New Century Exploration is a private E&P company based in Houston with assets in the Eastern Eagle Ford. New Century’s financial partner is Talara Capital Management, a New York private equity company with offices in Houston.
Our industry has a heavy responsibility as suppliers of the energy source that powers most of the world today.
Is NOT a Strategy...!
Hindsight
• What happened

Insight
• How and why did it happen

Foresight
• What will work in the future
The New Century Exploration team includes expert Eagle Ford engineers, geologists, landmen and staff.

We are actively developing 11,000 acres in the Eastern Eagle Ford, which also has significant Austin Chalk potential.

Our team was the first to use generation 3 fracking in the Eastern Eagle Ford (slick water, 100 mesh, high intensity).

We are Eagle Ford focused and seeking acquisition opportunities across the entire trend.
Regional Activity Last 6 Months

Permits Last 6 Months and Active Rigs

Permian Basin

Haynesville

Eastern Eagle Ford

Western Eagle Ford

Source: DrillingInfo
Eastern Eagle Ford Activity

• We have almost 11,000 acres in the Eastern Eagle Ford
• $900 million in transactions in our area the last 6 months

Source: DrillingInfo
In commodity based industries, some times are easier than others (but it’s always nice to be indispensable....)
• Remember that old maxim that we are only using 10% of our brain capacity?

• That has been disproven by modern neuroscience, but the analogy can be applied to producing oil and gas.

• We need to find projects that make the most of our skills in the current environment.
Oil Price = Supply / Demand

Source: IEA
Recent Transactions

Transactions >$20mm Uptrend

Sources: BMO, BHI
2017 Transactions by Basin

Q1 2017 Transactions (>$$20mm$$) by Basin

- Permian: 76%
- Eagle Ford: 16%
- SCOOP/STACK: 3%
- Marcellus/Utica: 4%
- Rocky Mountain: 1%

Sources: BMO, BHI
STEP 2 - INSIGHT
Focus on Technology

- Oil production per rig per day increased an average 25% per year for the last 6 years
- That’s 6 times greater than the GDP which gained an average 4% per year over that same period
- Technology is the engine driving our success and data is the fuel that enables that technology
Data Lake

We’re all fishing in the same data lake
• Some are better fishermen than others
• A few companies, like EOG, have better hindsight, insight and foresight
• Collaboration is critical for success
• Pick up good ideas at IPAA/TIPRO events.
Data and Software – DNA Analysis

Data sources:
- Frac Focus & State & Federal records
- EIA, IEA
- IHS, Drilling Info, EnergyNet, and others

Software tools
- Spotfire & Tableau
- PhDWin & Aries
- Kingdom

Media
- Oil & Gas Investor publications
- Technical Journals
- PLS docFinder & corporate presentations
**Frac Evolution**

**Gen 1**
- 500’ stages - 5 perf clusters
- 2,000’ well spacing
- 20/40 proppant 750 lbs/ft
- Cross link gel

**Gen 2**
- 250’ stages - 6 perf clusters
- 1,000’ well spacing
- 100 mesh 1,500 lbs/ft
- Hybrid or slick water

**Gen 3**
- 150’ stages - 6-10 perf clusters
- 330’ well spacing
- 100 mesh 2,500-4,000 lbs/ft
- Slick water
The Eagle Ford and other trends have all undergone impressive uplift.

First 6 months – BOE/ft

EUR/Ft vs. Cluster Spacing (Eastern Eagle Ford)
If at First You Don’t Succeed – Try Something Harder

Downturns are good for stimulating disruptive thinking
## A Few Technology Disrupters

<table>
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<tr>
<th>Company</th>
<th>Founder</th>
<th>Market Cap</th>
<th>2016 Revenue</th>
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<td>Steve Jobs</td>
<td>$769b</td>
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<td>Google</td>
<td>Sergey Brin &amp; Larry Page</td>
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WAYS TO HARNESS DISRUPTION
• Collaborate with customers, vendors, partners
• Digitize
  • Only 3-5% of oil and gas equipment is connected
  • An offshore rig has 30,000 sensors
  • Less than 1% of data is used to make decisions – data is buried in data graveyards

“We’re heading into 2017 with the ambition of disrupting the status quo. We’re turning the tables as leaders in this industry and harnessing disruption in many ways.”

--Lorenzo Simonelli, President and CEO of GE Oil & Gas
Private Equity firms are the largest source of oil and gas E&P funding.

There are currently about $100 billion in available Private Equity funds.

PE firms are largely focused on shale plays – core areas are largely delineated and developed so that may change.

PE firms are finding fewer places to deploy capital (deal flow is said to be approximately 20% of what it was a few years ago).

Capital markets have also opened up recently.
So what about worldwide oil supply?
Oil Shortage Feared by 2020 – IEA

- Total worldwide oil production is 85 million BO/D and shale is only about 5 million BO/D of that.
- Conventional oil discoveries have declined from a 15-year average of 9 billion BO to 2.4 billion BO in 2016 - the lowest level since the 1940’s.
- Global oil demand is projected to increase by 1.2 million BO/D per year and there is concern regarding a looming worldwide oil shortage.

Source: IEA
What demand for oil?
In April 2017 the EIA stated:

“It can be argued confidently that the market is already very close to balance, and as more data becomes available this will become clearer. We have an interesting second half to come.”

- Global demand growth of 1.3 million BO/D is forecast for 2017
- Worldwide oil production fell by 755,000 BO/D in March 2017

Source: EIA and IEA
The tide will turn as a global oil shortage takes effect

Technology used to squeeze more oil out of the rocks will continue to improve

There will be a greater emphasis on going back into existing wells to get more of the estimated 90% of shale oil remaining in place

Those that access and analyze big data quicker and smarter will be the winners

New technology will lead the way – go big or go home
IN CONCLUSION:

- Harvest the data lake constantly and collaborate
- Digitize to the highest degree and use those insights to make decisions
- Put new technology and processes to work
- Focus on projects with the best full cycle economics and don’t just hope for higher oil prices
- Avoid the bubbles