supply restraint by OPEC and its partners. In addition to a more balanced supply/demand outlook, recent political unrest in the Middle East, particularly Iran, a major oil exporter, creates further uncertainty and should provide an upward bias for the price of oil.

Of course, there are a number of risks that accompany higher oil prices. Countries outside of the OPEC agreement could decide to raise production and shale producers could also decide to ramp up production, both of which would temper further price appreciation. As oil prices rise, it remains to be seen whether the industry will be able to resist the temptation to abandon the capital discipline that has benefited the industry.

In the face of these unknowns, we continue to find attractive opportunities in the Energy and Materials sectors. We expect the E&P industry to benefit from higher oil prices because it has the most sensitivity to the price of the commodity. During the fourth quarter, we initiated a position in Hess Corporation. The company is positioned to benefit from a multi-year transformation which has focused on reducing costs and increasing production, and should enable the company to generate strong cash flow in the coming years. In addition, Hess has a substantial interest in a very large oil discovery in Guyana, which could provide upside to current estimates. We also initiated a position in Devon Energy. Devon has gone through a significant transformation over the past several years. It has improved its production profile by moving away from natural gas and focusing its capital investments in the Permian and the SCOOP/STACK region in Oklahoma. These changes, combined with a new management team that is committed to a more disciplined capital allocation strategy, should enable the company to generate strong returns.

Despite the rising price of oil, alternative energy usage continues to grow. We increased our position in Albemarle, one of the best-positioned global producers of lithium, a key component in battery technology. We continue to believe the company should benefit from growth in several key markets, including electric vehicles and power storage. In addition, we view the company's recent decision to exit one of its slower growth, non-core businesses positively because it provides capital to reinvest in its high-growth lithium business.

While the overall stock market experienced low volatility, that was not the case for the Energy sector. Adams Natural Resource Fund benefited from its diversified strategy as the advances in the Materials sector helped to offset the Energy sector declines. We are optimistic about the future of the natural resources market and remain focused on identifying quality companies that are executing at the highest levels and are trading at attractive valuations to generate superior returns for our shareholders over the long-term.

We thank you for investing in Adams Funds.

By order of the Board of Directors,

Mark E. Stoeckle Chief Executive Officer January 19, 2018 3

Investment Growth

(unaudited)

This chart shows the value of hypothetical \$10,000 investments in the Fund at net asset value and market price over the past 20 years. All Fund distributions are reinvested at the price received in the Fund's dividend reinvestment plan. Returns do not reflect taxes paid by shareholders on distributions or the sale of shares.

Average Annual Total Returns as of 12/31/17

| | Years | | | | |
|--|-------|------|------|-------|------|
| | 1 | 3 | 5 | 10 | 15 |
| PEO NAV | 3.0% | 0.7% | 3.1% | 1.1% | 8.4% |
| PEO Market Price | 4.6% | 0.2% | 3.0% | 0.6% | 7.9% |
| Lipper Global Natural Resources Funds Average* | 8.1% | 0.6% | 0.4% | -4.1% | 7.9% |

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Source: Thomson Reuters

Disclaimers

This report contains "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934. By their nature, all forward-looking statements involve risks and uncertainties, and actual results could differ materially from those contemplated by the forward-looking statements. Several factors that could materially affect the Fund's actual results are the performance of the portfolio of stocks held by the Fund, the conditions in the U.S. and international financial markets, the price at which shares of the Fund will trade in the public markets, and other factors discussed in the Fund's periodic filings with the Securities and Exchange Commission. This report is transmitted to the shareholders of the Fund for their information. It is not a prospectus, circular or representation intended for use in the purchase or sale of shares of the Fund or of any securities mentioned in the report. The rates of return will vary and the principal value of an investment will fluctuate. Shares, if sold, may be

worth more or less than their original cost. Past performance is no guarantee of future investment results. 4

Portfolio Highlights

December 31, 2017 (unaudited)

Ten Largest Equity Portfolio Holdings

| Ten Buigest Equity Territorie Trerum | 55 | |
|--------------------------------------|----------------|-----------------------------|
| | Market Value | Percent of Net Assets |
| Exxon Mobil Corporation | \$ 129,033,937 | 19.1% |
| Chevron Corporation | 68,266,107 | 10.1 |
| DowDuPont Inc. | 40,355,745 | 6.0 |
| Schlumberger Limited | 35,406,706 | 5.3 |
| ConocoPhillips | 30,661,554 | 4.5 |
| Halliburton Company | 23,104,270 | 3.4 |
| Valero Energy Corporation | 21,323,120 | 3.2 |
| EOG Resources, Inc. | 19,391,427 | 2.9 |
| Occidental Petroleum Corporation | 19,151,600 | 2.8 |
| Phillips 66 | 17,648,146 | 2.6 |
| | \$ 404,342,612 | 59.9% |

Industry Weightings

Statement of Assets and Liabilities

| December | 31, | 2017 |
|----------|-----|------|
|----------|-----|------|

Assets

| Investments* at value: | | |
|--|----------------|----------------|
| Common stocks (cost \$498,881,367) | \$ 667,729,023 | |
| Short-term investments (cost \$7,687,888) | 7,687,289 | \$ 675,416,312 |
| Cash | | 133,546 |
| Dividends and interest receivable | | 667,893 |
| Prepaid expenses and other assets | | 660,888 |
| Total Assets | | 676,878,639 |
| Liabilities | | |
| Accrued expenses and other liabilities | | 2,490,353 |
| Total Liabilities | | 2,490,353 |
| Net Assets | | \$ 674,388,286 |
| | | |
| Net Assets | | |
| Common Stock at par value \$0.001 per share, authorized 50,000,000 | | |
| shares; issued and outstanding 28,999,196 shares (includes | | \$ 28,999 |
| 13,535 restricted shares and 24,552 deferred stock units) (note 7) | | |
| Additional capital surplus | | 504,938,034 |
| Undistributed net investment income | | 361,422 |
| Undistributed net realized gain | | 212,774 |
| Unrealized appreciation | | 168,847,057 |
| Net Assets Applicable to Common Stock | | \$ 674,388,286 |

See Schedule of Investments beginning on page 16.

Net Asset Value Per Share of Common Stock

The accompanying notes are an integral part of the financial statements.

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\$ 23.26

473,913

\$ 13,704,527

Statement of Operations

| Year Ended December 31, 2017 |
|------------------------------|
| Investment Income |

| - | | | | |
|----|----|---|----|--|
| In | CC | m | e. | |

| income: | |
|--|---------------|
| Dividends (net of \$10,743 in foreign taxes) | \$ 18,085,468 |
| Interest and other income | 216,203 |
| Total Income | 18,301,671 |
| Expenses: | |
| Investment research compensation and benefits | 2,311,097 |
| Administration and operations compensation and benefits | 1,147,213 |
| Directors' compensation | 457,500 |
| Occupancy and other office expenses | 280,347 |
| Investment data services | 216,091 |
| Shareholder reports and communications | 183,445 |
| Accounting, recordkeeping, and other professional fees | 171,109 |
| Transfer agent, custody, and listing fees | 124,849 |
| Audit and tax services | 87,893 |
| Insurance | 55,689 |
| Legal services | 35,824 |
| Total Expenses | 5,071,057 |
| Net Investment Income | 13,230,614 |
| Realized Gain (Loss) and Change in Unrealized Appreciation | |
| Net realized gain (loss) on investments | 21,480,003 |
| Net realized gain (loss) on total return swap agreements | (1,579,829) |
| Change in unrealized appreciation on investments | (19,426,261) |
| change in amounted appropriation on investments | (1), (20,201) |

The accompanying notes are an integral part of the financial statements.

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Net Gain (Loss)

Change in Net Assets from Operations

Statements of Changes in Net Assets

| | For the Year Ended December 31, | |
|--|---------------------------------|----------------|
| | 2017 | 2016 |
| From Operations: | | |
| Net investment income | \$ 13,230,614 | \$ 11,536,954 |
| Net realized gain (loss) | 19,900,174 | 20,350,872 |
| Change in unrealized appreciation | (19,426,261) | 93,554,697 |
| Change in Net Assets from Operations | 13,704,527 | 125,442,523 |
| Distributions to Shareholders from: | | |
| Net investment income | (13,133,440) | (11,517,771) |
| Net realized gain | (20,556,258) | (20,506,783) |
| Change in Net Assets from Distributions | (33,689,698) | (32,024,554) |
| From Capital Share Transactions: | | |
| Value of shares issued in payment of distributions (note 5) | 8,430,416 | 9,574,317 |
| Deferred compensation (notes 5, 7) | 61,012 | 212,932 |
| Change in Net Assets from Capital Share Transactions | 8,491,428 | 9,787,249 |
| Total Change in Net Assets | (11,493,743) | 103,205,218 |
| | | |
| Net Assets: | | |
| Beginning of year | 685,882,029 | 582,676,811 |
| End of year (including undistributed net investment income of \$361,422 and \$166,634, respectively) | \$ 674,388,286 | \$ 685,882,029 |
| The accompanying notes are an integral part of the financial statements. | | |

Notes To Financial Statements

Adams Natural Resources Fund, Inc. (the "Fund") is registered under the Investment Company Act of 1940 ("1940 Act") as a non-diversified investment company. The Fund is an internally-managed closed-end fund specializing in energy and other natural resources stocks. The investment objectives of the Fund are preservation of capital, the attainment of reasonable income from investments, and an opportunity for capital appreciation.

1. SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation — The accompanying financial statements were prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for investment companies, which require the use of estimates by Fund management. Management believes that estimates and valuations are appropriate; however, actual results may differ from those estimates and the valuations reflected in the financial statements may differ from the value the Fund ultimately realizes.

Affiliates — Adams Diversified Equity Fund, Inc. ("ADX"), a diversified, closed-end investment company, owns 8% of the Fund's outstanding shares and is, therefore, an "affiliated company" as defined by the 1940 Act. During 2017, the Fund paid dividends and long-term capital gain distributions of \$2,580,393 to ADX. Directors of the Fund are also directors of ADX. The Fund, ADX, and Adams Funds Advisers, LLC ("AFA"), an ADX-affiliated investment adviser to external parties, have a shared management team.

Expenses — The Fund shares personnel, systems, and other infrastructure items with ADX and AFA and is charged a portion of the shared expenses. To protect the Fund from potential conflicts of interest, policies and procedures are in place covering the sharing of expenses among the entities. Expenses solely attributable to an entity are charged to that entity. Expenses that are not solely attributable to one entity are allocated in accordance with the Fund's expense sharing policy. The Fund's policy dictates that expenses, other than those related to personnel, are attributed to AFA based on the average percentage of time spent by all personnel on AFA-related activities relative to overall job functions; the remaining portion is attributed to the Fund and ADX based on relative net assets. Personnel-related expenses are attributed to AFA based on the individual's time spent on AFA-related activities; the remaining portion is attributed to the Fund and ADX based on relative time spent for portfolio managers, relative market values of portfolio securities covered for research staff, and relative net assets for all others. Expense allocations are updated quarterly, except for those related to payroll, which are updated annually.

For the year ended December 31, 2017, expenses of \$2,282,337 and \$395,694 were charged to ADX and AFA, respectively, in accordance with the Fund's expense sharing policy. There were no amounts due to, or due from, affiliated companies as of December 31, 2017.

Investment Transactions, Investment Income, and Distributions — The Fund's investment decisions are made by the portfolio management team with recommendations from the research staff. Policies and procedures are in place covering the allocation of investment opportunities among the Fund, ADX, and AFA to protect the Fund from potential conflicts of interest. Investment transactions are accounted for on trade date. Realized gains and losses on sales of investments are recorded on the basis of specific identification. Dividend income and distributions to shareholders are recognized on the ex-dividend date. Interest income is recognized on an accrual basis.

Valuation — The Fund's financial instruments are reported at fair value, which is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Fund has a Valuation Committee ("Committee") so that financial instruments are appropriately priced at fair value in accordance with GAAP and the 1940 Act. Subject to

Notes To Financial Statements (continued)

oversight by the Board of Directors, the Committee establishes methodologies and procedures to value securities for which market quotations are not readily available.

GAAP establishes the following hierarchy that categorizes the inputs used to measure fair value:

Level 1 — fair value is determined based on market data obtained from independent sources; for example, quoted prices in active markets for identical investments;

Level 2 — fair value is determined using other assumptions obtained from independent sources; for example, quoted prices for similar investments;

Level 3 — fair value is determined using the Fund's own assumptions, developed based on the best information available under the circumstances.

Investments in securities traded on national exchanges are valued at the last reported sale price as of the close of regular trading on the relevant exchange on the day of valuation. Over-the-counter and listed equity securities for which a sale price is not available are valued at the last quoted bid price. Money market funds are valued at net asset value. These securities are generally categorized as Level 1 in the hierarchy.

Short-term investments (excluding money market funds) are valued at amortized cost, which approximates fair value. Debt securities are generally traded in the over-the-counter market with prices obtained from an independent pricing service, which considers the yield or price of comparable bonds as well as prices quoted by dealers who make markets in such securities. Total return swap agreements are valued using independent, observable inputs, including underlying security prices, dividends, and interest rates. These securities are generally categorized as Level 2 in the hierarchy.

At December 31, 2017, the Fund's financial instruments were classified as follows:

| | Level 1 | Level 2 | Level 3 | Total | |
|------------------------|----------------|---------|---------|----------------|--|
| Assets: | | | | | |
| Common stocks | \$ 667,729,023 | \$ — | \$ — | \$ 667,729,023 | |
| Short-term investments | 7,687,289 | _ | _ | 7,687,289 | |
| Total investments | \$ 675,416,312 | \$ — | \$ — | \$ 675,416,312 | |

There were no transfers between levels during the year ended December 31, 2017.

2. FEDERAL INCOME TAXES

No federal income tax provision is required since the Fund's policy is to qualify as a regulated investment company under the Internal Revenue Code and to distribute substantially all of its taxable income and gains to its shareholders. Additionally, management has analyzed the tax positions included in federal income tax returns from the previous three years that remain subject to examination, and concluded no provision was required. Any income tax-related interest or penalties would be recognized as income tax expense. As of December 31, 2017, the identified cost of securities for federal income tax purposes was \$506,569,255 and net unrealized appreciation aggregated \$168,847,057, consisting of gross unrealized appreciation of \$217,740,881 and gross unrealized depreciation of \$48,893,824.

Distributions are determined in accordance with the Fund's annual 6% minimum distribution rate commitment, based on the Fund's average market price, and income tax regulations, which may differ from GAAP. Such differences are primarily related to the Fund's retirement plans and equity-based compensation. Differences that are permanent, while not material for the year ended December 31, 2017, are reclassified in the capital accounts of the Fund's financial

statements and have no impact on net assets. For tax purposes, distributions paid by the Fund during the years ended December 31, 2017 and December 31, 2016 were classified as ordinary income of \$13,121,928 and \$11,512,553, respectively, and as long-term capital gain of \$20,539,634 and \$20,499,473, respectively. The tax basis of distributable earnings at December 31, 2017 was \$1,006,135 of undistributed ordinary income and \$381,592 of undistributed long-term capital gain.

Notes To Financial Statements (continued)

3. INVESTMENT TRANSACTIONS

Purchases and sales of portfolio investments, other than short-term investments, securities lending collateral, and derivative transactions, during the year ended December 31, 2017 were \$155,728,883 and \$161,697,466, respectively. 4. DERIVATIVES

During the year ended December 31, 2017, the Fund invested in derivative instruments. The Fund may use derivatives for a variety of purposes, including, but not limited to, the ability to gain or limit exposure to particular market sectors or securities, to provide additional income, to limit equity price risk in the normal course of pursuing its investment objectives, and/or to obtain leverage.

Total Return Swap Agreements — The Fund may use total return swap agreements to manage exposure to certain risks and/or to enhance performance. Total return swap agreements are bilateral contracts between the Fund and a counterparty in which the Fund, in the case of a long contract, agrees to receive the positive total return (and pay the negative total return) of an underlying equity security and to pay a financing amount, based on a notional amount and a referenced interest rate, over the term of the contract. In the case of a short contract, the Fund agrees to pay the positive total return (and receive the negative total return) of the underlying equity security and to receive or pay a financing rate, based on a notional amount and a referenced interest rate, over the term of the contract. The fair value of each total return swap agreement is determined daily with the change in the fair value recorded as a change in unrealized appreciation on total return swap agreements in the Statement of Operations. Upon termination of a swap agreement, the Fund recognizes a realized gain (loss) on total return swap agreements in the Statement of Operations equal to the net receivable (payable) amount under the terms of the agreement.

Total return swap agreements entail risks associated with counterparty credit, liquidity, and equity price risk. Such risks include that the Fund or the counterparty may default on its obligation, that there is no liquid market for these agreements, and that there may be unfavorable changes in the price of the underlying equity security. To mitigate the Fund's counterparty credit risk, the Fund enters into master netting and collateral arrangements with the counterparty. A master netting agreement allows either party to terminate the agreement prior to termination date and to net amounts due across multiple agreements upon settlement, providing for a single net settlement with a counterparty. Pursuant to master netting arrangements, the net cumulative unrealized gain (asset) on open total return swap agreements and net cumulative unrealized loss (liability) on open total return swap agreements are presented in the Statement of Assets and Liabilities. The Fund's policy is to net all derivative instruments subject to a netting agreement. As of December 31, 2017, there were no outstanding total return swap agreements. During the year ended December 31, 2017, the average daily notional amounts of open long and (short) total return swap agreements, an indicator of the volume of activity during the period, were \$4,339,381 and \$(4,330,124), respectively. A collateral arrangement requires each party to provide collateral with a value, adjusted daily and subject to a minimum transfer amount, equal to the net amount owed to the other party under the agreement. The counterparty provides cash collateral to the Fund and the Fund provides collateral by segregating portfolio securities, subject to a valuation allowance, into a tri-party account at its custodian. As of December 31, 2017, there were no securities pledged as collateral and no cash collateral was held by the Fund.

5. CAPITAL STOCK

The Fund has 5,000,000 authorized and unissued preferred shares, \$0.001 par value.

On December 20, 2017, the Fund issued 448,248 shares of its Common Stock at a price of \$18.77 per share (the average market price on December 8, 2017) to shareholders of record November 22, 2017, who elected 11

Notes To Financial Statements (continued)

to take stock in payment of the year-end distribution from 2017 capital gain and investment income. During 2017, the Fund issued 892 shares of Common Stock at a weighted average price of \$18.85 per share as dividend equivalents to holders of deferred stock units and restricted stock units under the 2005 Equity Incentive Compensation Plan. On December 23, 2016, the Fund issued 462,680 shares of its Common Stock at a price of \$20.66 per share (the average market price on December 12, 2016) to shareholders of record on November 25, 2016, who elected to take stock in payment of the year-end distribution from 2016 capital gain and investment income. During 2016, the Fund issued 765 shares of Common Stock at a weighted average price of \$20.08 per share as dividend equivalents to holders of deferred stock units and restricted stock units under the 2005 Equity Income Compensation Plan. The Fund may purchase shares of its Common Stock from time to time, in accordance with parameters set by the Board of Directors, at such prices and amounts as the portfolio management team deems appropriate. There were no shares repurchased by the Fund in 2017 or 2016. Transactions in Common Stock for 2017 and 2016 were as follows:

| | Shares | | Amount | |
|--|---------|---------|--------------|--------------|
| | 2017 | 2016 | 2017 | 2016 |
| Shares issued in payment of distributions | 449,140 | 463,445 | \$ 8,430,416 | \$ 9,574,317 |
| Net activity under the 2005 Equity Incentive Compensation Plan | (5,249) | (4,791) | 61,012 | 212,932 |
| Net change | 443,891 | 458,654 | \$ 8,491,428 | \$ 9,787,249 |

6. RETIREMENT PLANS

The Fund sponsors a qualified defined contribution plan for all employees with at least six months of service and a nonqualified defined contribution plan for eligible employees to supplement the qualified plan. The Fund matches employee contributions made to the plan and, subject to Board approval, may also make a discretionary contribution to the plans. During 2017, the Fund recorded matching contributions of \$119,039. As of December 31, 2017, the Fund recorded a liability in the amount of \$118,318, included in Accrued expenses and other liabilities in the accompanying Statement of Assets and Liabilities, representing the 2017 discretionary contribution.

7. EQUITY-BASED COMPENSATION

The Fund's 2005 Equity Incentive Compensation Plan, adopted at the 2005 Annual Meeting and reapproved at the 2010 Annual Meeting, expired on April 27, 2015. Restricted stock awards granted prior to the Plan's expiration remain outstanding as of December 31, 2017 and vest on various dates through September 2, 2018, provided the service condition set forth in the award at grant is satisfied. Also outstanding are restricted stock units granted to non-employee directors that are 100% vested, but payment of which has been deferred at the election of the director. Outstanding awards were granted at fair market value on grant date (determined by the average of the high and low price on that date). Awards earn an amount equal to the Fund's per share distribution, payable in either cash (employees) or reinvested shares (non-employee directors). Reinvested shares are fully vested

Notes To Financial Statements (continued)

and paid concurrently with the payment of the original share grant. A summary of the activity related to nonvested restricted shares and restricted stock units for the year ended December 31, 2017 is as follows:

| Awards | Shares/Units | Weighted Average Grant-Date Fair Value | | |
|---------------------------------|--------------|--|--|--|
| Balance at December 31, 2016 | 52,603 | \$ 26.59 | | |
| Reinvested dividend equivalents | 892 | 18.85 | | |
| Vested & issued | (15,408) | 26.49 | | |
| Balance at December 31, 2017 | 38,087 | \$ 26.44 | | |

Compensation cost is based on the fair market value of the award on grant date and recognized on a straight-line basis over the vesting period. Any compensation cost recognized related to an award that is subsequently forfeited due to unmet service conditions is reversed. Total compensation cost related to equity-based compensation for the year ended December 31, 2017 was \$164,599. As of December 31, 2017, the Fund had unrecognized compensation cost of \$8,787, a component of additional capital surplus, related to nonvested awards that will be recognized over a weighted average period of 0.64 years. The total fair value of awards vested and issued during the year ended December 31, 2017 was \$304,046.

8. OFFICER AND DIRECTOR COMPENSATION

The aggregate remuneration paid by the Fund during the year ended December 31, 2017 to officers and directors amounted to \$3,129,151, of which \$457,500 was paid to independent directors. These amounts represent the taxable income to the Fund's officers and directors and, therefore, may differ from the amounts reported in the accompanying Statement of Operations that are recorded and expensed in accordance with GAAP.

9. PORTFOLIO SECURITIES LOANED

The Fund makes loans of securities to approved brokers to earn additional income. The loans are collateralized by cash and/or U.S. Treasury and government agency obligations valued at 102% of the value of the securities on loan. The market value of the loaned securities is calculated based upon the most recent closing prices and any additional required collateral is delivered to the Fund on the next business day. On loans collateralized by cash, the cash collateral is invested in a registered money market fund. The Fund accounts for securities lending transactions as secured financing and retains a portion of the income from lending fees and interest on the investment of cash collateral. The Fund also continues to receive dividends on the securities loaned. Gain or loss in the fair value of securities loaned that may occur during the term of the loan will be for the account of the Fund. At December 31, 2017, the Fund had no securities on loan. The Fund is indemnified by the Custodian, serving as lending agent, for the loss of loaned securities and has the right under the lending agreement to recover the securities from the borrower on demand.

Notes To Financial Statements (continued)

10. OPERATING LEASE COMMITMENTS

The Fund and its affiliated companies lease office space and equipment under operating lease agreements expiring at various dates through the year 2026. The Fund recognized rental expense of \$121,630 in 2017, and its estimated portion of the minimum rental commitments are as follows:

| 2018 | \$ 127,603 |
|------------|------------|
| 2019 | 100,696 |
| 2020 | 102,399 |
| 2021 | 100,513 |
| 2022 | 102,952 |
| Thereafter | 428,543 |
| Total | \$ 962,706 |

Financial Highlights

| | Year Ended December 31, | | | | |
|--|-------------------------|---------|---------|---------|---------|
| | 2017 | 2016 | 2015 | 2014 | 2013 |
| Per Share Operating Performance | | | | | |
| Net asset value, beginning of year | \$24.02 | \$20.74 | \$27.56 | \$32.26 | \$27.84 |
| Net investment income | 0.46 | 0.41 | 0.37 | 0.50 | 0.44 |
| Net realized gain (loss) and change in unrealized appreciation | 0.02 | 4.07 | (5.80) | (3.23) | 5.93 |
| Change in accumulated other comprehensive income | | _ | 0.05 | (0.01) | 0.03 |
| Total from operations | 0.48 | 4.48 | (5.38) | (2.74) | 6.40 |
| Less distributions from: | | | | | |
| Net investment income | (0.46) | (0.41) | (0.38) | (0.51) | (0.46) |
| Net realized gain | (0.72) | (0.73) | (1.00) | (1.38) | (1.42) |
| Total distributions | (1.18) | (1.14) | (1.38) | (1.89) | (1.88) |
| Capital share repurchases (note 5) | | | _ | 0.03 | 0.05 |
| Reinvestment of distributions | (0.06) | (0.06) | (0.06) | (0.10) | (0.15) |
| Total capital share transactions | (0.06) | (0.06) | (0.06) | (0.07) | (0.10) |
| Net asset value, end of year | \$23.26 | \$24.02 | \$20.74 | \$27.56 | \$32.26 |
| Market price, end of year | \$19.84 | \$20.17 | \$17.74 | \$23.84 | \$27.38 |
| Total Investment Return * | | | | | |
| Based on market price | 4.6% | 20.2% | -20.0% | -6.3% | 22.7% |
| Based on net asset value | 3.0% | 22.5% | -19.1% | -8.0% | 24.2% |
| Ratios/Supplemental Data | | | | | |
| Net assets, end of year (in millions) | \$674 | \$686 | \$583 | \$755 | \$864 |
| Ratio of expenses to average net assets | 0.78% | 0.82% | 1.26%** | 0.63% | 0.78%** |
| Ratio of net investment income to average net assets | 2.05% | 1.85% | 1.49%** | 1.53% | 1.44%** |
| Portfolio turnover | 24.4% | 19.0% | 16.0% | 19.6% | 18.7% |
| Number of shares outstanding at end of year (in 000's) | 28,999 | 28,555 | 28,097 | 27,381 | 26,775 |

Total investment return assumes reinvestment of all distributions at the price received in the Fund's dividend reinvestment plan.

**

Ratios of expenses to average net assets were 0.86% and 0.70% in 2015 and 2013, respectively, after adjusting for non-recurring pension-related settlement charges. The adjusted ratios of net investment income to average net assets were 1.89% and 1.52% in 2015 and 2013, respectively.

Schedule of Investments

| D | 1 | 2 | 1 / | 30 | 17 |
|----------|------------------------------------|----|-------|-----|-----|
| Decem | ner. | 4 | | 711 | 1 / |
| Decem | $\omega_{\mathbf{C}_{\mathbf{I}}}$ | J. | L 9 4 | -0 | 1/ |

| | Shares | Value (a) |
|-------------------------------------|-----------|--------------|
| Common Stocks — 99.0% | | |
| Energy — 79.2% | | |
| Exploration & Production — 25.8% | | |
| Anadarko Petroleum Corporation | 171,100 | \$ 9,177,804 |
| Callon Petroleum Company (b) | 273,500 | 3,323,025 |
| Cheniere Energy, Inc. (b) | 131,800 | 7,096,112 |
| Cimarex Energy Company | 81,400 | 9,931,614 |
| Concho Resources Inc. (b) | 89,100 | 13,384,602 |
| ConocoPhillips | 558,600 | 30,661,554 |
| Devon Energy Corporation | 37,600 | 1,556,640 |
| Diamondback Energy, Inc. (b) | 84,900 | 10,718,625 |
| Energen Corporation (b) | 34,200 | 1,968,894 |
| EOG Resources, Inc. | 179,700 | 19,391,427 |
| EQT Corporation | 113,100 | 6,437,652 |
| Hess Corporation | 172,200 | 8,174,334 |
| Newfield Exploration Company (b) | 182,500 | 5,754,225 |
| Occidental Petroleum Corporation | 260,000 | 19,151,600 |
| Pioneer Natural Resources Company | 82,700 | 14,294,695 |
| Range Resources Corporation | 322,100 | 5,495,026 |
| RSP Permian, Inc. (b) | 145,000 | 5,898,600 |
| Whiting Petroleum Corporation (b) | 62,875 | 1,664,930 |
| | | 174,081,359 |
| Integrated Oil & Gas — 29.3% | | |
| Chevron Corporation | 545,300 | 68,266,107 |
| Exxon Mobil Corporation | 1,542,730 | 129,033,937 |
| | | 197,300,044 |
| Oil Equipment & Services — 11.7% | | |
| Baker Hughes, a GE Company Class A | 90,100 | 2,850,764 |
| Forum Energy Technologies, Inc. (b) | 167,700 | 2,607,735 |
| Halliburton Company | 472,770 | 23,104,270 |
| National Oilwell Varco, Inc. | 141,900 | 5,111,238 |
| Oil States International, Inc. (b) | 180,100 | 5,096,830 |
| Schlumberger Limited | 525,400 | 35,406,706 |
| Weatherford International plc (b) | 1,190,100 | 4,962,717 |
| | | 79,140,260 |
| 16 | | |

Schedule of Investments (continued)

| December 31, 2017 |
|-------------------|
|-------------------|

| | Shares | Value (a) |
|----------------------------------|---------|--------------|
| Pipelines — 4.6% | | |
| Enbridge Inc. | 136,673 | \$ 5,345,281 |
| Kinder Morgan, Inc. | 289,300 | 5,227,651 |
| Targa Resources Corp. | 97,800 | 4,735,476 |
| Williams Companies, Inc. | 513,500 | 15,656,615 |
| | | 30,965,023 |
| Refiners — 7.8% | | |
| Andeavor | 119,600 | 13,675,064 |
| Phillips 66 | 174,475 | 17,648,146 |
| Valero Energy Corporation | 232,000 | 21,323,120 |
| | | 52,646,330 |
| Basic Materials — 19.8% | | |
| Chemicals — 15.9% | | |
| Air Products and Chemicals, Inc. | 73,800 | 12,109,104 |
| Albemarle Corporation | 70,900 | 9,067,401 |
| DowDuPont Inc. | 566,635 | 40,355,745 |
| Eastman Chemical Company | 93,700 | 8,680,368 |
| LyondellBasell Industries N.V. | 137,700 | 15,191,064 |
| Monsanto Company | 84,400 | 9,856,232 |
| PPG Industries, Inc. | 103,400 | 12,079,188 |
| | | 107,339,102 |
| General Industrials — 0.9% | | |
| Packaging Corporation of America | 49,900 | 6,015,445 |
| | | |
| Gold & Precious Metals — 0.6% | | |
| SPDR Gold Trust (b) | 35,200 | 4,352,480 |
| | | |
| Industrial Metals — 2.4% | | |
| Freeport-McMoRan, Inc. (b) | 398,700 | 7,559,352 |
| Reliance Steel & Aluminum Co. | 34,100 | 2,925,439 |
| Steel Dynamics, Inc. | 125,300 | 5,404,189 |
| | | 15,888,980 |
| Total Common Stocks | | |
| (Cost \$498,881,367) | | 667,729,023 |
| | | |

Schedule of Investments (continued)

December 31, 2017

| | Shares | Value (a) |
|---|-----------|----------------|
| Short-Term Investments — 1.1% | | |
| Money Market Funds — 1.1% | | |
| Fidelity Investments Money Market Funds - Prime Money Market Portfolio (Institutional Class), 1.45% (c) | 5,995,882 | \$ 5,997,681 |
| Northern Institutional Treasury Portfolio, 1.17% (c) | 1,689,608 | 1,689,608 |
| Total Short-Term Investments | | |
| (Cost \$7,687,888) | | 7,687,289 |
| Total — 100.1% of Net Assets | | |
| (Cost \$506,569,255) | | 675,416,312 |
| Other Assets Less Liabilities — $(0.1)\%$ | | (1,028,026) |
| Net Assets — 100.0% | | \$ 674,388,286 |

(a)

Common stocks are listed on the New York Stock Exchange or NASDAQ and are valued at the last reported sale price on the day of valuation. See note 1 to financial statements.

(b)

Presently non-dividend paying.

(c)

Rate presented is as of period-end and represents the annualized yield earned over the previous seven days.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Adams Natural Resources Fund, Inc.

Opinion on the Financial Statements

We have audited the accompanying statement of assets and liabilities, including the schedule of investments, of Adams Natural Resources Fund, Inc. (the "Fund") as of December 31, 2017, the related statement of operations for the year ended December 31, 2017, the statement of changes in net assets for each of the two years in the period ended December 31, 2017, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2017 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of Fund as of December 31, 2017, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2017 and the financial highlights for each of the five years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2017 by correspondence with the custodian and transfer agent. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

Baltimore, MD

February 16, 2018

We have served as the Fund's auditor since 1929.

Principal Changes in Portfolio Securities

December 31, 2017 (unaudited)

| (unuuunteu) | | | |
|----------------------------------|---------------------|---------------------|---|
| | Purchases (Cost) | Sales (Proceeds) | Market Value Held at December 31, 2017 |
| Air Products and Chemicals, Inc. | \$ 7,604,465 | | \$ 12,109,104 |
| Albemarle Corporation | 8,256,102 | | 9,067,401 |
| Anadarko Petroleum Corporation | 7,988,419 | | 9,177,804 |
| Andeavor | 11,405,063 | | 13,675,064 |
| Cheniere Energy, Inc. | 5,646,603 | | 7,096,112 |
| Energy Select Sector SPDR Fund | 4,884,797 | \$ 4,893,867 | _ |
| Exxon Mobil Corporation | 6,115,224 | 3,774,198 | 129,033,937 |
| Hess Corporation | 7,711,297 | | 8,174,334 |
| Newfield Exploration Company | 5,536,065 | | 5,754,225 |
| Oasis Petroleum Inc. | 3,278,090 | 2,672,096 | _ |
| Phillips 66 | 6,779,718 | | 17,648,146 |
| Williams Companies, Inc. | 2,110,265 | | 15,656,615 |
| Chevron Corporation | | 6,060,612 | 68,266,107 |
| DowDuPont Inc. | | 4,854,311 | 40,355,745 |
| H.B. Fuller Company | | 6,428,597 | _ |
| HollyFrontier Corporation | | 5,419,057 | |
| LyondellBasell Industries N.V. | | 6,830,885 | 15,191,064 |
| Marathon Petroleum Corporation | | 14,453,606 | |
| Monsanto Company | | 7,843,837 | 9,856,232 |
| Noble Energy, Inc. | | 10,055,658 | |
| Occidental Petroleum Corporation | | 5,682,157 | 19,151,600 |
| Parsley Energy, Inc. Class A | | 5,679,139 | |
| Targa Resources Corp. | | 4,112,273 | 4,735,476 |

The transactions presented above are those purchases or sales during the period that exceeded .30% of period-end net assets.

Historical Financial Statistics

(unaudited)

| Year | (000s) Value of Net Assets | (000s) Shares Outstanding | Net Asset Value Per Share | Market Value Per Share | Income Dividends Per Share | Capital Gains Distribution Per Share | Return of Capital Per Share | Dividends | Annual Distribution asRate* |
|------|----------------------------------|---------------------------------|---------------------------------|------------------------------|-------------------------------------|---|---|-----------|-----------------------------------|
| 2003 | \$ 522,941 | 21,737 | \$ 24.06 | \$ 23.74 | \$.38 | \$.81 | \$ — | \$ 1.19 | 5.8% |
| 2004 | 618,887 | 21,980 | 28.16 | 25.78 | .44 | .88 | _ | 1.32 | 5.4 |
| 2005 | 761,914 | 21,621 | 35.24 | 32.34 | .56 | 1.22 | _ | 1.78 | 5.9 |
| 2006 | 812,047 | 22,181 | 36.61 | 33.46 | .47 | 3.33 | _ | 3.80 | 11.2 |
| 2007 | 978,920 | 22,768 | 42.99 | 38.66 | .49 | 3.82 | _ | 4.31 | 11.6 |
| 2008 | 538,937 | 23,959 | 22.49 | 19.41 | .38 | 2.61 | _ | 2.99 | 8.9 |
| 2009 | 650,718 | 24,327 | 26.75 | 23.74 | .37 | 1.03 | | 1.40 | 6.6 |
| 2010 | 761,736 | 24,790 | 30.73 | 27.01 | .32 | .95 | _ | 1.27 | 5.5 |
| 2011 | 732,811 | 25,641 | 28.58 | 24.48 | .39 | 1.58 | _ | 1.97 | 7.1 |
| 2012 | 732,988 | 26,326 | 27.84 | 23.92 | .42 | 1.18 | | 1.60 | 6.4 |
| 2013 | 863,690 | 26,775 | 32.26 | 27.38 | .46 | 1.42 | _ | 1.88 | 7.2 |
| 2014 | 754,506 | 27,381 | 27.56 | 23.84 | .51 | 1.38 | | 1.89 | 6.6 |
| 2015 | 582,677 | 28,097 | 20.74 | 17.74 | .38 | 1.00 | | 1.38 | 6.2 |
| 2016 | 685,882 | 28,555 | 24.02 | 20.17 | .41 | .73 | _ | 1.14 | 6.1 |
| 2017 | 674,388 | 28,999 | 23.26 | 19.84 | .46 | .72 | | 1.18 | 6.1 |
| * | | | | | | | | | |

The annual distribution rate is the total dividends and distributions per share divided by the Fund's average month-end stock price. For years prior to 2012, the average month-end stock price is determined for the calendar year. For 2012 and later, the average month-end stock price is determined for the twelve months ended October 31, which is consistent with the calculation used for the annual 6% minimum distribution rate commitment adopted in September 2012.

Other Information

Annual Certification

The Fund's CEO has submitted to the New York Stock Exchange the annual CEO certification as required by Section 303A.12(a) of the NYSE Listed Company Manual.

Distribution Payment Schedule

The Fund presently pays distributions four times a year, as follows: (a) three interim distributions on or about March 1, June 1, and September 1, and (b) a "year-end" distribution, payable in late December, consisting of the estimated balance of the net investment income for the year, the net realized capital gains earned through October 31 and, if applicable, a return of capital. Shareholders may elect to receive the year-end distribution in stock or cash. In connection with this distribution, all shareholders of record are sent a distribution announcement notice and an election card in mid-November. Shareholders holding shares in "street" or brokerage accounts may make their election by notifying their brokerage house representative.

Electronic Delivery of Shareholder Reports

The Fund offers shareholders the benefits and convenience of viewing Quarterly and Annual Reports and other shareholder materials online. With your consent, paper copies of these documents will cease with the next mailing and will be provided via e-mail. Reduce paper mailed to your home and help lower the Fund's printing and mailing costs. To enroll, please visit the following websites:

Registered shareholders with the Fund's transfer agent, American Stock Transfer & Trust Company ("AST"): www.astfinancial.com

Shareholders using brokerage accounts: http://enroll.icsdelivery.com/PEO

Privacy Policy

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In order to conduct its business, the Fund, through AST, collects and maintains certain nonpublic personal information about our shareholders of record with respect to their transactions in shares of our securities. This information includes the shareholder's address, tax identification or Social Security number, share balances, and dividend elections. We do not collect or maintain personal information about shareholders whose shares of our securities are held in "street name" by a financial institution such as a bank or broker.

We do not disclose any nonpublic personal information about you, our other shareholders, or our former shareholders to third parties unless necessary to process a transaction, service an account, or as otherwise permitted by law. To protect your personal information internally, we restrict access to nonpublic personal information about our shareholders to those employees who need to know that information to provide services to our shareholders. We also maintain certain other safeguards to protect your nonpublic personal information.

Proxy Voting Policies and Record

A description of the policies and procedures that the Fund uses to determine how to vote proxies relating to portfolio securities owned by the Fund and the Fund's proxy voting record for the 12-month period ended June 30, 2017 are available (i) without charge, upon request, by calling the Fund's toll free number at (800) 638-2479; (ii) on the Fund's website: www.adamsfunds.com under the headings "Funds" and then "Reports & Literature"; and (iii) on the Securities and Exchange Commission's website: www.sec.gov.

Other Information (continued)

Statement on Quarterly Filing of Complete Portfolio Schedule

In addition to publishing its complete schedule of portfolio holdings in the First and Third Quarter Reports to Shareholders, the Fund also files its complete schedule of portfolio holdings with the Securities and Exchange Commission for the first and third quarters of each fiscal year on Form N-Q. The Fund's Forms N-Q are available on the Commission's website: www.sec.gov . The Fund's Forms N-Q may be reviewed and copied at the Commission's Public Reference Room, and information on the operation of the Public Reference Room may be obtained by calling 1-800-SEC-0330. The Fund also posts a link to its Forms N-Q on its website: www.adamsfunds.com; select Fund name and click the headings "Funds" and then "Reports & Literature".

INVESTORS CHOICE

INVESTORS CHOICE is a direct stock purchase and sale plan, as well as a distribution reinvestment plan, sponsored and administered by AST. The Plan provides registered shareholders and interested first time investors an affordable alternative for buying, selling, and reinvesting in Fund shares. A brochure which further details the benefits and features of INVESTORS CHOICE as well as an enrollment form may be obtained by contacting AST.

The costs to participants in administrative service fees and brokerage commissions for each type of transaction are listed below. Fees are subject to change at any time.

Fees

Initial Enrollment and Optional Cash

Investments:

Service Fee \$2.50 per investment

Brokerage Commission \$0.05 per share

Reinvestment of Dividends*:

Service Fee 2% of amount invested

(maximum of \$2.50 per investment)

Brokerage Commission \$0.05 per share

Sale of Shares:

Service Fee \$10.00

Brokerage Commission \$0.05 per share

Deposit of Certificates for safekeeping \$7.50

(waived if sold)

Book to Book Transfers Included

To transfer shares to another participant or to a new participant

* The year-end dividend and capital gain distribution will usually be made in newly issued shares of Common Stock. There are no fees or commissions in connection with this dividend and capital gain distribution when made in newly issued shares.

Minimum and Maximum Cash

Investments:

Initial minimum investment

(non-holders) \$500

Minimum optional investment

(existing holders) \$50 Electronic Funds Transfer (monthly minimum) \$50 Maximum per transaction

\$25,000

Maximum per year NONE INVESTORS CHOICE

Mailing Address: Attention: Dividend Reinvestment P.O. Box 922 Wall Street Station

New York, NY 10269-0560

Website:

www.astfinancial.com

E-mail: info@astfinancial.com

For shareholders whose stock is held by a broker in "street" name, the AST INVESTORS CHOICE Direct Stock Purchase and Sale Plan remains available through many registered investment security dealers. If your shares are currently held in a "street" name or brokerage account, please contact your broker for details about how you can participate in AST's Plan or contact AST.

Directors

| Name (Age) Director Since | Principal Occupation(s) During Past 5 Years | Number of Portfolios in Fund Complex Overseen by Director | Other Current Directorships |
|--|---|--|--|
| Independent Directors | S | | |
| Enrique R. Arzac, Ph.D. (76) 1983 | Professor Emeritus Graduate School of Business, Columbia University | Two | Aberdeen Asset Management Funds (6 closed-end funds) Mirae Asset Discovery Funds (6 open-end funds) |
| Phyllis O. Bonanno (74) 2003 | Retired President & CEO International Trade Solutions, Inc. (consultants) (until 2009) | Two | |
| Kenneth J. Dale (61) 2008 | Senior Vice President and Chief Financial Officer The Associated Press | Two | |
| Frederic A. Escherich (65) 2006 | Private Investor | Two | |
| Roger W. Gale, Ph.D. (71) 2005 | President & CEO GF Energy, LLC (electric power consultants) | Two | |
| Lauriann C. Kloppenburg (57) 2017 | Retired Chief Strategy Officer and Chief Investment Officer - Equity Group Loomis, Sayles & Co., LP (investment management) | Two | |
| Kathleen T. McGahran, Ph.D., J.D., CPA (67) 2003 Chair of the Board | President & CEO Pelham Associates, Inc. (executive education provider) Adjunct Professor Tuck School of Business, Dartmouth College | Two | Scor Global Life Reinsurance Scor Reinsurance of New York |
| Craig R. Smith, M.D. (71) 2005 | Retired President Williston Consulting LLC (pharmaceutical and biotechnology consulting) Chief Operating Officer Algenol LLC (ethanol manufacturing) (until 2014) | Two | |
| Interested Director Mark E. Stoeckle (61) 2013 | Chief Executive Officer (since 2013) Adams Diversified Equity Fund, Inc. Adams Natural Resources Fund, Inc. | Two | |

President (since 2015) Adams Diversified Equity Fund, Inc. Chief Investment Officer, U.S. Equities and Global Sector Funds BNP Paribas Investment Partners (2013)

All Directors serve for a term of one year upon their election at the Annual Meeting of Shareholders. The address for each Director is the Fund's office.

Officers

Name (Age) Principal Occupation(s) During Past 5 Years **Employee Since**

Mark E. Chief Executive Officer of the Fund and Adams Diversified Equity Fund, Inc. since 2013 and President of Adams Diversified Equity Fund, Inc. since 2015; Chief Investment Officer, U.S. Stoeckle (61)

2013 Equities and Global Sector Funds, BNP Paribas Investment Partners (2013)

President of the Fund and Executive Vice President of Adams Diversified Equity Fund, Inc. since James P. Haynie, CFA 2015; Executive Vice President of the Fund and President of Adams Diversified Equity Fund, Inc. (2013-2015); Chief Investment Officer, US Equities and Global Sector Funds, BNP Paribas (55)

Investment Partners (2013) 2013

Brian S. Hook, CFA, CPA (48)

Vice President, Chief Financial Officer and Treasurer of the Fund and Adams Diversified Equity

Fund, Inc. 2008

Lawrence L. Hooper, Jr. (65)

Vice President, General Counsel, Secretary and Chief Compliance Officer of the Fund and Adams Diversified Equity Fund, Inc.

Gregory

Buckley (47) Vice President – Research since 2015; Senior Research Analyst (2013-2015)

2013

1997

Michael A. Kijesky, CFA

Vice President - Research

(47)2009

Michael E. Vice President – Research of the Fund and Adams Diversified Equity Fund, Inc. since 2014;

Rega, CFA (58) Senior Equity Analyst and Portfolio Manager, BNP Paribas Investment Partners (prior to 2014)

Christine M.

Sloan, CPA (45) Assistant Treasurer of the Fund and Adams Diversified Equity Fund, Inc.

1999

2014

All officers serve for a term of one year upon their election by the Board of Directors at the annual organization meeting. The address for each officer is the Fund's office.

Service Providers

Counsel Norton Rose Fulbright US LLP Independent Registered Public Accounting Firm PricewaterhouseCoopers LLP Custodian of Securities The Northern Trust Company

American Stock Transfer & Trust Company, LLC

Stockholder Relations Department

6201 15th Avenue

Transfer Agent & Registrar Brooklyn, NY 11219

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Item 2. Code of Ethics.

On June 12, 2003, the Board of Directors adopted a code of ethics that applies to the registrant's principal executive officer and principal financial officer. The code of ethics is available on the registrant's website at: www.adamsfunds.com.

Item 3. Audit Committee Financial Expert.

The Board of Directors has determined that at least one of the members of the registrant's audit committee meets the definition of audit committee financial expert as that term is defined by the Securities and Exchange Commission. The directors on the registrant's audit committee whom the Board of Directors has determined meet such definition are Frederic A. Escherich and Enrique R. Arzac, who are independent pursuant to paragraph (a)(2) of this Item.

Item 4. Principal Accountant Fees and Services.

- (a) Audit Fees. The aggregate fees for professional services rendered by the registrant's independent registered public accounting firm, PricewaterhouseCoopers LLP, for the audit of the registrant's annual financial statements and review of the registrant's semi-annual financial statements for 2017 and 2016 were \$80,919 and \$69,348, respectively.
- (b) Audit-Related Fees. There were no audit-related fees in 2017 and 2016.
- (c) Tax Fees. The aggregate fees for professional services rendered to the registrant by PricewaterhouseCoopers LLP for the review of the registrant's excise tax calculations and preparations of federal, state and excise tax returns for 2017 and 2016 were \$18,494 and \$8,568, respectively.
- (d) All Other Fees. There were no fees for services rendered to the registrant by PricewaterhouseCoopers LLP, other than for the services referenced above, for 2017 and 2016.
- (e) (1) The audit committee's policy is to pre-approve all audit and permissible non-audit services provided by the independent accountants. In assessing requests for services by the independent accountants, the audit committee considers whether such services are consistent with the auditor's independence; whether the independent accountants are likely to provide the most effective and efficient service based upon their familiarity with the registrant; and whether the

service could enhance the registrant's ability to manage or control risk or improve financial statement audit and review quality. The audit committee may delegate pre-approval authority to its Chair. Any pre-approvals by the Chair under this delegation are to be reported to the audit committee at its next scheduled meeting.

- (2) All services performed in 2017 and 2016 were pre-approved by the audit committee.
- (f) Not applicable.
- (g) The aggregate fees for non-audit professional services rendered by PricewaterhouseCoopers LLP to the registrant for 2017 and 2016 were \$18,494 and \$8,568, respectively.
- (h) The registrant's audit committee has considered the provision by PricewaterhouseCoopers LLP of the non-audit services described above and found that they are compatible with maintaining PricewaterhouseCoopers LLP's independence.

Item 5. Audit Committee of Listed Registrants.

- (a) The registrant has a standing audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934. The members of the Audit Committee are: Frederic A. Escherich, Enrique R. Arzac, Roger W. Gale, Lauriann C. Kloppenburg, and Craig R. Smith.
- (b) Not applicable.

Item 6. Investments.

- (a) This schedule is included as part of the Report to Stockholders filed under Item 1 of this form.
- (b) Not applicable.

Item 7. Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies.

PROXY VOTING GUIDELINES

The registrant follows long-standing general guidelines for the voting of portfolio company proxies and takes very seriously its responsibility to vote all such proxies. The portfolio company proxies are evaluated by our research staff and voted by our portfolio management team, and we annually provide the Board of Directors with a report on how proxies were voted during the previous year. We do not use an outside service to assist us in voting our proxies.

While the policy is to vote all of the proxies for portfolio companies, as a general matter, securities that the registrant has loaned will not be recalled to facilitate proxy voting (in which case the borrower of the security is entitled to vote the proxy). However, if the registrant's management becomes aware of a material vote with respect to the loaned securities in time to recall the security and has determined in good faith that the importance of the matter to be voted on outweighs the loss in lending revenue that would result from recalling the security (i.e., a controversial upcoming

merger or acquisition, or some other significant matter), the security will be recalled for voting.

As an internally-managed investment company, the registrant uses its own staff of research analysts and portfolio managers. In making the decision to invest in a company for the portfolio, among the factors the research team analyses is the integrity and competency of the company's management. We must be satisfied that the companies we invest in are run by managers with integrity. Therefore, having evaluated this aspect of our portfolio companies' managements, we give significant weight to the recommendations of the company's management in voting on proxy issues.

We vote proxies on a case-by-case basis according to what we deem to be the best long-term interests of our shareholders. The key over-riding principle in any proxy vote is that stockholders be treated fairly and equitably by the portfolio company's management. In general, on the election of directors and on routine issues that we do not believe present the possibility of an adverse impact upon our investment, after reviewing whether applicable corporate governance requirements as to board and committee composition have been met, we will vote in accordance with the recommendations of the company's management. When we believe that the management's recommendation is not in the best interests of our stockholders, we will vote against that recommendation.

Our general guidelines for when we will vote contrary to the portfolio company management's recommendation are:

Stock Options

Our general guideline is to vote against stock option plans that we believe are unduly dilutive of our stock holdings in the company. We use a general guideline that we will vote against any stock option plan that results in dilution in shares outstanding exceeding 4%. Most stock option plans are established to motivate and retain key employees and to reward them for their achievement. An analysis of a stock option plan cannot be made in a vacuum but must be made in the context of the company's overall compensation scheme. In voting on stock option plans, we give consideration to whether the stock option plan is broad-based in the number of employees who are eligible to receive grants under the plan. We generally vote against plans that permit re-pricing of grants or the issuance of options with exercise prices below the grant date value of the company's stock.

Executive Compensation

On proposals relating to executive compensation, we generally vote against proposals that fail to require or demonstrate effective linkage between pay and the company's performance over time, and for proposals that require or demonstrate such effective linkage.

It is our general policy to vote against proposals relating to future employment contracts that provide that compensation will be paid to any director, officer or employee that is contingent upon a merger or acquisition of the company.

Corporate Control/Governance Issues

Unless we conclude that the proposal is favorable to our interests as a long-term shareholder in the company, we have a long-standing policy of voting against proposals to create a staggered board of directors. In conformance with that policy, we will generally vote in favor of shareholder proposals to eliminate the staggered election of directors.

Unless we conclude that the proposal is favorable to our interests as a long-term shareholder in the company, our general policy is to vote against amendments to a company's charter that can be characterized as blatant anti-takeover provisions.

We generally vote for proposals to require that the majority of a board of directors consist of independent directors and vote against proposals to establish a retirement plan for non-employee directors.

We generally vote for proposals to require that all members of the company's Audit, Compensation, and Nominating committees be independent of management.

We have found that most stockholder proposals relating to social issues focus on very narrow issues that either fall within the authority of the company's management, under the oversight of its board of directors, to manage the day-to-day operations of the company or concern matters that are more appropriate for global solutions rather than company-specific ones. We consider these proposals on a case-by-case basis but usually are persuaded if management's position is reasonable and vote in accordance with management's recommendation on these types of proposals.

Item 8. Portfolio Managers of Closed-End Management Investment Companies.

- (a) (1) As of the date of this filing, Mark E. Stoeckle, Chief Executive Officer, and James P. Haynie, President, comprise the two-person portfolio management team for the registrant. Mr. Stoeckle has served as portfolio manager for the registrant since February 11, 2013; prior thereto, he served as Chief Investment Officer, U.S. Equities and Global Sector Funds, for BNP Paribas Investment Partners. Mr. Haynie has been a member of the portfolio management team since August 19, 2013, serving as Executive Vice President until January 21, 2015; prior thereto, Mr. Haynie served as Chief Investment Officer, U.S. Equities, for BNP Paribas Investment Partners from February 2013 and was Senior Portfolio Manager at BNP Paribas Investment Partners from 2005 to 2013. Mr. Stoeckle is the lead member of the portfolio management team. Messrs. Stoeckle and Haynie receive investment recommendations from a team of research analysts and make decisions jointly about any investment transactions in the portfolio.
 - (2) As of the date of this filing, Messrs. Stoeckle and Haynie also serve on the portfolio management team for the registrant's non-controlling affiliate, Adams Diversified Equity Fund, Inc. ("ADX"), a registered investment company with total net assets of \$1,785,771,890 as of December 31, 2017. Mr. Stoeckle is Chief Executive Officer and President of ADX and Mr. Haynie is Executive Vice President. The registrant is a non-diversified fund focusing on the energy and natural resources sectors and ADX is a diversified fund with a different focus. There are few material conflicts of interest that may arise in connection with the portfolio management of both funds. The funds do not buy or sell securities or other portfolio holdings to or from the other, and policies and procedures are in place covering the sharing of expenses and the allocation of investment opportunities, including bunched orders and investments in initial public offerings, between the funds.
 - (3) As of December 31, 2017, the registrant's portfolio managers are compensated through a plan consisting of salary and annual cash incentive compensation, of which the amount in any year is determined by the

Compensation Committee, comprised solely of independent director members of the Board of Directors ("Committee"). The Committee has periodically employed a compensation consultant to review the plan. The structure and methods used to determine the compensation of the portfolio managers were as follows: Salaries are determined by using appropriate industry surveys and information about the local market. Incentive compensation is based on a combination of relative fund performance of the registrant and ADX, with 70% weighting, and individual performance, with a 30% weighting. Target incentives are set annually based on aggregate compensation less salary for each position. Fund performance used in determining incentive compensation is measured over a one-year period, accounting for one-fourth of the calculation, a three-year period, which accounts for one-half, and a five-year period, which accounts for one-fourth. The registrant's total return on net asset value ("NAV") over each of these periods is used to determine performance relative to a blended benchmark of 80% Dow Jones U.S. Oil and Gas Index and 20% Dow Jones U.S. Basic Materials Index. Using these calculations, the incentive compensation can be less than or exceed the established target.

As of December 31, 2017, the structure of the compensation that the portfolio managers receive from ADX is the same as that for the registrant with the exception that the portfolio managers' incentive compensation is based on a comparison with the performance of a 50/50 blend of the S&P 500 Index and the Lipper Large-Cap Core Funds Average universe.

- (4) Using a valuation date of December 31, 2017, Messrs. Stoeckle and Haynie each beneficially owned equity securities in the registrant valued between \$100,001 and \$500,000.
- (b) Not applicable.

Item 9. Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers.

| Total Number of Shares (or Units Purchased) | Average Price Paid per Share (or Unit) | Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs | Maximum Number of Shares (or Units) That May Yet Be Purchased Under the Plans or Programs |
|---|--|---|--|
| 0 | | 0 | 1,332,000 |
| | | | |
| 0 | | 0 | 1,332,000 |
| | | | |
| 0 | | 0 | 1,332,000 |
| | | | |
| 0 | | 0 | 1,332,000 |
| | | | |
| 0 | | 0 | 1,332,000 |
| 0 | | 0 | 1,332,000 |
| | of Shares (or Units Purchased) 0 0 0 0 0 | of Shares (or Units Purchased) O O O O O O O O O O O O O | Total Number of Shares (or Units Purchased) Average Price Paid per Share (or Unit) O 0 0 0 0 0 0 0 0 0 0 |

| July 2017 | 0 | | 0 | 1,332,000 |
|-----------|------|-----|--------|----------------|
| August | 0 | | 0 | 1,332,000 |
| 2017 | | | | |
| September | 0 | | 0 | 1,332,000 |
| 2017 | | | | |
| October | 0 | | 0 | 1,332,000 |
| 2017 | | | | |
| November | 0 | | 0 | 1,332,000 |
| 2017 | | | | |
| December | 0 | | 0 | 1,332,000 (2c) |
| 2017 | | | | |
| | | | | |
| Total | 0(1) | \$0 | 0 (2a) | |
| | | | (2b) | |

- (1) There were no shares purchased other than through a publicly announced plan or program.
- (2a) The Plan was announced on December 11, 2014.
- (2b) The share amount approved in 2014 was 5% of outstanding shares, or 1,332,000 shares.
- (2c) The Plan has no expiration date.
- (2d) None.
- (2e) None.

Item 10. Submission of Matters to a Vote of Security Holders.

There were no material changes to the procedures by which shareholders may recommend nominees to the registrant's Board of Directors made or implemented after the registrant last provided disclosure in response to the requirements of Item 407(c)(2)(iv) of Regulation S-K (as required by Item 22(b)(15) of Schedule 14A), or this Item.

Item 11. Controls and Procedures.

- (a) The registrant's principal executive officer and principal financial officer have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) are effective based on their evaluation of the disclosure controls and procedures as of a date within 90 days of the filing date of this report.
- (b) There have been no significant changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) that occurred during the registrant's most recent fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 12. Disclosures of Securities Lending Activities for Closed-End Management Investment Companies.

- (a) Dollar amounts of income and fees/compensation related to securities lending activities during the most recent fiscal year are:
 - (1) Gross income from securities lending activities was \$78,285.
 - (2) Rebates paid to borrowers were \$47,769, fees deducted from a pooled cash collateral reinvestment product were \$1,815, and revenue generated by the securities lending program paid to the securities lending agent was \$8,606.
 - (3) The aggregate fees related to securities lending activities were \$58,190.
 - (4) Net income from securities lending activities was \$20,095.
- (b) Services provided by the securities lending agent in the most recent fiscal year for lending of the Fund's portfolio securities in accordance with its securities lending authorization agreement, included: identifying and approving borrowers, selecting securities to be loaned, negotiating loan terms, recordkeeping of all loan and dividend activity, receiving and holding collateral from borrowers, monitoring loan and collateral values on a daily basis, requesting additional collateral as required, and arranging for return of loaned securities at loan termination. When cash collateral is received from the borrower, the security lending agent invests the cash in a registered money market fund.

Item 13. Exhibits.

- (a) (1) Not applicable. See registrant's response to Item 2 above.
 - (2) Separate certifications by the registrant's principal executive officer and principal financial officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 and required by Rule 30a-2(a) under the Investment Company Act of 1940, are attached.
 - (3) Written solicitation to purchase securities: not applicable.
 - (4) Change in independent public accountant: not applicable.
- (b) A certification by the registrant's principal executive officer and principal financial officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and required by Rule 30a-2(b) under the Investment Company Act of 1940, is attached.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Adams Natural Resources Fund, Inc.

By: /s/ Mark E. Stoeckle
Mark E. Stoeckle
Chief Executive Officer
(Principal Executive Officer)

Date: February 26, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Mark E. Stoeckle
Mark E. Stoeckle
Chief Executive Officer
(Principal Executive Officer)

Date: February 26, 2018

By: /s/ Brian S. Hook
Brian S. Hook
Vice President, Chief Financial Officer & Treasurer
(Principal Financial Officer)

Date: February 26, 2018