

THE OIL MARKET HAS TURNED THE CORNER

JULY 2016

BY: JIM MCALISTER, SR
PRINCIPAL



“THE OIL MARKET HAS TURNED THE CORNER”

July 2016

Jim McAlister, Sr.

This report is a follow up to the McAlister Investment Real Estate’s January 2016 report **“Impact of 2015 Oil and Gas Price Drop on Houston Real Estate”**. [Click here to read the January 2016 McAlister Oil Report.](#)

In the January 2016 report, McAlister Investment predicted that rig count and U.S. production would turn positive in mid-2016 or early 2017, signaling a bottom to the oil market decline. This report will elaborate on the forecast, its accuracy and the conclusions discussed in the January McAlister Investment Report.

This report updates information, articles, reports, and data through July 2016 and is a complement to the details presented in the January 2016 presentation.

The conclusions as of July 2016 are very clear. The oil market is trying to balance and the U.S. Oil & Gas industry is at the beginning of a sustainable recovery due to the rising but still volatile price of crude. This will have a large impact on the resurgence of Texas job growth and specifically growth within the Texas oil and gas job sector. With the return of steady job growth in the oil and gas sector of Texas and Houston, we will see a much stronger housing market and real estate growth activity.

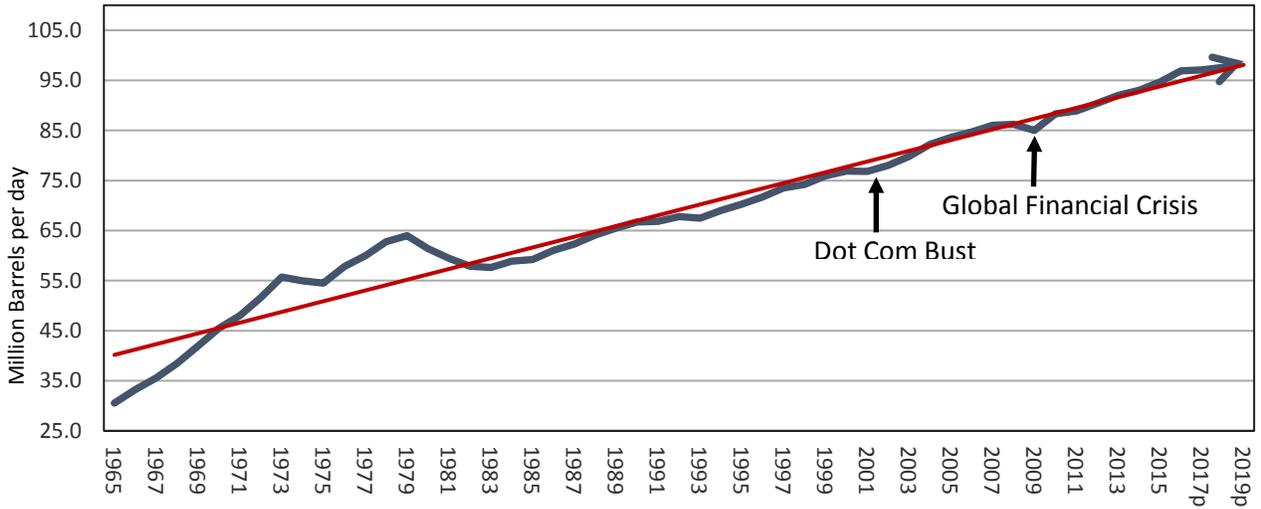
While long term demand and consumption will continue to increase due to the growing global population, there are significant uncertainties for the short term that will add volatility in crude oil prices. There are several factors that could create downward pressure on oil prices. There is increased global supply from rising exports from Iran, the unknown impact of Great Britain leaving the EU following the Brexit vote and new drilling in the US that creates even more crude oil supply cumulatively leading to concerns about higher levels of crude and refined product inventories.

As of June 2016, the global supply of crude rose by 600,000 barrels to 96 mb/day. During that same period, OPEC’s crude supply rose by 400,000 b/d while global demand is only increasing slowly.

Following 18+ months of decline in rig counts, U.S. production has also declined in 2016. There have been serious supply outages from geopolitical issues (Nigeria, Venezuela) and natural disasters (Canada wildfires). However, in other non-OPEC countries such as China, Mexico, and Columbia supply has moderately increased.

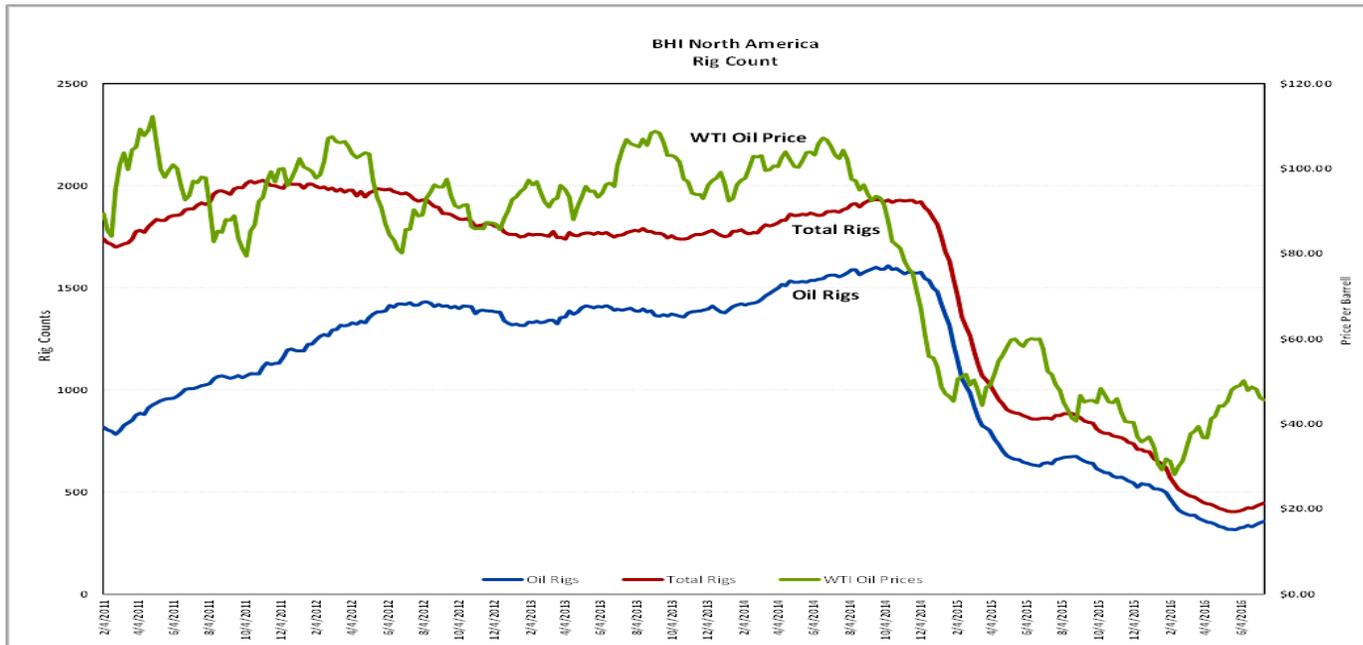
Global demand for oil has increased steadily for the last 30 years [see chart below] with the exception of 2001 (global currency crises and Dot-com bust) and 2009 (Global Financial Crisis) and should continue to do so on a steady trajectory. As global demand increases and closes the gap on global production, oil prices will inevitably increase.

1965-2019p World Oil Demand



Source: www.iea.org, 1965-1996 Data:labs.timgrossbacher.ch/worldoil/q

However, during this period of balancing supply and demand of oil, it is reasonable to expect short term pricing volatility. Any increase in the price of oil is likely to be followed by flurried, but limited, increased oil production from new economically viable wells. This quickly causes an increase in supply, and resulting oil inventories, and the price of oil to moderate. Oil production then slows while demand continues its slow and steady increase and oil prices then recover. Then the cycle repeats. The economics of shale oil drilling has dramatically improved since 2014 and the price of oil is likely to bounce within a range of \$40 to \$50/bbl as the oil market find's its footing on the evolving economically acceptable cost of production. Wells with high cost of production will remain quiet, while those oil fields and wells with lower and a more competitive cost of production find their profitable niche in the market.



The research department of Raymond James has raised its crude price expectations for 2017 from \$60/bbl to \$80/bbl. U.S. oil production was down 194,000 bbl/d for week ending July 1st. This will put overall U.S. output down to 8.4 million b/day.

Below, please find key points derived from various publications to support the above conclusions:

“Saudi Energy Minister Declares End to Oil Glut,” Houston Chronicle, June 23, 2016

- a. Pumping more oil than the market could absorb left Texas with a loss of 100,000 energy jobs and oil producing countries with an economic problem. Shale drilling which spurred the boom, has proved difficult to stop.
- b. Saudi Energy Minister, Khalid Al-Falih, declared the end of the oil glut and the beginning of the rebalancing of the oil market.
- c. If Al-Falih’s assessment is right, the most painful period of the most painful oil-market crash since the 1980’s is over. Falling crude production in the United States, Nigeria, Venezuela and other countries has closed the gap between supply and demand. The next eight months to a year could lay the groundwork for a market recovery as refineries start burning through millions of barrels of surplus oil poured into storage tanks as long as two years ago.
- d. Until the global inventory is reduced, crude prices are likely to remain subdued.
- e. Al-Falih commented that he “was confident that global energy demand would strengthen” and until inventory is reduced, crude prices will likely remain subdued.
- f. “We could be done with this in eight months,” said Praveen Kumar, executive director of the University of Houston’s Gutierrez Energy Management Institute.
- g. Kumar said he was confident that global energy demand would strengthen, noting that China is beginning to emerge from its economic doldrums. He called the end of the global oil surplus two years and a day after U.S. crude peaked over \$105/bbl.
- h. The so-called “shale revolution” and the ensuing downturn in crude prices are two big reasons Saudi Arabia and the rest of the Organization of Petroleum Exporting Countries have changed their approach to managing oil supplies. For OPEC, the surge in U.S. oil production proved shale drillers could respond quickly to high crude prices — “a game-changer,” Al-Falih said. As a result, Saudi Arabia has refused calls by other OPEC nations to resume its role as the worlds swing producer and cut its oil production in a bid to stabilize falling crude prices.
- i. U.S. oil production, driven by more expensive shale drilling, has dropped by more than 500,000 barrels a day since early 2015. “No matter what we do, ultimately markets win,” Al-Falih said.

“U.S. Short Term Energy Outlook,” U.S. Energy Information Administration, June 2016

- a. Benchmark North Sea Brent crude oil spot prices averaged \$47/b in May, a \$5/b increase from April and the fourth consecutive monthly increase since reaching a 12-year low of \$31/b in January. Growing global oil supply disruptions, rising oil demand, and falling U.S. crude oil production contributed to the price increase.
- b. EIA’s forecast for the average WTI price in September 2016 of \$46/b should be considered in the context of Nymex contract values for September 2016 delivery. These contracts traded during the five-day period ending June 2 (Market Prices and Uncertainty Report) suggest the market expects WTI prices could range from \$36/b to \$69/b (at the 95% confidence interval) in September 2016.
- c. U.S. crude oil production averaged 9.4 million barrels per day (b/d) in 2015. Production is forecast to average 8.6 million b/d in 2016 and 8.2 million b/d in 2017, both unchanged from last month’s STEO. EIA estimates that crude oil production for May 2016 averaged 8.7 million b/d, which is more than 0.2 million b/d below the April 2016 level, and approximately 1 million b/d below the 9.7 million b/d level reached in April 2015.
- d. **Global Petroleum and Other Liquid Fuels Consumption:** Global consumption of petroleum and other liquid fuels is estimated to have grown by 1.4 million b/d in 2015. EIA expects global consumption of petroleum and other liquid fuels to increase by 1.5 million b/d in both 2016 and 2017, mostly driven by growth in countries outside of the Organization for Economic Cooperation and Development (OECD). Non-OECD consumption growth was an estimated 0.9 million b/d in 2015, and it is expected to be 1.3 million b/d in 2016 and 1.4 million b/d in 2017.
- e. China’s consumption of petroleum and other liquid fuels is forecast to grow by 0.4 million b/d in both 2016 and 2017.
- f. OECD petroleum and other liquid fuels consumption rose by 0.5 million b/d in 2015. OECD consumption is expected to increase by 0.2 million b/d in 2016 and by less than 0.1 million b/d in 2017. Consumption growth in the United States and South Korea more than offsets decreases in consumption in OECD Europe and Japan in 2016 and 2017.
- g. **Non-OPEC Petroleum and Other Liquid Fuels Supply:** EIA estimates that petroleum and other liquid fuels production in countries outside of the Organization of the Petroleum Exporting Countries (OPEC) grew by 1.5 million b/d in 2015, with more than half of the growth occurring in North America. EIA expects non-OPEC production to decline by 0.6 million b/d in 2016 and by 0.2 million b/d in 2017.
- h. **U.S. Production:** Changes in non-OPEC production are largely driven by changes in U.S. tight oil production, which has high production decline rates and relatively short investment horizons, making it among the most price-sensitive oil production globally.
- i. **China Production:** Production is expected to fall in China during 2016 and 2017 by nearly 0.2 million b/d as the three largest state-owned oil companies have announced capital expenditure cuts and output reductions, mainly at mature fields that require high investment levels to maintain production. Also, fewer new offshore developments in China are expected to come online in 2016 compared with 2015.

- j. **Non OPEC Production:** Non-OPEC unplanned supply outages in May were 1.1 million b/d, an increase of 0.7 million b/d from April. Most of the increase was in Canada, where wildfires caused disruptions that averaged about 0.8 million b/d in May, with a daily peak of more than 1.0 million b/d. EIA expects disrupted volumes in Canada to average 400,000 b/d in June.
- k. **OPEC Production:** Political unrest in the Middle East continues to be a factor in production. OPEC unplanned crude oil supply disruptions averaged nearly 2.6 million b/d in May, 0.1 million b/d higher than in April, as increased outages in Nigeria, Iraq, and Libya offset fewer outages in Kuwait.
- l. **Crude Oil Prices:** The monthly average spot price of Brent crude oil increased by \$5/b in May to \$47/b, which was the highest monthly average for Brent since October 2015. This was the fourth consecutive increase in the monthly average Brent price, the longest such stretch since May through September 2013. Increasing global oil supply outages were the main contributor to higher oil prices in May.
- m. **Inventory:** EIA expects global oil inventory draws to begin in the third quarter of 2017. The expected inventory draws contribute to forecast rising prices in the first half of 2017, with price increases expected to accelerate later in 2017. Brent prices are forecast to average \$52/b in 2017, \$1/b higher than forecast in last month's STEO. Forecast Brent prices reach an average of \$58/b in the fourth quarter of 2017, reflecting the potential for more significant inventory draws beyond the forecast period.
- n. The current values of futures and options contracts highlight the heightened volatility and high uncertainty in the oil price outlook (Market Prices and Uncertainty Report). WTI futures contracts for September 2016 delivery that were traded during the five-day period ending June 2 averaged \$50/b, and implied volatility averaged 35%. These levels established the lower and upper limits of the 95% confidence interval for the market's expectations of monthly average WTI prices in September 2016 at \$36/b and \$69/b, respectively. The 95% confidence interval for market expectations widens over time, with lower and upper limits of \$31/b and \$83/b for prices in December 2016. At this time in 2015, WTI for September 2015 delivery averaged \$60/b, and implied volatility averaged 33%, with the corresponding lower and upper limits of the 95% confidence interval at \$45/b and \$81/b.

“Oil Market Report – Marker Crude Prices,” U.S. Energy Information Administration, June 14, 2016

- a. Crude oil prices rallied to a 2016 high above \$51/bbl in June, stoked by continuing outages in Nigeria and Canada as well as a steady decline in U.S. oil production.
- b. Outages in OPEC and non-OPEC countries cut global oil supply by nearly 0.8 mb/d in May. At 95.4 mb/d, output stood 590 kb/d below a year earlier - the first significant drop since early 2013. Non-OPEC supply growth is expected to return in 2017 at a modest 0.2 mb/d, after declining by 0.9 mb/d in 2016.
- c. OPEC crude output fell by 110 kb/d in May to 32.61 mb/d as big losses in Nigeria due to oil sector sabotage more than offset higher Middle East output. Iran has clearly emerged as OPEC's fastest source of supply growth this year, with an anticipated gain of 700 kb/d.
- d. Global oil demand growth in 1Q16 has been revised upwards to 1.6 mb/d and for 2016 growth will now be 1.3 mb/d. In 2017 we will see the same rate of growth and global demand will reach 97.4 mb/d. Non-OECD nations

will provide most of the expected gains in both years. The growth rate is slightly above the previous trend, mostly due to relatively low crude oil prices.

- e. As of mid-2016, EIA is ideally placed to look back at a turbulent six months and take its first look into 2017. Even in January when the price of oil fell to its lowest level since November 2003, EIA knew that the oil market would re-balance in the reasonably foreseeable future, even though, in the meantime, a lot of surplus oil would be added to bulging stocks. EIA now know that less oil has been stock-piled than EIA originally expected. In January, EIA estimated that the surplus of supply over demand in 1H16 would be 1.5 mb/d. Today, with all the usual caveats about data revisions to come, it looks as if the figure is about 0.8 mb/d. Between January and today two main factors have transformed the outlook: first, oil demand growth has been significantly stronger than EIA expected. Firm data for 1Q16 shows year-on-year growth of 1.6 mb/d versus an initial expectation of 1.2 mb/d. Accordingly, EIA have slightly increased our demand growth number for 2016 as a whole to 1.3 mb/d. In last month's Report EIA highlighted India's place at the top of the demand growth league table.
- f. The second main factor to transform the outlook has been unexpected supply cuts. Canada's wildfires at their peak removed up to 1.5 mb/d of production capacity; in Nigeria, militant action has forced production down to thirty-year lows; and Libya remains a long way from significantly increasing its production despite occasional signs of optimism. Canada's shut-in production will fully return in the near future but the troubles in Nigeria and Libya look to be long-standing. This current list of shut-ins might soon be augmented by Venezuela where the deteriorating situation could affect the operations of the oil industry. In addition to the unplanned shut-ins, our forecast of production falls, due to lower oil prices remains intact. The non-OPEC group of countries will see production fall by 0.9 mb/d in 2016, including a 500 kb/d fall for U.S. shale output.
- g. At the beginning of June, OPEC provided some clarity to the market by deciding not to re-introduce any form of production management. For planning purposes, EIA has assumed only modest growth in production from member countries. So, assuming no further surprises, in 2H16 EIA expect the oil market to be balanced, with a small stock draw in 3Q16 offset by a small stock build in 4Q16. In this report EIA published for the first time its 2017 outlook. EIA sees global oil demand growing at the same rate as in 2016 – 1.3 mb/d, and non-OPEC supply growing by a modest 0.2 mb/d. Again, on the planning assumption that OPEC oil production grows modestly in 2017, EIA expects to see global oil stocks build slightly in 1H17 before falling slightly more in 2H17. For the year as a whole there will be a very small stock draw of 0.1 mb/d.
- h. At halfway in 2016 the oil market looks to be balancing; but EIA must not forget that there are large volumes of shut-in production, mainly in Nigeria and Libya, that could return to the market, and the strong start for oil demand growth seen this year might not be maintained. In any event, following three consecutive years of stock build at an average rate close to 1 mb/d there is an enormous inventory overhang to clear. This is likely to dampen prospects of a significant increase in oil prices.

“Some drillers set to boost spending as oil rises,” Houston Chronicle/Fuel Fix, June 3, 2016

- a. As oil prices hover near \$50 a barrel, record oil company spending cuts the past two years could give way to a slight boost in investments over the next six months, and nearly three quarters of drillers now plan to pour more cash into oil and gas fields in 2017, according to a new survey of oil companies by investment bank Evercore ISI. A third of the companies planning to boost spending next year expect to increase their budgets by more than 25 percent.

- b. Oil field investments are the lifeblood of service companies like Schlumberger and Halliburton that provide equipment and crews to oil companies. The service companies employ the bulk of Houston’s oil workers, and they have cut tens of thousands of jobs after oil prices crashed.
- c. “A strong recovery for North America is in the cards,” said James West, an oil field services analyst at Evercore. If oil prices climb into the \$50 to \$55 a barrel range later this year, then two-thirds of the oil companies surveyed around the world would increase their spending more than 10 percent in 2016.
- d. West also said land drilling contractors are starting to see more interest in drilling rigs – interest that could soon turn into contracts. Meanwhile, firms that help oil companies bring wells into production are reporting an increase in work as drillers tap into wells they bored but left dormant as oil prices crashed.

“Report pins oils fortunes on \$50,” Houston Chronicle, June 16, 2016

- a. The oil crash has forced energy companies to delay \$1 trillion in new projects through the end of the decade and slash nearly 150,000 U.S. jobs, but the cycle of layoffs that has left thousands of Texans out of work could end soon, according to an analysis by the Federal Reserve Bank of Dallas.
- b. “If crude prices hold near \$50 a barrel, it could take just three to four months for the job losses in the industry to reach bottom after two years of painful reductions,” said Michael Plante, senior research economist at the Dallas Fed. That would mark a dramatic turn for an industry that just a few months ago was reeling from massive layoffs by companies such as BP, Chevron, and Royal Dutch Shell, as well as independent drillers taking scores of drilling rigs out of operation.
- c. Oil, for the week of June 09, climbed above \$50 a barrel for the first time in nearly a year but has declined in the next five trading session. It settled at \$48.01 in New York on [June 15]. The Dallas Fed estimates that the industry downturn that began nearly two years ago has cost United States 134,900 oil and gas jobs through April, and likely thousands more in May and June. Texas absorbed about 70% of those job cuts. The collapse of crude prices from more than \$100 a barrel in June 2014 to about \$26 a barrel in February also has forced the industry to retreat from \$1 trillion in planned projects and leave about 7 billion barrels of crude in the earth, research firm Wood Mackenzie estimated in a new report issued June 15th.
- d. There are signs of nascent recovery. Over the past two weeks, U.S. drillers have brought a dozen rigs back into production. Crude production in Canada and Nigeria has fallen off amid sharp disruptions from wildfires and militant attacks, respectively. But beyond the supply disruptions, which have played a big role in pushing prices to \$50 a barrel, the market still has not worked off much of its surplus, Goldman Sachs said in a report Wednesday, June 15, 2016.
- e. The Organization of Petroleum Exporting Countries is putting out more oil than expected and climbing energy prices could spur producers in the United States and other countries to pump more oil, bringing new pressures on prices. Though U.S. crude stockpiles are declining — the Energy Department reported another drop of 900,000 barrels Wednesday — it may not mean global crude supplies are shrinking enough to come into balance with worldwide demand. In the second half of the year, the gap between demand and supply will likely remain narrow, Goldman said, but the surplus could grow again in the first three months of 2017. Whether prices continue to rise will depend on how long production remains depressed in Nigeria and cash-strapped Venezuela, which is mired in an economic crisis. Venezuela sits on the world’s largest proven oil reserves, but

plunging revenues and generous social programs have hurt the country's ability to invest in its national oil company and maintain production.

"IEA: Oil stockpile in first half smaller than expected," Oil & Gas Journal, June 14, 2016

- a. In its June [Oil Market Report](#), the International Energy Agency stated that less oil has been stockpiled than originally expected during this year's first half. The surplus of supply over demand in the first half is currently about 800,000 b/d compared with the initial expectation of 1.5 million b/d in January. The sharp reduction is driven by stronger oil demand growth and unexpected supply cuts, according to IEA.
- b. Canada's wildfires at their peak removed as much as 1.5 million b/d of production capacity. In Nigeria, militant action has forecast production down to 30-year lows. Libya remains a long way from significantly increasing its production. Venezuela's oil might also soon be affected by the country's deteriorating situation. In May, outages in Organization of Petroleum Exporting Countries and non-OPEC countries cut global oil supply by nearly 800,000 b/d.
- c. The non-OPEC group of countries will see production fall by 900,000 b/d this year.
- d. "In any event, following three consecutive years of stock build at an average rate close to 1 million b/d there is an enormous inventory overhang to clear. This is likely to dampen prospects of a significant increase in oil prices," IEA said. The report also includes for the first time IEA's 2017 outlook. IEA expects global oil demand to increase at the same rate as in 2016—1.3 million b/d—and global demand will reach 97.4 million b/d. Non-OPEC supply will rise by a modest 200,000 b/d.

The conclusion of this report is that the oil market seems to be balancing and should do so in the next 8 to 12 months. Oil prices are poised to reach up to \$60 /bbl by the end of 2016 and \$70/bbl in 2017.

McAlister Investment Real Estate feels that the growing Oil and Gas E&P programs will create jobs in Texas and Houston. McAlister Investment will send out reports containing current information to its partners and friends monthly to help stay up to date on the oil field recovery and the employment growth that will have a strong impact on Texas real estate values and activity.

Please feel free to visit our website at www.mcalsterinv.com for additional information on our company.

Jim McAlister, Sr.

