NHCO Week in Review
November 24, 2014

This past week we spent two days in West Texas studying the oil and gas business. Our goal was to learn more about the operations of energy companies who explore, produce and distribute petroleum and natural gas. We also wanted to understand the current economics and market conditions influencing energy related investments. Our areas of focus were the "upstream" (drilling) and "midstream" (processing and transporting) operations.

West Texas is an area where the advent of horizontal drilling and multi-stage hydraulic fracturing has opened up large reserves for commercial production. This area is now the largest crude oil producing region in the United States, and accounted for 18% of total U.S. crude oil production in 2013s.

While horizontal drilling capability is a relatively new technology hydraulic fracturing has been around since the 1860s. Modern day fracturing was invented in 1949 by the Standard Oil Company. Back then it was common to frac a well with 100,000 gallons of water; now 7,000,000 gallons are routinely used. Fracturing is used to enhance the flow of energy from a well once the drilling is done and the rig and derrick are removed. The process usually takes 3-5 days. Once the fracturing operation is done, the well is considered “completed,” and is now ready to produce.

Much environmental debate has been centered on hydraulic fracturing . A chief environmental concern associated with hydraulic fracturing is the amount of water it requires. Although each frac job consumes millions of gallons of water, we learned that fracturing’s water consumption represents only about 1% of yearly water usage in Texas. In addition the water used often comes from non-drinkable sources. Another environmental element is the construction and testing of well casings to ensure a complete seal through the entire depth of the fresh water table. The regulations vary between states, but in Texas laws require well drillers to seal and test their well casings to a sufficient depth to help prevent ground water contamination.

While in West Texas we saw much evidence of an economic boom. It was very evident that a large amount of capital had been infused into the local economy. Land leases for "working interests" in the mineral rights have skyrocketed from $300 to $10,000 per acre. Housing is scarce because of the large influx of workers. "Man camps" have grown up which provide beds for rent in a double wide. Trucks were everywhere hauling their goods to and from the rigs and oil wells. The road wear from heavy volume was evident and traffic accidents were a daily occurrence. With an unemployment rate of 2.8%, workers are seen routinely job hopping for an additional 25 cents per hour. Everything seemed to be in great demand and short supply.

Such short supply has driven up the valuations of some energy-related projects. We heard reports that the newest projects were being completed for amounts representing three to five times expected earnings. Supply shortages are also evident in pipeline capacity, and we heard stories of well operators having to “flare”, or burn at the well location, excess natural gas that pipeline systems could not accept. These incinerated resources illuminate the fact that even an industry that has enjoyed such a dramatic renaissance is enduring its own growing pains.

Gary Martin and Cam Simonds

Important Disclosures

NHCO Weekly Market Update

	11/21/2014	% Wk Chg	% Yr Chg
DJIA	**17,810.06**	0.99%	7.44%
S & P 500	**2,063.50**	1.16%	11.64%
Nasdaq	**4,712.97**	0.52%	12.84%
EAFE	**1,831.20**	0.99%	-4.41%
Emerging Mkts	**1,004.35**	1.37%	0.17%
Hang Seng	**23,437.12**	-2.70%	0.56%
NIKKEI	**17,357.51**	-0.76%	6.54%
FTSE	**6,750.76**	1.45%	0.02%
CRB Index	**269.10**	0.87%	-3.95%
Dow Jones Utility	**596.15**	1.73%	21.52%
TIPS Index	**113.06**	-0.12%	2.88%
VIX Index	**12.90**	-3.08%	-5.98%
OIL	**80.36**	0.95%	-27.47%
Gold	**1,201.55**	1.08%	0.25%
Euro	**1.24**	-1.07%	-9.96%
Yen	**117.79**	1.29%	11.79%
Sterling	**1.57**	-0.08%	-5.30%
High Yield	**6.10%**	1.84%	2.52%
Investment Grade	**3.61%**	-0.28%	-6.72%
2 Year Gov't	**0.50%**	-1.96%	31.58%
5 Year Gov't	**1.61%**	0.00%	-7.47%
10 Year Gov't	**2.31%**	-0.43%	-23.76%
30 year Gov't	**3.02%**	-0.98%	-23.93%
2 Year Muni	**0.43%**	4.88%	30.30%
5 Year Muni	**1.23%**	0.82%	6.96%
10 Year Muni	**2.26%**	-0.88%	-18.41%
30 Year Muni	**3.17%**	2.59%	-25.06%
3m LIBOR	**0.23%**	0.00%	-8.00%
Fed Funds	**0.09%**	12.50%	125.00%
Prime	**3.25%**	0.00%	0.00%
Money Market	**0.38%**	0.00%	-5.00%
12m CD	**0.70%**	1.45%	4.48%
30 Year Mortgage	**4.00%**	-0.99%	-11.89%
15 Year Mortgage	**3.10%**	-0.64%	-12.68%

Data: Bloomberg