I purchased this stock back in November $2017 @ \$ 18.35$. These are my thoughts after reviewing this when I completed my initial purchase in 2017:
PRO \#1 - First coal based MLP (formed in 1999). 2nd largest coal producer in the country. 1.8 b tons in reserves 37 m tons sold in 2016 ( 49 years available).
PRO \#2 - I love the annual reports talk about 'long haul'.
PRO \#3 - Workforce is union free.
PRO \#4 - Low debt and much lower debt to equity over 10-year period (lowest in most recent quarter). They spent downturn of 2016 bolstering the balance sheet (including lowering payouts).
PRO \#5 - MLP eliminates double taxation.
CON \#1-Coal is out of fashion...but there is no way we don't wind up figuring out how to burn this stuff without polluting. FACT!
CON \#2 - Only 4 analysts follow them.
CON \#3 - I'm not actually excited about owning an MLP...I guess. This is a MLP (no corporate income tax). I researched owning these in my ROTH. It will seemingly trigger the UBTI/UBIT tax rules (which I do not want to get into). Need to own this in my taxable account (if at all). Income (distributions/dividends) will be treated as income for me upon tax time.
CON \#4 - Tax reform in Senate right now might impact creation of new MLPs (not impact existing ones).
So, one of the biggest things that looks different for this business is the large increase in shares outstanding. What the heck happened?!?! Was I diluted? This is a restructuring in the corporate structure. The 2017 annual report says: "The Alliance Partnerships also took the first step toward simplifying our structure through an Exchange Transaction. The Exchange Transaction eliminated AHGP's incentive distribution rights and converted its general partner interest in exchange for the issuance of $56,100,000$ ARLP common units. Completed in July, it further enhanced our capital markets capacity and access. We are also moving forward to complete the process of fully simplifying the Alliance Partnership structure, which will result in ARLP being the only publicly traded reporting entity". So this is related to the sister company AHGP - Alliance Holdings GP, L.P. They are merging these two entities into ARLP. This should not be dilutive overall. Honestly, I don't claim to understand why they had the two entities to begin with and how the merging really impacts my position in ARLP overall. My take is it is not a big deal but I could be completely wrong on this.

These guys think like owners...long term owners...because they are. Insiders have $21 \%$ ownership and insiders are still buying (with Directors buying in $\$ 19.55-\$ 19.85$ late last year). When I read the annual reports and see the language they use and match that up with their ownership I know these guys are going to run the company to their benefit. I really like this aspect of this business...A LOT!

My one major sticking point with this entire investment is just the fact that it is coal production. Coal is a dirty fuel, a declining industry, and a huge target for all the upcoming green energy investment. It could also be on the wrong side of legislation/legislatures who want to make people using coal pay extra for using it (which could have an impact on pricing and demand). I don't view either of these risks as being outside the realm of possibility as the whims of governments can change based on who is in elected power. Currently there is not too much bad on this front worldwide (other than generally the world is moving away from coal usage) but this could change and impact the company greatly. All that said, I don't think we stop using coal anytime soon (maybe ever) and there will be a need for the country's second largest coal producer to continue to produce (and to use up their 49 years of available supply).

In general, I like this company and will likely add to my position in it a bit at this time based on this updated analysis. I don't really find too much wrong with this investment and the things I look at show a high degree of certainty. I've been reinvesting the dividends since I purchased this. With the really high yield associated with this that has not been insignificant. I think going forward I will up my investment to be in line with my target allocation and then no longer reinvest the dividends and just let those flow into my account. At the current rate the investment will pay for itself in a few years (and hopefully l'll then have the original investment plus some extra capital to invest elsewhere). I might also just keep reinvesting too since I think the value is right and I like the company. Hmmm! Not sure yet!

I'm sharing my analysis here. If you have thoughts on it l'd love to hear them hit me up on Twitter @mymoneytrainer

## Certainty Rating



# Test \#0 - SUPER QUICK VALUATION - Expected Case - Based On 1) NPV Earnings, 2) 5 Year DCF Free Cash Flow, 3) 10 Year NPV Cash Flow. <br> Tells Us Quickly If It Makes Sense To Even Dive Deeper (No Sense In Investing Unless Margin Of Safety Exists And Likelihood Of Decent Returns Is High). <br> Multiples Of RFRR Are Good (Meaing This Model Kicks Out Higher Certainty Ratings For Higher Multiples). 

## Net Present Value Calculator (AKA Ben Graham Formula) (Run Assuming Zero Growth)

| 20-year AAA Corporate Bond Rate | $4.0 \%$ | https://fred.stlouisfed.org/series/AAA | Last Updated: | 1/3/19 |
| ---: | :---: | :--- | :--- | :--- |
| EPS | $\$ 2.41$ |  |  |  |
| Constant PE (0\% perpetual growth) | 8.5 |  |  |  |
| Company's Perpetual Growth Rate | $0.0 \%$ |  | Last Updated: | $1 / 3 / 19$ |
| Minimum Risk Free Rate of Return | $2.4 \%$ | https://fred.stlouisfed.org/series/TB3MS |  |  |
| Graham's Intrinsic Value (Original Formula) | $\$ 20.49$ |  |  |  |
| \% of Current Price | $107 \%$ | BUY - Current Price Is Below IV |  |  |
| Graham's Intrinsic Value (Revised Formula) | $\$ 34.75$ |  |  |  |
| \% of Current Price | $182 \%$ | BUY - Current Price Is Below IV |  |  |

## 5 Year Discounted Free Cash Flow (Owners Earnings) Calculator (AKA NPV) (Run Assuming Zero Growth)

| Perpetual Growth Rate |  | 0.0\% | Explanation: | Run at zero perpetual growth to be super con |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Discount Rate/WACC | PV of CFs | + Terminal Value | = PV |  |
| Last 3 Year Average: | \$5.69 | 28.0\% | \$14.40 | \$20.32 | \$19.02 | 0.3\% |
| Last 10 Year Average: | \$3.84 | 18.7\% | \$11.81 | \$20.51 | \$19.14 | -0.4\% |
|  |  | 23.4\% |  |  |  |  |
|  | Year | FCFPS |  |  |  |  |
|  | 2008 | \$0.75 |  |  |  |  |
|  | 2009 | -\$0.62 |  |  |  |  |
|  | 2010 | \$3.14 |  |  |  |  |
|  | 2011 | \$3.89 |  |  |  |  |
|  | 2012 | \$1.78 |  |  |  |  |
|  | 2013 | \$4.60 |  |  |  |  |
|  | 2014 | \$5.68 |  |  |  |  |
|  | 2015 | \$5.90 |  |  |  |  |
|  | 2016 | \$7.20 |  |  |  |  |
|  | 2017 | \$6.37 |  |  |  |  |
|  | 2018 | \$3.49 | TTM FCF: | \$455,000,000 |  |  |

Explanation: The number of shares outstanding has changed from 74mmish to 131 mmish . This obviously diluted the FCFPS in 2018.

| Return On Shareholder's Equity | $29.5 \%$ |
| ---: | ---: |
| Retained To Equity | $4.2 \%$ |
| Dividends Percent | $25.3 \%$ |

Dividends Percent
4.2\% 14\%
25.3\%

都


Expected Return - 5 Year DCF Expected Return - 10 NPV Cash Flows Expected Return Average

## Certainty Rating

| Certainty Rating |  |
| :--- | :--- |
| $107 \%$ | Graham's Intrinsic Value (Original Formula) |
| $182 \%$ | Graham's Intrinsic Value (Revised Formula) |
| $120 \%$ | 5 Year Discounted Free Cash Flow |
| $75 \%$ | 10 Year NPV of Future Cashflows |
| $105 \%$ | Average |
| $118 \%$ | Total |

Hurdle Returns (vs. Risk Free)

| Hurdle Returns (vs. Risk Free) |  |  |
| :---: | :---: | :---: |
| $2.4 \%$ | 0 x | $0 \%$ |
| $4.7 \%$ | 1 x | $15 \%$ |
| $7.1 \%$ | 2 x | $30 \%$ |
| $9.5 \%$ | 3 x | $45 \%$ |
| $11.9 \%$ | 4 x | $60 \%$ |
| $14.2 \%$ | 5 x | $75 \%$ |
| $16.6 \%$ | 6 x | $90 \%$ |
| $19.0 \%$ | 7 x | $105 \%$ |
| $21.3 \%$ | 8 x | $120 \%$ |

Explanation: NA

Valuation Scoring (Max Possible Score 25.25)

|  |  | 5.00 | Base (+5) - PE (FYF) vs. Market PE |
| :---: | :---: | :---: | :---: |
|  |  | 5.00 | Base (+5) - PE (FYF) vs. Industry |
| 20.05 | Total Valuation Score | 5.00 | Base (+5) - PE (FYF) vs. Static Hurdle (Case Shiller Mean) |
| 79\% | Percent of Max Possible Score | 1.00 | Extra Credit (+1) - PE (TTM) vs. Market PE |
| 82\% | Percent of Current Universe | 1.00 | Extra Credit (+1) - PE (MRFY) vs. Market PE |
| 81\% | Combined | 0.40 | Extra Credit (+1) - Sales (TTM) vs. Industry |
|  |  | 1.00 | Extra Credit (+1) - CF (MRFY) vs. Industry |
|  |  | 1.00 | Extra Credit ( +1 ) - CF (MRFY) vs. Market |
|  |  | 0.40 | Extra Credit ( +1 ) - BV (MRQ) vs. Industry |
| Certainty R | Rating | 0.00 | Extra Credit (+2) - PEG (TTM) vs. Market |
| Valuation: | 81\% | 0.00 | Extra Credit (+.25) - Analyst - Schwab |
| Quality: | 65\% | 0.00 | Extra Credit (+.25) - Analyst - Morningstar |
| Combined: | 73\% | 0.00 | Extra Credit (+.25) - Analyst - Credit Suisse |
|  |  | 0.00 | Extra Credit (+.25) - Analyst - Ned Davis |
|  |  | 0.00 | Extra Credit (+.25) - Analyst - S\&P Cap IQ Earnings and Div Rank |
|  |  | 0.00 | Extra Credit (+.25) - Analyst - S\&P CFRA |
|  |  | 0.00 | Extra Credit (+.25) - Analyst - Argus |
|  |  | 0.00 | Extra Credit (+.25) - Analyst - Market Edge |
|  |  | 0.25 | Extra Credit (+.25) - Analyst - Reuters |



|  | Base (+1) - Positive PE (FYF) |
| :---: | :---: |
|  | Base (+1)- Positive Net Profit Margin |
|  | Base (+1) - Positive Price To Cash Flow |
|  | Base (+1) - Positive Cash Flow Per Share |
|  | Base (+1) - Positive ROE |
|  | Base (+1) - Positive ROI |
|  | Base (+1) - Quick Ratio Greater Than Static Hurdle |
|  | Base (+1) - Quick Ratio Higher Than Industry |
|  | Base (+1) - Current Ratio Greater Than Static Hurdle |
|  | Base (+1) - Current Ratio Higher Than Industry |
|  | Base (+5) - Debt To Equity Lower Than Static Hurdle |
|  | Base (+5) - Debt To Equity Lower Than Industry |
|  | Base (+1) - Net Profit Margin Higher Than Industry |
|  | Base (+1) - Industry ROE vs. Market ROE |
|  | Base (+1) - ROE vs. Industry |
|  | Base (+1) - Industry ROI vs. Market ROI |
|  | Base (+1)-ROI vs. Industry |
|  | Base (+1) - Market Cap |
|  | Extra Credit (+.25\%) - Morningstar Moat |
|  | Extra Credit (+.25\%) - Morningstar Stewardship |

Industry: Oil, Gas \& Consumable Fuels
Number of Companies In Industry: 97

|  | Industry | Stock |  |  |
| ---: | :---: | :---: | :---: | :---: |
| Average Price/Earnings (FYF): | 20.2 | 5.5 | Better | $100 \%$ |
| Average Price/Earnings (TTM): | 19.9 | 5.9 | Better | $100 \%$ |
| Average Price/Earnings (MRFY): | 28.3 | 6.1 | Better | $100 \%$ |
| Average Price/Book (MRQ): | 2.5 | 1.8 | Better | $100 \%$ |
| Average Price/Sales (TTM): | 1.7 | 1.2 | Better | $100 \%$ |
| Average Price/Cash Flow (MRFY): | 9.2 | 4.1 | Better | $100 \%$ |
| Average PEG (TTM): | 4.3 | NA |  |  |
| Average Debt To Equity (MRQ): | $168.0 \%$ | $34.0 \%$ | Better | $100 \%$ |
| Average Net Profit Margin (MRFY): | $5.0 \%$ | $16.9 \%$ | Better | $100 \%$ |
| Average Return On Equity (TTM): | $7.1 \%$ | $32.6 \%$ | Better | $100 \%$ |
| Average Return On Assets (MRFY): | $2.7 \%$ | $17.7 \%$ | Better | $100 \%$ |
| Average Quick Ratio (MRQ): | 1.3 | 0.9 | Worse | $0 \%$ |
| Average Current Ratio (MRQ): | 1.3 | 1.1 | Worse | $0 \%$ |
| Average Cash Flow Per Share (TTM): | $\$ 4.99$ | $\$ 5.09$ | Better | $100 \%$ |
|  |  |  |  | Average (Certainty Rating): |
|  |  |  |  | $85 \%$ |

Explanation: NA

| Historical Pricing |  |  |  |  |  | Max Price Movements |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | High Price | Low Price | Volume | Shares Out |  | Drawdown | Gain |
| 2008 | \$29.00 | \$8.70 | 244,192 | 73,000,000 | 0\% | 70\% | 233\% |
| 2009 | \$22.50 | \$11.94 | 200,427 | 73,000,000 | 0\% | 47\% | 88\% |
| 2010 | \$33.06 | \$18.76 | 211,629 | 73,000,000 | 0\% | 43\% | 76\% |
| 2011 | \$42.05 | \$29.00 | 196,169 | 74,000,000 | 0\% | 31\% | 45\% |
| 2012 | \$41.90 | \$25.21 | 217,088 | 74,000,000 | 0\% | 40\% | 66\% |
| 2013 | \$39.50 | \$29.03 | 135,316 | 74,000,000 | 0\% | 27\% | 36\% |
| 2014 | \$53.84 | \$37.08 | 174,963 | 74,000,000 | 0\% | 31\% | 45\% |
| 2015 | \$43.65 | \$11.93 | 285,960 | 74,000,000 | 0\% | 73\% | 266\% |
| 2016 | \$26.65 | \$9.95 | 335,638 | 74,000,000 | 0\% | 63\% | 168\% |
| 2017 | \$25.55 | \$17.60 | 302,850 | 99,000,000 | 0\% | 31\% | 45\% |
| 2018 | \$21.90 | \$15.55 | 446,845 | 131,000,000 | 0\% | 29\% | 41\% |
|  |  |  |  |  |  |  |  |
| Average: | \$34.51 | \$19.52 |  |  |  | 43\% | 77\% |
| Max: | \$53.84 | \$37.08 |  |  |  | 31\% | 45\% |
| Min: | \$21.90 | \$8.70 |  |  |  | 60\% | 152\% |
| AT High vs. AT Low: | \$53.84 | \$8.70 |  |  |  | 84\% | 519\% |



Explanation: NA

|  | Price to Earnings Over Time |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | EPS | Earnings | High PE | Low PE |
| 2008 | $\$ 1.84$ | $\$ 134,000,000$ | 15.8 | 4.7 |
| 2009 | $\$ 2.63$ | $\$ 192,000,000$ | 8.6 | 4.5 |
| 2010 | $\$ 4.40$ | $\$ 321,000,000$ | 7.5 | 4.3 |
| 2011 | $\$ 5.26$ | $\$ 389,000,000$ | 8.0 | 5.5 |
| 2012 | $\$ 3.09$ | $\$ 229,000,000$ | 13.5 | 8.1 |
| 2013 | $\$ 5.31$ | $\$ 393,000,000$ | 7.4 | 5.5 |
| 2014 | $\$ 6.72$ | $\$ 497,000,000$ | 8.0 | 5.5 |
| 2015 | $\$ 4.14$ | $\$ 306,000,000$ | 10.6 | 2.9 |
| 2016 | $\$ 4.58$ | $\$ 339,000,000$ | 5.8 | 2.2 |
| 2017 | $\$ 3.07$ | $\$ 304,000,000$ | 8.3 | 5.7 |
| 2018 | $\$ 2.98$ | $\$ 390,000,000$ | 7.4 | 5.2 |
|  |  |  |  |  |
| Average: | $\$ 4.00$ | $\$ 317,036,364$ | 9.2 | 4.9 |
|  | Max: | $\$ 6.72$ | $\$ 497,000,000$ | 15.8 |
| Min: | $\$ 1.84$ | $\$ 134,000,000$ | 5.8 | 8.1 |


| Certainty <br> Rating | $85 \%$ |
| :---: | :---: |



Explanation: Currently at $6.4 x$ which is closer to the average low of $4.9 x$ than the average high of $9.2 x$.

|  | Price to Sales Over Time |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | SPS | Sales | High PS | Low PS |
| 2008 | $\$ 15.85$ | $\$ 1,157,000,000$ | 1.8 | 0.5 |
| 2009 | $\$ 16.86$ | $\$ 1,231,000,000$ | 1.3 | 0.7 |
| 2010 | $\$ 22.05$ | $\$ 1,610,000,000$ | 1.5 | 0.9 |
| 2011 | $\$ 24.92$ | $\$ 1,844,000,000$ | 1.7 | 1.2 |
| 2012 | $\$ 27.49$ | $\$ 2,034,000,000$ | 1.5 | 0.9 |
| 2013 | $\$ 29.81$ | $\$ 2,206,000,000$ | 1.3 | 1.0 |
| 2014 | $\$ 31.09$ | $\$ 2,301,000,000$ | 1.7 | 1.2 |
| 2015 | $\$ 30.73$ | $\$ 2,274,000,000$ | 1.4 | 0.4 |
| 2016 | $\$ 26.09$ | $\$ 1,931,000,000$ | 1.0 | 0.4 |
| 2017 | $\$ 18.14$ | $\$ 1,796,000,000$ | 1.4 | 1.0 |
| 2018 | $\$ 14.92$ | $\$ 1,954,000,000$ | 1.5 | 1.0 |


| Average: | $\$ 23.45$ | $\$ 1,848,909,091$ | 1.5 | 0.8 |
| ---: | ---: | ---: | ---: | :--- |
| Max: | $\$ 31.09$ | $\$ 2,301,000,000$ | 1.8 | 1.2 |
| Min: | $\$ 14.92$ | $\$ 1,157,000,000$ | 1.0 | 0.4 |


| Certainty <br> Rating | $70 \%$ |
| :---: | :---: |



Explanation: At $1.3 x$ this is closer to the average high of $1.5 x$ versus the average low of $.8 x$.


Explanation: At 2.0x it is currently trading below the average low of $2.3 x$ (well below the average high of $3.8 x$ ).

|  | Price to Free Cash Flow Over Time |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | FCFPS | Free Cash Flow | High FCFPS | Low FCFPS |
| 2008 | $\$ 0.75$ | $\$ 55,000,000$ | 38.5 | 11.5 |
| 2009 | $-\$ 0.62$ | $-\$ 45,260,000$ |  |  |
| 2010 | $\$ 3.14$ | $\$ 229,220,000$ | 10.5 | 6.0 |
| 2011 | $\$ 3.89$ | $\$ 287,860,000$ | 10.8 | 7.5 |
| 2012 | $\$ 1.78$ | $\$ 131,720,000$ | 23.5 | 14.2 |
| 2013 | $\$ 4.60$ | $\$ 340,400,000$ | 8.6 | 6.3 |
| 2014 | $\$ 5.68$ | $\$ 420,320,000$ | 9.5 | 6.5 |
| 2015 | $\$ 5.90$ | $\$ 436,600,000$ | 7.4 | 2.0 |
| 2016 | $\$ 7.20$ | $\$ 532,800,000$ | 3.7 | 1.4 |
| 2017 | $\$ 6.37$ | $\$ 630,630,000$ | 4.0 | 2.8 |
| 2018 | $\$ 3.49$ | $\$ 457,795,699$ | 6.3 | 4.4 |
|  |  |  |  |  |
| Average: | $\$ 3.84$ | $\$ 316,098,700$ | 12.3 | 6.3 |
|  | Max: | $\$ 7.20$ | $\$ 630,630,000$ | 38.5 |
| Min: | $-\$ 0.62$ | $-\$ 45,260,000$ | 3.7 | 14.2 |


| Certainty <br> Rating | $75 \%$ |
| :---: | :---: |

Historical Price To Free Cash Flow


Explanation: At $6.3 x$ it is trading right at the average low and about half the average high. Some of the older values are skewing the averages higher however. So low BUT not low.

## Best Case (with expected growth)

## Net Present Value Calculator (AKA Ben Graham Formula) (Run Assuming Zero Growth)

| 20-year AAA Corporate Bond Rate | $4.0 \%$ | https://fred.stlouisfed.org/series/AAA | Last Updated: |
| ---: | :---: | :---: | :---: |
| EPS | $\$ 2.61$ |  | 1/3/19 |
| Constant PE (0\% perpetual growth) | 8.5 |  | Last Updated: |
| Company's Perpetual Growth Rate | $0.0 \%$ |  | $1 / 3 / 19$ |
| Minimum Risk Free Rate of Return | $2.4 \%$ | https://fred.stlouisfed.org/series/TB3MS |  |
| Graham's Intrinsic Value (Original Formula) | $\$ 22.19$ |  |  |
| \% of Current Price | $116 \%$ | BUY - Current Price Is Below IV |  |
| Graham's Intrinsic Value (Revised Formula) | $\$ 37.63$ |  |  |
| \% of Current Price | $197 \%$ | BUY - Current Price Is Below IV |  |

## 5 Year Discounted Free Cash Flow (Owners Earnings) Calculator (AKA NPV) (Run Assuming Expected Growth)

| Perpetual Growth Rate |  |  |  |  |  |  |  | $0.0 \%$ | Explanation: | NA |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Discount Rate/WACC | PV of CFs | + Terminal Value | $=$ PV |  |  |  |  |  |  |
| Morningstar Current | $\$ 5.69$ | $28.0 \%$ | $\$ 14.40$ | $\$ 20.32$ | $\$ 19.02$ | $0.3 \%$ |  |  |  |  |  |
| Brokerage CF (TTM) | $\$ 3.84$ | $18.7 \%$ | $\$ 11.81$ | $\$ 20.51$ | $\$ 19.14$ | $-0.4 \%$ |  |  |  |  |  |

Explanation: NA
10 Year NPV of Future Cashflows (Run Assuming Updated EPS (using best case future annual estimate) \& DPS and Expected Growth)

| Return On Shareholder's Equity | $31.9 \%$ |  |
| ---: | ---: | ---: |
| Retained To Equity | $6.6 \%$ | $21 \%$ |
| Dividends Percent | $25.3 \%$ |  |


| Current and Projected Shareholder Equity and Projected Earnings |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Equity Base | EquityPS | Earnings | EarningsPS |  | Dividends | DivsPS | Added To Base | RetainedPS |
| 2018 | \$1,063,734,000 | \$8.17 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2019 | \$1,134,042,000 | \$8.71 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2020 | \$1,204,350,000 | \$9.25 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2021 | \$1,274,658,000 | \$9.79 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2022 | \$1,344,966,000 | \$10.33 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2023 | \$1,415,274,000 | \$10.87 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2024 | \$1,485,582,000 | \$11.41 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |
| 2025 | \$1,555,890,000 | \$11.95 | \$339,822,000 |  | \$2.61 | \$269,514,000 | \$2.07 | \$70,308,000 | \$0.54 |

NPV of future cashflow

Expected Return - 5 Year DCF
Expected Return - 10 NPV Cash Flows Expected Return Average

1\% In Money
2\% In Money
3\% In Money
4\% In Money
5\% In Money
6\% In Money
7\% In Money
8\% In Money
9\% In Money
10\% In Money 11\% In Money 12\% In Money 13\% In Money 14\% Too Expensive 15\% Too Expensive 16\% Too Expensive 17\% Too Expensive 18\% Too Expensive 19\% Too Expensive 20\% Too Expensive 21\% Too Expensive 22\% Too Expensive 23\% Too Expensive 24\% Too Expensive 25\% Too Expensive
23.4\%

13\%
18.2\%

| Certainty Rating |  |
| :---: | :--- |
| $116 \%$ | Graham's Intrinsic Value (Original Formula) |
| $197 \%$ | Graham's Intrinsic Value (Revised Formula) |
| $120 \%$ | 5 Year Discounted Free Cash Flow |
| $75 \%$ | 10 Year NPV of Future Cashflows |
| $105 \%$ | Average |
| $123 \%$ | Total |


| Hurdle Returns (vs. Risk Free) |  |  |
| ---: | :---: | ---: |
| $2.4 \%$ | $0 x$ | $0 \%$ |
| $4.7 \%$ | $1 x$ | $15 \%$ |
| $7.1 \%$ | $2 x$ | $30 \%$ |
| $9.5 \%$ | $3 x$ | $45 \%$ |
| $11.9 \%$ | $4 x$ | $60 \%$ |
| $14.2 \%$ | $5 x$ | $75 \%$ |
| $16.6 \%$ | $6 x$ | $90 \%$ |
| $19.0 \%$ | $7 x$ | $105 \%$ |
| $21.3 \%$ | $8 x$ | $120 \%$ |

Explanation: Using the average 2020 forcasts (which is still a bit lower than the 2019 estimates).

Explanation: NA

## Net Present Value Calculator (AKA Ben Graham Formula) (Run Assuming Zero Growth)

| 20-year AAA Corporate Bond Rate | $4.0 \%$ | https://fred.stlouisfed.org/series/AAA | Last Updated: |
| ---: | :---: | :---: | :---: |
| EPS | $\$ 1.21$ |  | 1/3/19 |
| Constant PE (0\% perpetual growth) | 8.5 |  | Last Updated: |
| Company's Perpetual Growth Rate | $0.0 \%$ |  | $1 / 3 / 19$ |
| Minimum Risk Free Rate of Return | $2.4 \%$ | https://fred.stlouisfed.org/series/TB3MS |  |
|  |  |  |  |
| Graham's Intrinsic Value (Original Formula) | $\$ 10.24$ |  |  |
| \% of Current Price | $54 \%$ | DON'T BUY - Current Price is Above IV |  |
|  |  |  |  |
| Graham's Intrinsic Value (Revised Formula) | $\$ 17.37$ |  |  |
| \% of Current Price | $91 \%$ | DON'T BUY - Current Price is Above IV |  |

## 5 Year Discounted Free Cash Flow (Owners Earnings) Calculator (AKA NPV) (Run Assuming Zero Growth)



Explanation: The number of shares outstanding has changed from 74mmish to 131mmish. This obviously diluted the FCFPS in 2018.
10 Year NPV of Future Cashflows (Run Assuming Updated EPS (using $1 / 2$ best case future annual estimate) \& DPS and Zero Growth)

| Return On Shareholder's Equity | $14.7 \%$ |  |
| ---: | ---: | ---: |
| Retained To Equity | $-10.6 \%$ | $-72 \%$ |
| Dividends Percent | $25.3 \%$ |  |



| NPV of future cashflows | \$119.43 | 1\% In Money |  |
| :---: | :---: | :---: | :---: |
|  | \$59.30 | 2\% In Money |  |
|  | \$39.32 | 3\% In Money |  |
|  | \$29.37 | 4\% In Money |  |
|  | \$23.43 | 5\% In Money |  |
|  | \$19.48 | 6\% In Money |  |
|  | \$16.68 | 7\% Too Expensive |  |
|  | \$14.58 | 8\% Too Expensive |  |
|  | \$12.96 | 9\% Too Expensive |  |
|  | \$11.67 | 10\% Too Expensive | Explanation: NA |
|  | \$10.61 | 11\% Too Expensive |  |
|  | \$9.73 | 12\% Too Expensive |  |
|  | \$8.99 | 13\% Too Expensive |  |
|  | \$8.36 | 14\% Too Expensive |  |
|  | \$7.81 | 15\% Too Expensive |  |
|  | \$7.33 | 16\% Too Expensive |  |
|  | \$6.91 | 17\% Too Expensive |  |
|  | \$6.53 | 18\% Too Expensive |  |
|  | \$6.19 | 19\% Too Expensive |  |
|  | \$5.89 | 20\% Too Expensive |  |
|  | \$5.62 | 21\% Too Expensive |  |
|  | \$5.37 | 22\% Too Expensive |  |
|  | \$5.14 | 23\% Too Expensive |  |
|  | \$4.93 | 24\% Too Expensive |  |
|  | \$4.74 | 25\% Too Expensive |  |

Expected Return - 5 Year DCF $23.4 \%$
 Expected Return Average 14.7\%

## Certainty Rating

| Certainty Rating |  |
| :---: | :--- |
| $54 \%$ | Graham's Intrinsic Value (Original Formula) |
| $91 \%$ | Graham's Intrinsic Value (Revised Formula) |
| $120 \%$ | 5 Year Discounted Free Cash Flow |
| $30 \%$ | 10 Year NPV of Future Cashflows |
| $90 \%$ | Average |
| $77 \%$ | Total |

Explanation: NA

| 20-year AAA Corporate Bond Rate | 4.0\% | https://fred.stlouisfed.org/series/AAA | Last Updated: | 1/3/19 |
| :---: | :---: | :---: | :---: | :---: |
| EPS | \$4.00 |  |  |  |
| Constant PE (0\% perpetual growth) | 8.5 |  |  |  |
| Company's Perpetual Growth Rate | 0.0\% |  |  |  |
| Minimum Risk Free Rate of Return | 2.4\% | https://fred.stlouisfed.org/series/TB3MS | Last Updated: | 1/3/19 |
| Graham's Intrinsic Value (Original Formula) | \$34.00 |  |  |  |
| \% of Current Price | 178\% | BUY - Current Price Is Below IV |  |  |
| Graham's Intrinsic Value (Revised Formula) | $\$ 57.68$ $302 \%$ |  |  |  |
| \% of Current Price | 302\% | BUY - Current Price Is Below IV |  |  |

## 5 Year Discounted Free Cash Flow (Owners Earnings) Calculator (AKA NPV) (Run Assuming Zero Growth)

| Perpetual Growth Rate |  | $0.0 \%$ | Explanation: | Run at zero perpetual growth to be super con |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | Discount Rate/WACC | PV of CFs | + Terminal Value | $=$ PV |  |
| Morningstar Current | $\$ 5.69$ | $28.0 \%$ | $\$ 14.40$ | $\$ 20.32$ | $\$ 19.02$ | $0.3 \%$ |
| Brokerage CF (TTM) | $\$ 3.84$ | $18.7 \%$ | $\$ 11.81$ | $\$ 20.51$ | $\$ 19.14$ | $-0.4 \%$ |

Explanation: The number of shares outstanding has changed from 74mmish to 131mmish. This obviously diluted the FCFPS in 2018.
10 Year NPV of Future Cashflows (Run Assuming Updated EPS (using 1/2 best case future annual estimate) \& DPS and Zero Growth)

| Return On Shareholder's Equity | $49.0 \%$ |  |
| ---: | :--- | :--- |
| Retained To Equity | $23.6 \%$ | $48 \%$ |
| Dividends Percent | $25.3 \%$ |  |



| $\$ 196.87$ | $2 \%$ In Money |
| :--- | ---: |
| $\$ 130.54$ | $3 \%$ In Money |
| $\$ 97.51$ | $4 \%$ In Money |
| $\$ 77.78$ | $5 \%$ In Money |
| $\$ 64.69$ | $6 \%$ In Money |
| $\$ 55.37$ | $7 \%$ In Money |
| $\$ 48.42$ | $8 \%$ In Money |
| $\$ 43.03$ | $9 \%$ In Money |
| $\$ 38.73$ | $10 \%$ In Money |
| $\$ 35.22$ | $11 \%$ In Money |
| $\$ 32.31$ | $12 \%$ In Money |
| $\$ 29.85$ | $13 \%$ In Money |
| $\$ 27.74$ | $14 \%$ In Money |
| $\$ 25.92$ | $15 \%$ In Money |
| $\$ 24.33$ | $16 \%$ In Money |
| $\$ 22.92$ | $17 \%$ In Money |
| $\$ 21.68$ | $18 \%$ In Money |
| $\$ 20.56$ | $19 \%$ In Money |
| $\$ 19.55$ | $20 \%$ In Money |
| $\$ 18.64$ | $21 \%$ Too Expensive |
| $\$ 17.82$ | $22 \%$ Too Expensive |
| $\$ 17.06$ | $23 \%$ Too Expensive |
| $\$ 16.37$ | $24 \%$ Too Expensive |
| $\$ 15.73$ | $25 \%$ Too Expensive |


| Year | EPS | Earnings | Shares Out |
| :---: | :---: | :---: | :---: |
| 2008 | $\$ 1.84$ | $\$ 134,000,000$ | $73,000,000$ |
| 2009 | $\$ 2.63$ | $\$ 192,000,000$ | $73,000,000$ |
| 2010 | $\$ 4.40$ | $\$ 321,000,000$ | $73,000,000$ |
| 2011 | $\$ 5.26$ | $\$ 389,0000000$ | $74,000,000$ |
| 2012 | $\$ 3.09$ | $\$ 229,000,000$ | $74,000,000$ |
| 2013 | $\$ 5.31$ | $\$ 393,000,000$ | $74,000,000$ |
| 2014 | $\$ 6.72$ | $\$ 497,000,000$ | $74,000,000$ |
| 2015 | $\$ 4.14$ | $\$ 306,000,000$ | $74,000,000$ |
| 2016 | $\$ 4.58$ | $\$ 339,000,000$ | $74,000,000$ |
| 2017 | $\$ 3.07$ | $\$ 304,000,000$ | $99,000,000$ |
| 2018 | $\$ 2.98$ | $\$ 390,000,000$ | $131,000,000$ |
| Average EPS | $\$ 4.00$ |  |  |

Explanation: This is skewed high due to the increased sharecount in recent years. I'm discounting this one out completely (as the prior EPS values are much higher than they would be today). Will double weight the stress test (since the worst case is some kind of legislation arrives that cripples the coal market).

Expected Return - 5 Year DCF $23.4 \%$
Expected Return - 10 NPV Cash Flows 20\%
Expected Return Average 21.7\%

| Certainty Rating |  |
| :--- | :--- |
| $178 \%$ | Graham's Intrinsic Value (Original Formula) |
| $302 \%$ | Graham's Intrinsic Value (Revised Formula) |
| $120 \%$ | 5 Year Discounted Free Cash Flow |
| $120 \%$ | 10 Year NPV of Future Cashflows |
| $120 \%$ | Average |
| $168 \%$ | Total |


| Hurdle Returns (vs. Risk Free) |  |  |
| ---: | :---: | :---: |
| $2.4 \%$ | $0 x$ | $0 \%$ |
| $4.7 \%$ | $1 x$ | $15 \%$ |
| $7.1 \%$ | $2 x$ | $30 \%$ |
| $9.5 \%$ | $3 x$ | $45 \%$ |
| $11.9 \%$ | $4 x$ | $60 \%$ |
| $14.2 \%$ | $5 x$ | $75 \%$ |
| $16.6 \%$ | $6 x$ | $90 \%$ |
| $19.0 \%$ | $7 x$ | $105 \%$ |
| $21.3 \%$ | $8 x$ | $120 \%$ |

Explanation: NA

| Expected Return -5 Year DCF | $23.4 \%$ |
| ---: | :---: |
| Expected Return - 10 NPV Cash Flows | $12.0 \%$ |
| Expected Return Total | $17.7 \%$ |
|  |  |
| Certainty Rating | $118 \%$ |

## Test \#2 - Best Case (with expected growth)

Expected Return - 5 Year DCF 23.4\%
Expected Return - 10 NPV Cash Flows 13.0\%
Expected Return Total 18.2\%
Certainty Rating 123\%

| Test \#2 - Stress Test (50\% Reduction In Expected Case) |  | 30\% Weighting |
| :---: | :---: | :---: |
| Expected Return - 5 Year DCF | 23.4\% |  |
| Expected Return - 10 NPV Cash Flows | 6.0\% |  |
| Expected Return Total | 14.7\% |  |
| Certainty Rating | 77\% |  |
| Test \#2 - Last 10 Year Earnings Average (with zero growth) |  | 0\% Weighting |
| Expected Return - 5 Year DCF | 23.4\% |  |
| Expected Return - 10 NPV Cash Flows | 20.0\% |  |
| Expected Return Total | 21.7\% |  |
| Certainty Rating | 168\% |  |
| Consolidation Of All Scenarios (Weighted) |  |  |
| Expected Return - 5 Year DCF | 23.4\% |  |
| Expected Return - 10 NPV Cash Flows | 10.4\% |  |
| Expected Return Total | 16.9\% |  |
| Certainty Rating | 106\% |  |

Tells Us The Business Has Pricing Power, History Of Success, Growth, Rate Of Growth, And Our Initial Rate Of Return.
Growing Sales \& Growing Earnings - Earnings and Sales are 1) Consistent, 2) Strong, and 3) Growing At A Steady Rate.


Explanation: Sales have generally been growing over the past decade but off all time highs in 2014ish.


Explanation: Same, earnings have been growing over last decade.


Explanation: The increase in shares outstanding has dropped this dramatically to decade lows. But not bad at all since the share count almost doubled!


Explanation: EPS has not dropped terribly in relation to the shares outstanding AND overall it is trending up over the decade (although down a bit in the last few years).

| Year | Gross Profit |  |
| ---: | ---: | ---: |
| 2008 | $\$ 285,779,000$ | $25 \%$ |
| 2009 | $\$ 380,379,000$ | $31 \%$ |
| 2010 | $\$ 549,010,000$ | $34 \%$ |
| 2011 | $\$ 625,116,000$ | $34 \%$ |
| 2012 | $\$ 451,548,000$ | $22 \%$ |
| 2013 | $\$ 507,380,000$ | $23 \%$ |
| 2014 | $\$ 616,668,000$ | $27 \%$ |
| 2015 | $\$ 529,842,000$ | $23 \%$ |
| 2016 | $\$ 438,337,000$ | $23 \%$ |
| 2017 | $\$ 389,732,000$ | $22 \%$ |
| 2018 | $\$ 382,984,000$ | $20 \%$ |
| Average: |  |  |
|  | High: | $26 \%$ |
|  | Low: | $34 \%$ |
|  | Certainty Rating: | $75 \%$ |



Explanation: The margins have been trending down and are currently at the 10 year low value. That said...not going out of business.

| Year | Operating Margin |  |  |  |
| ---: | ---: | ---: | :---: | :---: |
| 2008 | $\$ 152,000,000$ | $13 \%$ |  |  |
| 2009 | $\$ 222,000,000$ | $18 \%$ |  |  |
| 2010 | $\$ 352,000,000$ | $22 \%$ |  |  |
| 2011 | $\$ 413,000,000$ | $22 \%$ |  |  |
| 2012 | $\$ 394,000,000$ | $19 \%$ |  |  |
| 2013 | $\$ 444,000,000$ | $20 \%$ |  |  |
| 2014 | $\$ 544,000,000$ | $24 \%$ |  |  |
| 2015 | $\$ 462,000,000$ | $20 \%$ |  |  |
| 2016 | $\$ 366,000,000$ | $19 \%$ |  |  |
| 2017 | $\$ 329,000,000$ | $18 \%$ |  |  |
| 2018 | $\$ 318,000,000$ | $16 \%$ |  |  |
| Average: |  |  |  | $19 \%$ |
|  | High: | $24 \%$ |  |  |
|  | Low: | $13 \%$ |  |  |
|  | Certainty Rating: | $75 \%$ |  |  |

Explanation: The operating margins are pretty much at an all time low (minus the low value in 2008) and at $16 \%$ well off the highs of $201424 \%$. That said...not going out of business.


Explanation: Cap Ex spending has been lower in recent years and is currently still lower than the average. It is not terribly consistent but it is likely due to ebbs and flows in the cycle (and needs to invest accordingly). They have had good returns on their investments so I don't necessarily see these shifts as bad.


Explanation: No issues here. Free cash flows have been growing steadily.


Explanation: Debt has been dropping like a rock (and has been a concerted effort for the company).


Explanation: The MLP structure forces the company to payout a \% of earnings in order to maintain the tax advantage. So the payout ratio is high but also uncontollable.

## Shares Outstanding / Buyback Program



| Year | Shares Out |
| :---: | :---: |
| 2008 | $73,000,000$ |
| 2009 | $73,000,000$ |
| 2010 | $73,000,000$ |
| 2011 | $74,000,000$ |
| 2012 | $74,000,000$ |
| 2013 | $74,000,000$ |
| 2014 | $74,000,000$ |
| 2015 | $74,000,000$ |
| 2016 | $74,000,000$ |
| 2017 | $99,000,000$ |
| 2018 | $131,000,000$ |

Certainty Rating: $100 \%$

Explanation: When I bought this one dataset says 130 million shares and another said 85 million. Just issued 10 million shares (was at steady 74 m). From Q3 earnings Balance Sheet "Limited Partners - Common Unitholders 130,704,217 and 74,375,025 units outstanding, respectively". Regardless, this was confusing initially. No buyback plan in place.

## Insider Ownership / Activity



Explanation: $21 \%$ insider ownership and insiders are still buying (with Directors buying in $\$ 19.55-\$ 19.85$ ).

## Return "Moat" Assessment - Not A "Low Return" Business. Charlie Munger says that eventually over time returns will match ROIC.

| Return on Invested Capital |  |
| :---: | :---: |
| Year |  |
| 2008 | $49.0 \%$ |
| 2009 | $35.4 \%$ |
| 2010 | $28.7 \%$ |
| 2011 | $25.9 \%$ |
| 2012 | $17.9 \%$ |
| 2013 | $18.1 \%$ |
| 2014 | $21.5 \%$ |
| 2015 | $9.9 \%$ |
| 2016 | $15.5 \%$ |
| 2017 | $18.2 \%$ |
| 2018 | $24.6 \%$ |


| Company (10 Year Average) | $24.0 \%$ |
| :--- | :---: |
| Company (10 Year High) | $49.0 \%$ |
| Company (10 Year Low) | $9.9 \%$ |
| Company (Current Year/TTM) | $24.6 \%$ |
|  |  |
| Industry (Current Year) | $13.6 \%$ |
| Overall Market Without Financials (Current Year) | $14.1 \%$ |

Explanation: Used Coal \& Related Energy

| Yes | Is the ROIC equal to or higher than the overall market? |
| :--- | :--- |
| Yes | Is the ROIC equal to or higher than the industry? |
| Yes | Has the ROIC always been positive? |
| Yes | Is the ROIC steady (not really far from average, or high/low)? |


| Return on Equity |  | Company (10 Year Average) | 35.9\% |
| :---: | :---: | :---: | :---: |
| Year |  | Company (10 Year High) | 63.9\% |
| 2008 |  | Company (10 Year Low) | 15.6\% |
| 2009 |  | Company (Current Year/TTM) | 31.8\% |
| 2010 | 63.9\% |  |  |
| 2011 | 56.2\% | Industry (Current Year) | 7.1\% |
| 2012 | 34.0\% |  |  |
| 2013 | 34.5\% | Overall Market Without Financials (Current Year) | 12.5\% |
| 2014 | 37.9\% |  |  |
| 2015 | 15.6\% | Explanation: NA |  |


| Return on Assets |  |
| :---: | :---: |
| Year |  |
| 2008 | $15.5 \%$ |
| 2009 | $12.6 \%$ |
| 2010 | $19.4 \%$ |
| 2011 | $18.8 \%$ |
| 2012 | $12.2 \%$ |
| 2013 | $13.2 \%$ |
| 2014 | $16.0 \%$ |
| 2015 | $6.7 \%$ |
| 2016 | $11.1 \%$ |
| 2017 | $12.5 \%$ |
| 2018 | $17.2 \%$ |


| Company (10 Year Average) | $14.1 \%$ |
| :--- | :---: |
| Company (10 Year High) | $19.4 \%$ |
| Company (10 Year Low) | $6.7 \%$ |
| Company (Current Year/TTM) | $17.2 \%$ |
|  | $2.7 \%$ |
| Industry (Current Year) | $4.4 \%$ |

Explanation: NA
$\begin{array}{ll}\text { Yes } & \text { Is the ROA equal to or higher than the overall market? } \\ \text { Yes } & \text { Is the ROA equal to or higher than the industry? } \\ \text { Yes } & \text { Has the ROA always been positive? } \\ \text { Yes } & \text { Is the ROA steady (not really far from average, or high/low)? }\end{array}$

| Asset Turnover |  |
| :--- | :--- |
| Year |  |
| 2008 | 1.34 |
| 2009 | 1.18 |
| 2010 | 1.26 |
| 2011 | 1.14 |
| 2012 | 1.10 |
| 2013 | 1.08 |
| 2014 | 1.04 |
| 2015 | 0.98 |
| 2016 | 0.85 |
| 2017 | 0.81 |
| 2018 | 0.88 |


| Company (10 Year Average) | 1.06 |
| :--- | :--- |
| Company (10 Year High) | 1.34 |
| Company (10 Year Low) | 0.81 |
| Company (Current Year/TTM) | 0.88 |

Explanation: NA
$\begin{array}{ll}\text { Yes } & \text { Is the Asset Turnover consistent over time? } \\ \text { No } & \text { Is the Asset Turnover improving (trending higher)? }\end{array}$

| Net Margin \% |  |
| :--- | :--- |
| Year |  |
| 2008 | $11.6 \%$ |
| 2009 | $10.7 \%$ |
| 2010 | $15.4 \%$ |
| 2011 | $16.4 \%$ |
| 2012 | $11.1 \%$ |
| 2013 | $12.2 \%$ |
| 2014 | $15.4 \%$ |
| 2015 | $6.9 \%$ |
| 2016 | $13.0 \%$ |
| 2017 | $15.4 \%$ |
| 2018 | $19.5 \%$ |


| Company (10 Year Average) | $13.4 \%$ |
| :--- | :---: |
| Company (10 Year High) | $19.5 \%$ |
| Company (10 Year Low) | $6.9 \%$ |
| Company (Current Year/TTM) | $19.5 \%$ |
| Industry (Current Year) | $5.0 \%$ |
| Overall Market Without Financials (Current Year) | $9.5 \%$ |
| Explanation: NA |  |


| Yes | Is the Net Margin \% equal to or higher than the overall market? |
| :--- | :--- |
| Yes | Is the Net Margin \% equal to or higher than the industry? |
| Yes | Has the Net Margin \% always been positive? |
| Yes | Is the Net Margin \% steady (not really far from average, or high/low)? |


| Gross Margin \% |  |
| :---: | :---: |
| Year |  |
| 2008 | $24.7 \%$ |
| 2009 | $30.9 \%$ |
| 2010 | $34.1 \%$ |
| 2011 | $33.9 \%$ |
| 2012 | $22.2 \%$ |
| 2013 | $23.0 \%$ |
| 2014 | $26.8 \%$ |
| 2015 | $23.3 \%$ |
| 2016 | $22.7 \%$ |
| 2017 | $21.7 \%$ |
| 2018 | $19.6 \%$ |


| Company (10 Year Average) | $25.7 \%$ |
| :--- | :--- |
| Company (10 Year High) | $34.1 \%$ |
| Company (10 Year Low) | $19.6 \%$ |
| Company (Current Year/TTM) | $19.6 \%$ |

Explanation: NA

| Yes | Has the Gross Margin \% always been positive? |
| :--- | :--- |
| No | Is the Gross Margin \% generally improving? |
| Yes | Is the Gross Margin \% steady (not really far from average, or high/low)? |


| Operating Margin \% |  |
| :--- | :--- |
| Year |  |
| 2008 | $13.1 \%$ |
| 2009 | $18.0 \%$ |
| 2010 | $21.9 \%$ |
| 2011 | $22.4 \%$ |
| 2012 | $19.4 \%$ |
| 2013 | $20.1 \%$ |
| 2014 | $23.6 \%$ |
| 2015 | $20.3 \%$ |
| 2016 | $19.0 \%$ |
| 2017 | $18.3 \%$ |
| 2018 | $16.3 \%$ |


| Company (10 Year Average) | $19.3 \%$ |
| :--- | :---: |
| Company (10 Year High) | $23.6 \%$ |
| Company (10 Year Low) | $13.1 \%$ |
| Company (Current Year/TTM) | $16.3 \%$ |
|  |  |
| Industry (Current Year) | $8.4 \%$ |
| Overall Market Without Financials (Current Year) | $11.3 \%$ |

Explanation: NA

| Yes | Is the Operating Margin \% equal to or higher than the overall market? |
| :--- | :--- |
| Yes | Is the Operating Margin \% equal to or higher than the industry? |
| Yes | Has the Operating Margin \% always been positive? |
| No | Is the Operating Margin \% generally improving? |
| Yes | Is the Operating Margin \% steady (not really far from average, or high/low)? |
|  |  |
| No | Is The Business Unique? Or Does It Have Something That Makes It Unique? |
| Yes | Price Is Not The Single Most Important Motivating Factor In Purchase Of Product. |
| Yes | Prices Can Be Adjusted For Inflation? |
| Yes | Is Revenue "Safe" (Long-Term Contracts, Long-Term Retention, Don't Have To Resell Everything Every Time)? |
| No | Does The Company Have Strong/Recognized Brands? |
| No | Is There An Attachment To The Companies Brand(s)? Is There An Identifiable Consumer Monopoly? |


| Competition "Moat" Assessment - Not A "Commodity-Type" Business |  |  |
| :--- | :---: | :---: |
| No |  | Is Business Competition Free? There Is Not A Company That Directly Competes With This One. |
| No |  |  | Is Business Competition Free? There Is Not A Presence Of Multiple Producers In Industry?

Certainty Rating:
60\%

| Financial Leverage <br> (Asset To Equity Ratio) |  |
| :---: | :---: |
| Year |  |
| 2008 | 3.28 |
| 2009 | 3.29 |
| 2010 | 2.78 |
| 2011 | 2.77 |
| 2012 | 2.49 |
| 2013 | 2.25 |
| 2014 | 2.39 |
| 2015 | 2.02 |
| 2016 | 1.94 |
| 2017 | 1.78 |


| Company (10 Year Average) | 2.50 |
| :--- | :--- |
| Company (10 Year High) | 3.29 |
| Company (10 Year Low) | 1.78 |
| Company (Current Year/TTM) | 1.78 |

Explanation: NA

| Yes | Is the Financial Leverage consistent over time? |
| :--- | :--- |
| Yes | Is the Financial Leverage improving (ie lowering)? |


| Debt To Equity |  | Shares | Company (10 Year Average) | $77.7 \%$ |  |
| :---: | :---: | :---: | :--- | :---: | :---: |
| Year |  |  | Company (10 Year High) | $154.0 \%$ |  |
| 2008 | $0 \%$ | $73,000,000$ | Company (10 Year Low) | $0.0 \%$ |  |
| 2009 | $132 \%$ | $73,000,000$ | Company (Current Year/TTM) | $34.0 \%$ |  |
| 2010 | $154 \%$ | $73,000,000$ |  | $168.0 \%$ |  |
| 2011 | $110 \%$ | $74,000,000$ | Industry (Current Year) |  |  |
| 2012 | $112 \%$ | $74,000,000$ |  | $119.0 \%$ |  |
| 2013 | $100 \%$ | $74,000,000$ | Overall Market Without Financials (Current Year) |  |  |
| 2014 | $60 \%$ | $74,000,000$ |  | Explanation: NA |  |
| 2015 | $67 \%$ | $74,000,000$ |  |  |  |
| 2016 | $45 \%$ | $74,000,000$ |  |  |  |
| 2017 | $41 \%$ | $99,000,000$ |  |  |  |
| 2018 | $34 \%$ | $131,000,000$ |  |  |  |


| Yes | Is The Debt To Equity Low Versus Static Measure (Less Than 50\%)? |
| :--- | :--- |
| Yes | Is The Debt To Equity Low Versus Market (Less Than Market)? |
| Yes | Is The Debt To Equity Low Versus Industry (Less Than Industry)? |
| Yes | Has The Debt To Equity Lowered Over Time? |
| Yes | The Company Is Not Adding Debt In Order To Increase ROE. |
| Yes | The Company Is Not Adding Debt In Order To Do Share Buybacks. |


| Yes | Does The Company Retain Its Earnings (Ideally No Payouts Unless There Is No Additional Expansion Opportunity)? |
| :--- | :--- |
| Yes | Is The Company Able To Spend Little On Maintaining Current Operations (Is CapEx Rebuilding Or Expansion)? |
| Yes | Is Company Reinvesting Earnings In New Businesses, Expansion Of Existing Businesses (That Will Increase Value)? |
| Yes | Is Company Reinvesting Earnings In Share Repurchases (That Will Increase Value)? |

Certainty Rating: 100\% Explanation: Distributes earnings but is able to invest them if they'd rather. Good and bad with that but likely not making huge investments (declining industry) so fine.

| Management Assessment | Does The Company's Management Add Value To The Business? |
| :---: | :---: |
| Yes | Management Has Candor And Can Admit Mistakes |
| Yes | Management Has Been In Place For Some Time |
| Yes | Management Does What It Says It Will Do |
| Yes | Management Knows The Business (Rarely Surprised) |
| Yes | Management Is Allocating Capital (Reinvested Earnings) Into Businesses, Expansion That Will Increase Value. |
| Yes | Profitability Is Not Almost Entirely Dependent Upon Management's Abilities To Efficiently Utilize Tangible Assets (Idiot Run Test). |

Certainty Rating: $100 \%$ Explanation: I love this management

## GOOD BUSINESS CHECK

Return "Moat" Assessment: 93\%
Business "Moat" Assessment: 72\%
Competition "Moat" Assessment: 60\%
Leverage Assessment: 100\%
Compounding Assessment: 100\%
Management Assessment: 100\%
88\%
Explanation: NA

## Test \#8-MY GUT



## Point And Figure



## Certainty Rating: <br> 100\%

Explanation: I like a lot about the weekly chart on this one. There are some large drawdowns and these got into large oversold positions. The run back up to generally overbought has put it into its current range and seems to have been tested a few times recently. One major selloff (down to the $\$ 14.00$ level) occurred in early 2018 and then there were some big spike selling in later 2018 and the price has recovered each time from the oversold (or near oversold territory). So I think their is good support for the current price (or a bit lower). So between $\$ 16$ and $\$ 19$ has a lot of price support going back a long time.

## Weekly Candlestick



## 50/200 Day Trend Line (Crossing?)

| Certainty Rating: $100 \%$ |
| :---: |
| Explanation: NA |
| RSI (Cheap, Falling Knife?) |
| Certainty Rating: $100 \%$ |
| Explanation: NA |
| MACD (Crossing?) |
| Certainty Rating: $100 \%$ |
| Explanation: NA |

## Money Flow (Oversold?)

Certainty Rating: 100\%

Explanation: NA

