RECENT TECHNICAL ADVANCES IN SHALE PLAYS – PRACTICAL APPLICATIONS IN THE EAGLE FORD SHALE

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Forward Looking Statements / Note Regarding Reserves

This presentation and the conference it accompanies contain statements concerning the Company’s expectations, beliefs, plans, objectives, goals, strategies, future events or performance and underlying assumptions and other statements that are not historical facts. These statements are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. The forward-looking statements in this presentation and the conference it accompanies include, but are not limited to, statements relating to the Company’s business and financial outlook, cost and risk profile of oil and gas exploration and development activities, quality and risk profile of the Company’s assets, liquidity and the ability to finance exploration and development activities, including accessibility of borrowings under the Company’s revolving credit facility, hedging activities, growth strategies, ability to explore for and develop oil and gas resources successfully and economically, estimates and forecasts of the timing, number and results of wells we expect to drill and other exploration activities, drilling inventory, downspacing, estimates regarding timing and levels of production or reserves, estimated ultimate recovery, the Company’s capital expenditure plan and allocation by area, cost reductions and savings, efficiency of capital, changes in oil and gas prices, the price of oil and gas at which projects break-even, future market conditions in the oil and gas industry, ability to make, integrate and develop acquisitions, midstream arrangements and agreements, gas marketing strategy, lease terms, expected working or net revenue interests, the ability to adhere to our drilling schedule, acquisition of acreage and 3-D seismic data, including number, timing and size of projects, planned evaluation of prospects, probability of prospects having oil and gas, acreage, working capital requirements, liquids weighting, rates of return, net present value, 2014 - 2016 exploration and development plans, any other statements regarding future operations, financial results, business plans and cash needs and all other statements that are not historical facts.

You generally can identify forward-looking statements by the words “anticipate,” “believe,” “budgeted,” “continue,” “could,” “estimate,” “expect,” “forecast,” “goal,” “intend,” “may,” “objective,” “plan,” “potential,” “predict,” “projection,” “scheduled,” “should,” or other similar words. Such statements are inherently subject to risks and uncertainties, including, but not limited to, those relating to the worldwide economic downturn, adverse market conditions and assessments, availability of financing, the Company’s dependence on its exploratory drilling activities, the volatility of and changes in oil and gas prices, the need to replace reserves depleted by production, operating risks of oil and gas operations, the Company’s dependence on key personnel, factors that affect the Company’s ability to manage its growth and achieve its business strategy, results, delays and uncertainties that may be encountered in drilling, development or production, interpretations and impact of oil and gas reserve estimation and disclosure requirements, activities and approvals of our partners and parties with whom we have alliances, technological changes, capital requirements, borrowing base determinations and availability under our credit facility, evaluations of us by lenders under our credit facility, the potential impact of government regulations, including current and proposed legislation and regulations related to hydraulic fracturing, oil and gas drilling, air emissions and climate change, regulatory determinations, litigation, competition, the uncertainty of reserve information and estimates, effects of changes in the availability and marketability of equipment and crews, actions by our midstream and other industry partners, weather, availability of financing, actions by lenders, our ability to obtain permits and licenses, the results of audits and assessments, the failure to obtain certain bank and lease consents, the existence and resolution of title defects, new taxes and impact fees, risks associated with the trend towards increased anti-development activity, delays, costs and difficulties relating to our joint ventures, actions by joint venture partners, results of exploration activities, the availability and completion of land acquisitions, completion and connection of wells, and other factors detailed in the “Risk Factors” and other sections of the Company’s Annual Report on Form 10-K for the year ended December 31, 2013 and other filings with the Securities and Exchange Commission (“SEC”). Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes may vary materially from those indicated.

Each forward-looking statement speaks only as of the date of the particular statement or, if not stated, the date printed on the cover of the presentation. When used in this presentation, the word “current” and similar expressions refer to the date printed on the cover of the presentation. Each Forward-looking statement is expressly qualified by this cautionary statement and the Company undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by reference to these risks and uncertainties. You should not place undue reliance on forward-looking statements. The information contained in this presentation does not purport to be all-inclusive or to contain all information that potential investors may require.

We use certain terms in this presentation such as “Potential”, “Potential Reserves”, “Potential Exposure”, “Estimated Resource”, “Unrisked Exploration Potential” and “Unrisked Reserve Potential”, “Recoverable” and similar terms that the SEC’s guidelines strictly prohibit us from including in filings with the SEC. Our Probable (2P) and Possible (3P) reserves do not meet SEC rules and Guidelines (including those relating to pricing) for such reserves. These terms include reserves with substantially less certainty, and no discount or other adjustment is included in the presentation of such reserve numbers. U.S. investors are urged to consider closely the disclosure in our Form 10-K for the year ended December 31, 2014, File No. 000-29187-87, and in our other filings with the SEC, available from us at 500 Dallas, Suite 2300, Houston, Texas, 77002. These forms can also be obtained from the SEC by calling 1-800-SEC-0330.

This presentation includes “non-GAAP financial measures” as that term is defined in Regulation G. The most directly comparable GAAP financial measures and information reconciling these non-GAAP financial measures to the Company’s financial results prepared in accordance with GAAP are included at the end of this presentation.
Overview
Who Is “Carrizo”? 

“World Class” expert at unconventional (shale) plays

- Operated the drilling of over 750 horizontal shale wells to date.


- 155 MMBoe proved reserves, 480 MMBoe probable (de-risked) reserves.

- Average Eagle Ford horizontal length is 2,000 meters, with 3,000 meter horizontal completion (in a 6,600 meter well) and 42 frac stages drilled successfully.

- Horizontal wells are completed with 20 - 40 frac stages and micro-seismic is often used to optimize fracturing.

- Leading expert at drilling in urban and environmentally sensitive areas.

- EURs of our wells consistently rank among the best in our core areas.
06/30/15 Proved NPV10
($MM)

<table>
<thead>
<tr>
<th>Operational Areas</th>
<th>Proved</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Niobrara</td>
<td>102</td>
<td>30%</td>
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<tr>
<td>Utica</td>
<td>39</td>
<td>10%</td>
</tr>
<tr>
<td>Marcellus</td>
<td>73</td>
<td>10%</td>
</tr>
<tr>
<td>Eagle Ford</td>
<td>2,158</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>2,372</td>
<td>33%</td>
</tr>
</tbody>
</table>

Notes: Based on 06/30/15 internal reserves estimates and SEC pricing ($71.68/Bbl and $3.39/Mcf).
Technical Efficiencies – Or Not?

- Experience! Experience! Experience!

**Drilling --**

- New Modern Rigs
  - Larger Mud Pumps
  - Optimized With Downhole Assemblies to Specific Drilling Conditions

**Optimal Well Spacing – Stagger Stack**

**Completions --**

- Optimal Sand Concentration in Frack Design – not to much, not to little, but “just right”
- Engineered Perfs
- Diversion techniques (re-fracks?)
- Future Improvements such as Dissolvable Plugs
CRZO Eagle Ford Case Study – South Texas

- Displays CRZO leases and industry completions at November 2014
- 10,800 Eagle Ford industry wells producing
- Industry consistently running 200 – 250 drilling rigs during this period
Experience! Experience! Experience!

Drilling and Fracking Experience

Approaching 10,000,000 total feet of hole (1,890 miles) in 5 primary play areas

Over 9,400 Stages Fracked to Date
Operational Improvement
Continuous Improvement

Since 2010 rig performance in terms of wells TD’d per rig has improved over 160%

Generation 3 rigs are performing as expected

Entire fleet Generation 3 rigs, permitting us to drop one out of three rigs without a material drop our activity

Year-over-year, rig fleet as a whole drilled 16,781 ft. more hole per rig

Lots of small wins add up to overall efficiency gains
Drilling Efficiencies
Modern Rig Technology – 3rd Generation

- Bi-Fuel – Diesel and Natural Gas
- 1500 HP AC Electric Motors
- 750,000 lbs Mast /w Top Drive
- 2000 HP – 7500 psi Mud Pumps
- Walking System
- Hydraulic Cat Walk
- Rotating Mousehole
Modern Rigs Lead to --
Continuous Improvement

- Drivers behind improvement
  - Learning Curve
  - New Technology - rigs, bits, directional tools
  - Pad Drilling
  - Batch drilling

- Results of the efficiencies gained
  - Reduced costs
  - Lower cost per unit
  - Better return on investment
Optimal Well Spacing – An Evolution

330 ft. Downspacing – Irvin Example
Optimal Well Spacing
330 ft. Downspacing – Pena Winfield

Legend:
- 1,000 ft
- 850 ft
- 500 ft
- 330 - 400 ft
- 600 ft
Optimal Well Spacing – Beyond Downspacing

Stagger Stack – Potential to Materially Expand Inventory

- Current development
  - 330 ft. effective spacing
  - ~1,090 total locations at full 330 ft. spacing

- Full stagger stack
  - 165 ft. effective spacing
  - ~80% increase to inventory

- Partial stagger stack
  - 220 ft. effective spacing
  - ~45% increase to inventory

- Partial stagger stack
  - 270 ft. effective spacing
  - ~20% increase to inventory
Optimal Well Spacing

Micro Seismic

- **Concept**
  - Utilize micro seismic events characteristics to define stimulated rock volume and propped rock volume

- **Theory**
  - A surface micro seismic array is capable of gathering data on the energy released and the orientation of shear fractures created during a frack treatment
  - There is a relationship between energy released during a shear failure and the fracture area created
  - The defined properly sized fracture sets are placed and oriented at the corresponding event point
  - Material balance models fills and grows the created fractures with the water and sand job volumes pumped during the frac job
Micro-Seismic
MicroSeismic Inc. – FracStar™
Micro-Seismic
MicroSeismic Inc. – FracStar™

Steps to create SRV (Stimulated Reservoir Volume) and PSRV (Propped Stimulated Reservoir Volume) model

1. Gather surface array micro seismic data
2. Conversion of recorded events to oriented fault planes
3. Generation of SRV and PSRV cubes
Utilize Microseismic to calculate SRV and PSRV and determine if Stagger Stack down spacing is viable
Eagle Ford Shale
Optimizing the Development Program

- Performance of 330 ft. spaced wells looks very similar to wells drilled at wider spacing in each area tested.
- Testing further downspacing through stagger-stacks in the Lower Eagle Ford during 2015 – Results are positive.
- Initial Upper Eagle Ford test on-line in 4Q 2015.
- Continue testing a variety of completion enhancements including engineered completions, diversion techniques and fiber optic monitoring.
Completions
Optimal Sand Concentration in Frack Design

Benchmarking Study – Stage Completion Design

- **Fluid**
  - 7,800 bbls hybrid slick water (65%) and cross linked gel (35%)

- **Proppant**
  - 380,000 lbs of sand; combination of 100 mesh, 40/70 and 30/50 white sand

- **Rate**
  - 80 bpm average treating rate

- **Treatment Interval**
  - 240’ plug to plug

- **Perf Clusters**
  - 5 clusters on 40’ spacing

- **Frac Style**
  - Zipper
Optimal Sand Concentration
Benchmarking Study – Completion Design

Source: ITG Investment Research.
Optimal Sand Concentration
Benchmarking Study – Completion Design

Average Proppant Placement by Operator for LaSalle County
Optimal Sand Concentration

Benchmarking Study – Pena Winfield and Gardendale
Optimal Sand Concentration
Benchmarking Study – Pena Winfield

Pena Winfield Area Historical and Forecast Oil Production

Cumulative Oil Production - Normalized to 5000' Lateral

Other Operator 4 CRZO Operator 3

Optimal Sand Concentration Benchmarking Study – Pena Winfield

Pena Winfield Area Historical and Forecast Oil Production

Cumulative Oil Production - Normalized to 5000' Lateral

Other Operator 4 CRZO Operator 3
Optimal Sand Concentration

Benchmarking Study – Gardendale

Gardendale Area Historical and Forecast Oil Production

Cumulative Oil Production - Normalized to 5000' Lateral

Gardendale Area Historical and Forecast Oil Production

Cumulative Oil Production - Normalized to 5000' Lateral

Operator 4
Operator 5
CRZO
Operator 3
Engineered Completions vs. Geometric Completions

Perforating

Fracking
Engineered Completions

HC Sat, Porosity, Perm
Compatibility Flags
Geometric
Engineered

Stage Rock Stress Comparison

Differential Stress, psi

Geometric Perfs
Engineered Perfs

Perf 1
Perf 2
Perf 3
Perf 4
Perf 5
Perf 6
Engineered Completion Test – Treating Results

Average Treating Pressure

- 363 psi

- Irvin 162
- Avg Engineered Perfs
- Irvin 166
- Irvin 163
- Avg Geometric Perfs
- Irvin 167
Engineered Completions – Performance Results

Irvin Ranch Cumulative Oil Production (First 68 Producing Days)

- Days on Production
- Cumulative Oil Production (bbls)

Legend:
- 162H(EP)
- 166H(EP)
- 163H
- 167H
- 151H
- 150H
- 131H
- 132H
- 136H
- 135H
Proppant Diversion

- **Concept**
  - Utilize graded bead system to divert fluid and sand flow during a frack job to cause diversion within existing frac networks to create complexity
  - Create diversion between stages to force more even fluid distribution

- **Theory**
  - Graded ball system works in same manner as lost circulation agents used in the drilling operations or for that matter like building a dam
  - Start with larger beads to create a bridge
  - Follow with smaller sized beads to plug the holes in the bridge

- **Application**
  - Simple application
  - Pumped midway through job in 150 lbs. batches
Proppant Diversion

West Pena Test -- Access Frac®

- All wells drilled with same effective lateral length and at 330 ft. spacing
- Access Frac® wells flowing back significantly stronger
- Access Frac® wells have slightly higher cumulative production
Are We Dead Yet?

“Rumors of [our] Demise Have Been Greatly Exaggerated” – After Mark Twain