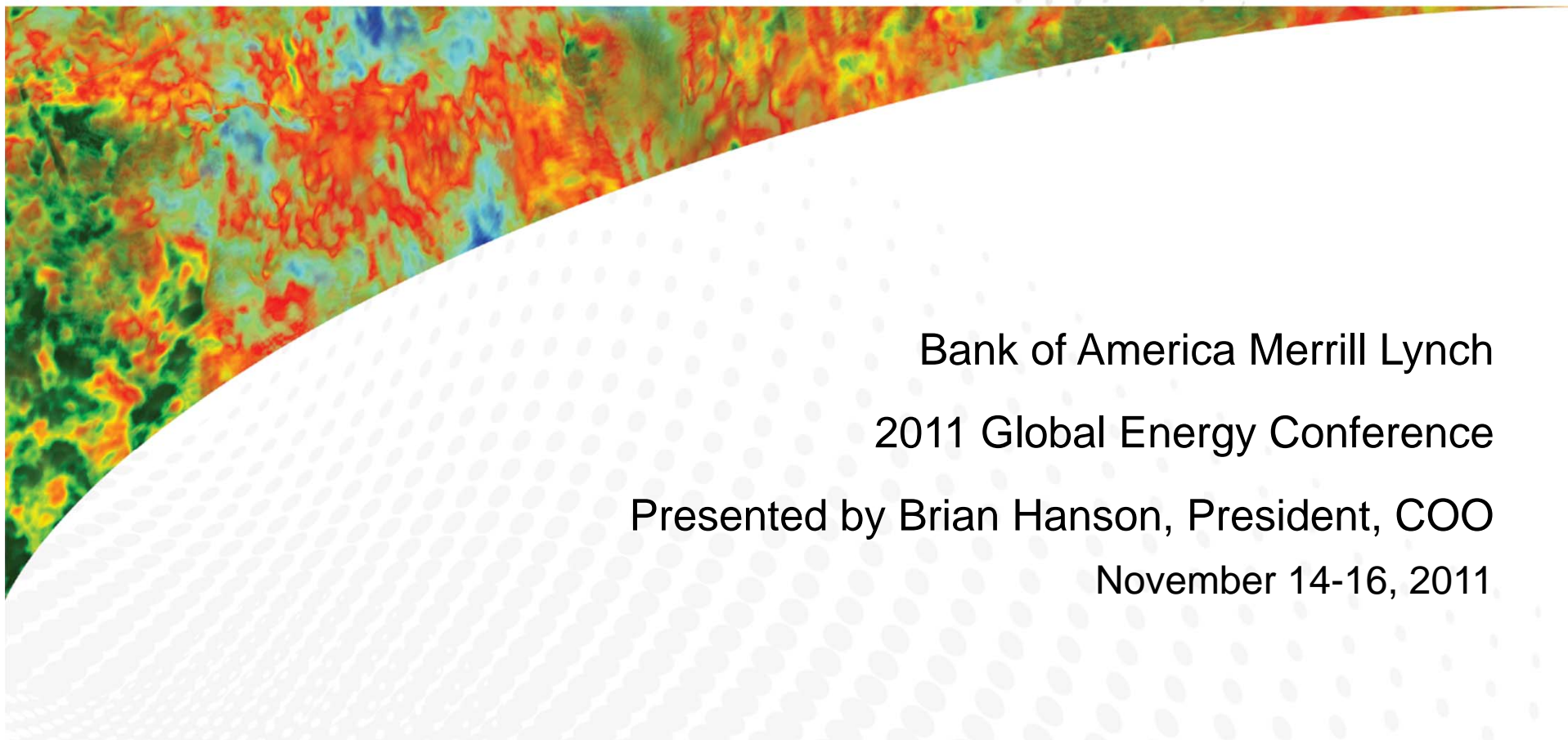




→ Charged to innovate. Driven to solve.™

# ION Geophysical Corporate Update



Bank of America Merrill Lynch

2011 Global Energy Conference

Presented by Brian Hanson, President, COO

November 14-16, 2011



## Today's Discussion

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- Who We Are and What We Do
- Areas of Expertise & Recent Examples
- Current Business Issues
- Summary
- Appendix: Financial Information



## Who We Are and What We Do

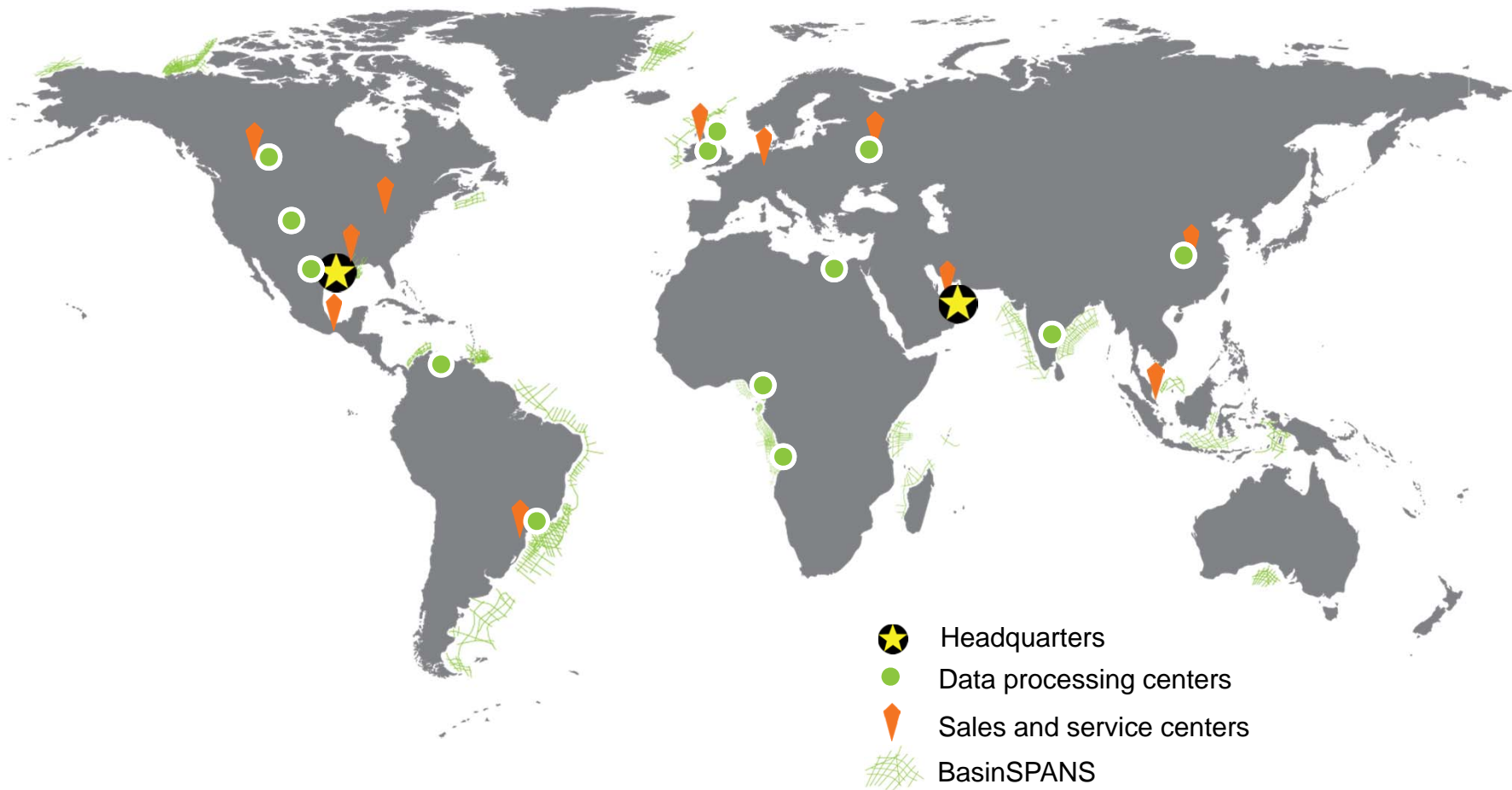
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## ION at a Glance

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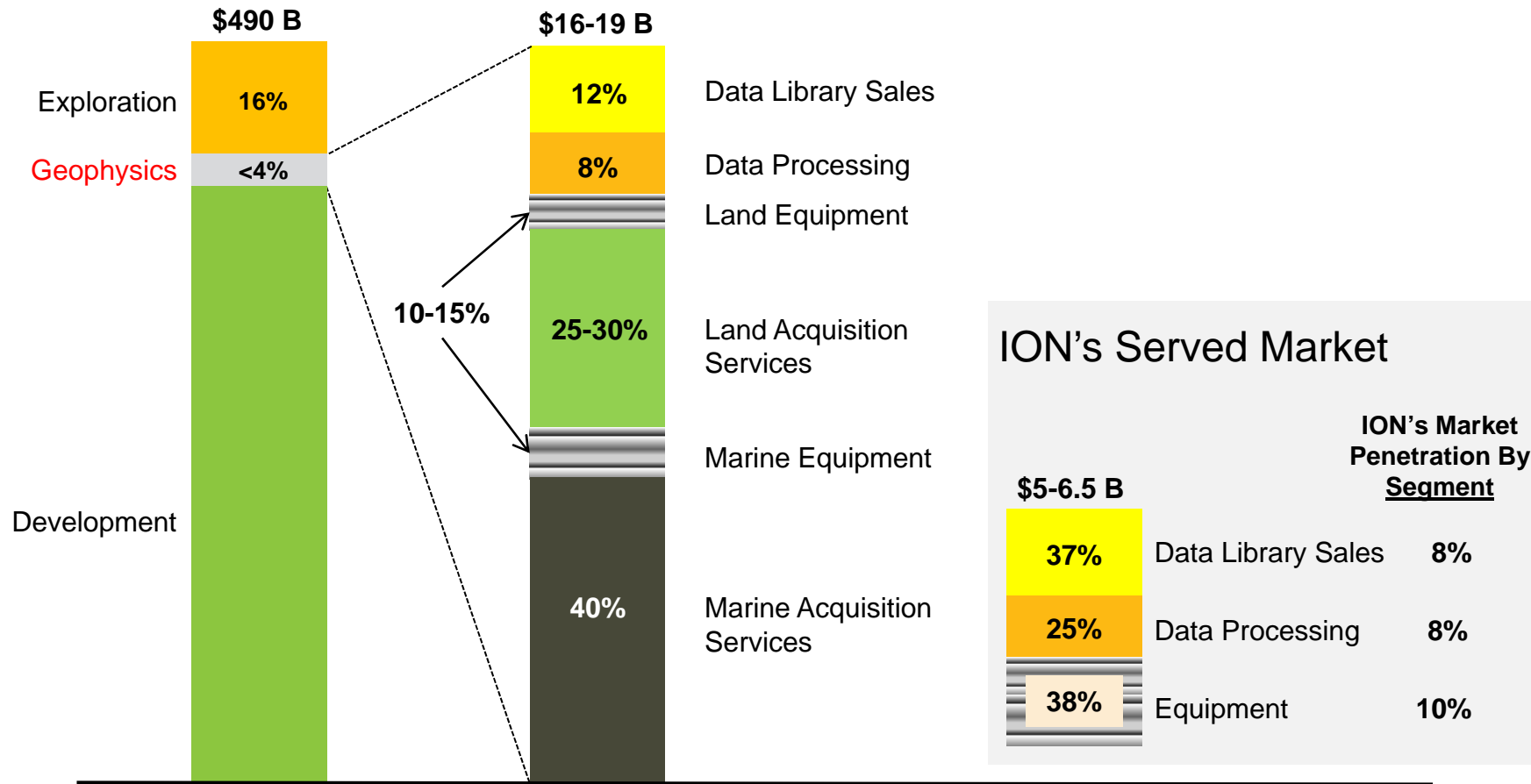
- **Technology company**, driven to develop and apply proven, innovative technologies and services to help our clients find and produce hydrocarbons as safely and efficiently as possible
- Founded in **1968** as Input/Output – renamed ION in 2007
- Headquartered in **Houston, Texas**
- Listed on the NYSE (Ticker: **IO**) since 1994
- ~**1,400 employees** operating from over **20 locations** worldwide
- FY 2010 revenues - \$444 million
- CEO 2003 – 2011 Robert P. Peebler
- 2012 – CEO R. Brian Hanson; Executive Chairman Robert P. Peebler

# Global Footprint



# Seismic vs. E&P vs. ION's Served Market

A \$16-19 Billion Annual (Revenue) Industry, A \$5-6.5 Billion Annual Market



# Global Market Outlook

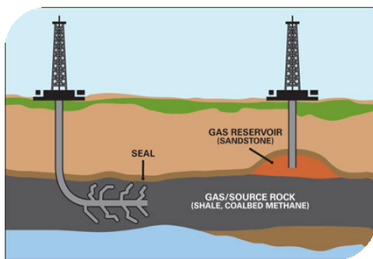
## Energy Markets



- General
  - Lingering effects of oil spill – slower to rebound than expected
  - Geopolitical tensions and regulatory uncertainty
  - U.S. economic recovery slower than expected
  - Developing countries led by China still expanding
  - OPEC increasing production to meet global demand



- Oil Segment
  - Relatively strong oil prices due to Asia demand
  - Future tighter supplies due to slow down in deep water GOM
  - Deep water still major theme (80+ percent outside of GOM)
  - Frontiers in Brazil, Arctic, West Coast Africa, liquid shale plays, Iraq



- Natural Gas Segment
  - Decoupled from oil prices
  - Shale plays are a discontinuity in gas markets
  - Shale plays spreading from North America
  - Low price environment driving technology for productivity

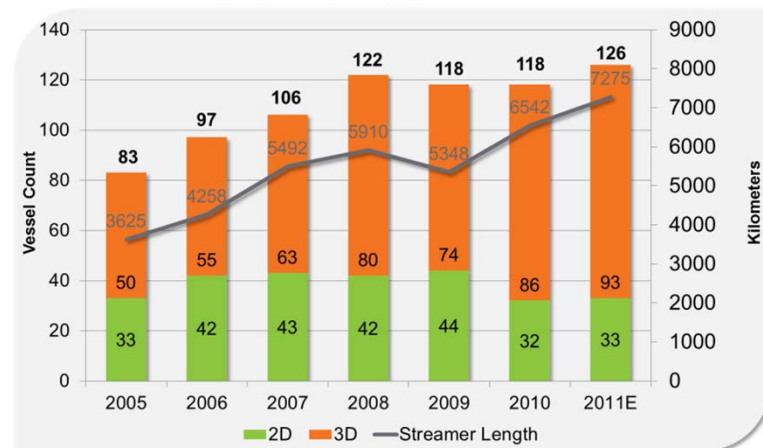
# Global Market Outlook

## Geophysical Sector

- Predicted increased E&P spending realized
- 2011 healing period for seismic as exploration activity resumes
- Marine
  - Anticipated incremental higher capacity seismic vessels working, including new builds and OBC
  - Anticipated increase in demand for data processing in GoM
- Land
  - Global land seismic contractor activity is steady in 2011
  - Channel counts per crew increasing, leading to higher utilization rates in the install base

### Systems Segment

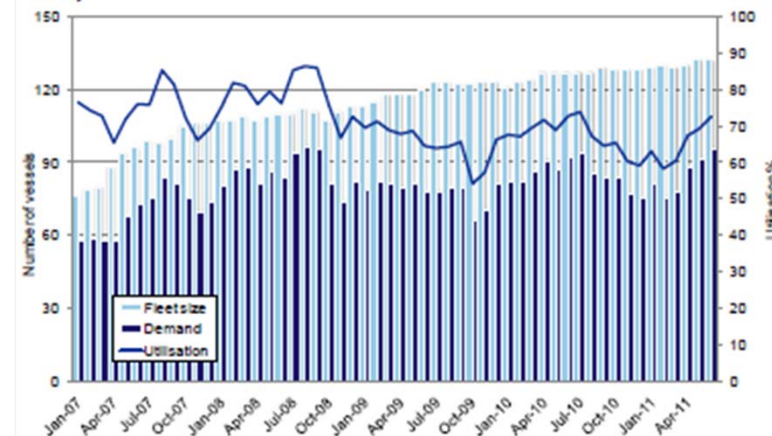
Vessel Count & Streamer Length Segmented by Survey Type



2D – One streamer 3D – Two or more streamers  
 Streamer length – Aggregate kilometers measured from vessel connection to end of streamer

### Fleet size, demand and utilisation

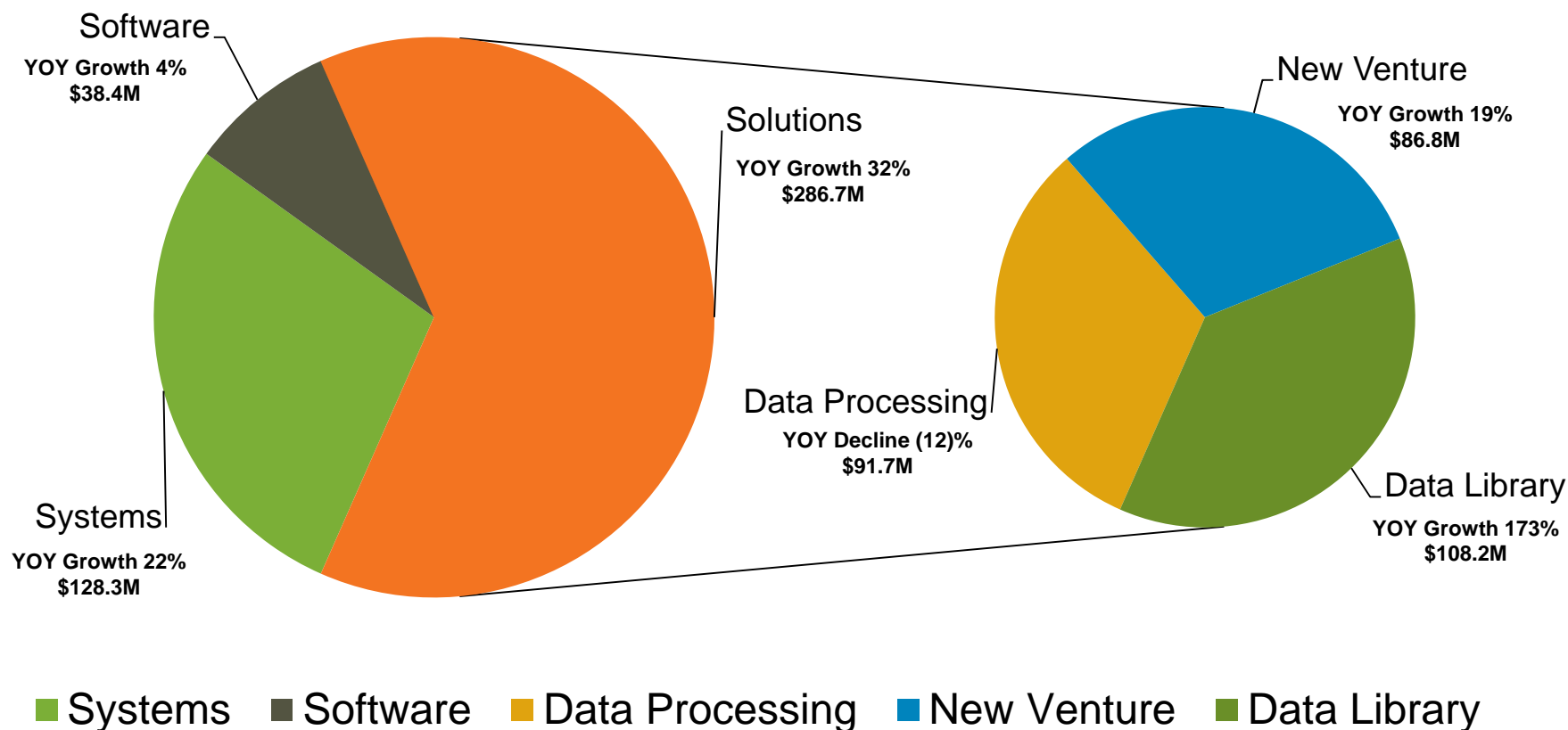
January 2007 to June 2011



# Revenue Distribution by Product/Service Line

TTM Ending 30-September 2011

100% = \$453.4 Million



Note: Systems includes Sensor B.V., Marine Imaging Systems, Concept Systems

Data Processing includes GXT Imaging Solutions (and Reservoir Solutions)

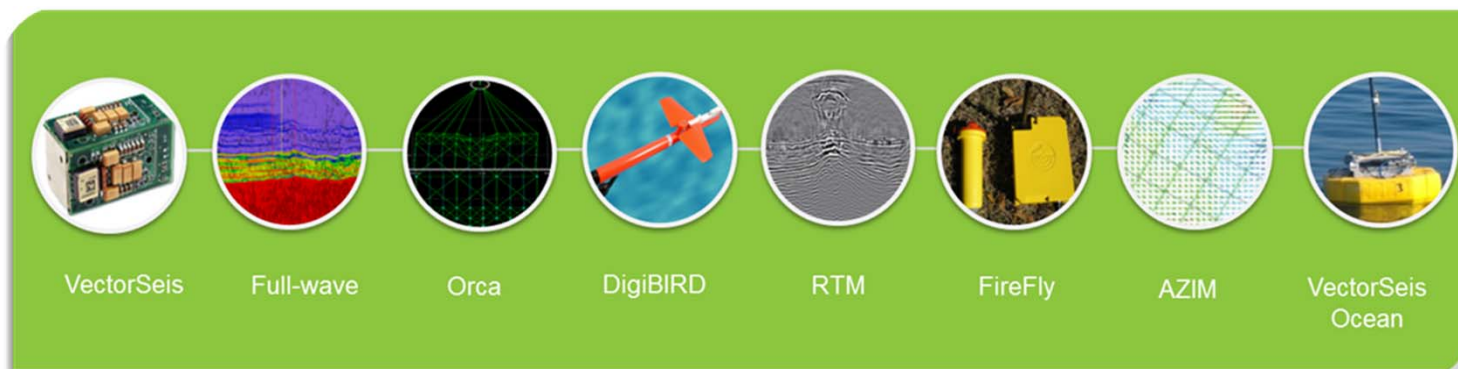
New Ventures represent new Integrated Seismic Solution programs that are being acquired (analogous to "Acquisition Services" at ION)

Data Libraries represent the ongoing sale of licenses to previously acquired seismic data programs

Proforma for historic land business

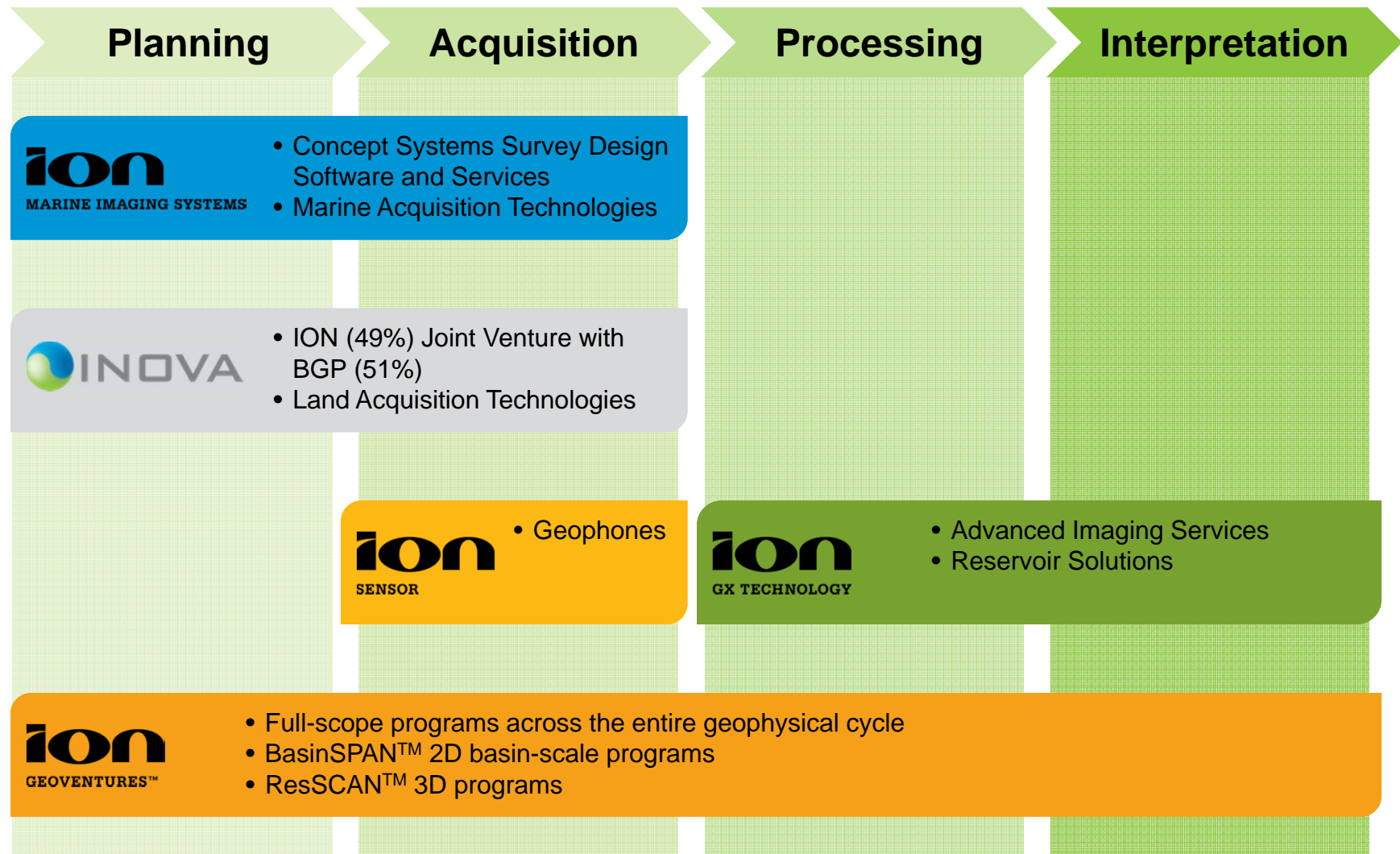
# ION Strategy

- **Technology company** – bring the whole of ION to bear to solve the toughest E&P challenges
- **History of innovation** – cableless acquisition technology and digital sensors, streamer steering technology, command and control systems, reverse time migration, full-wave imaging
- **Participate in each stage of the geophysical cycle** – planning, acquisition, processing, interpretation – where, through our services and technology, we can add greatest value
- **Operate an asset-light model** – when engaged in geophysical operations, we utilize the services of 3rd party contractors, allowing us to focus our capital on our people and technology development



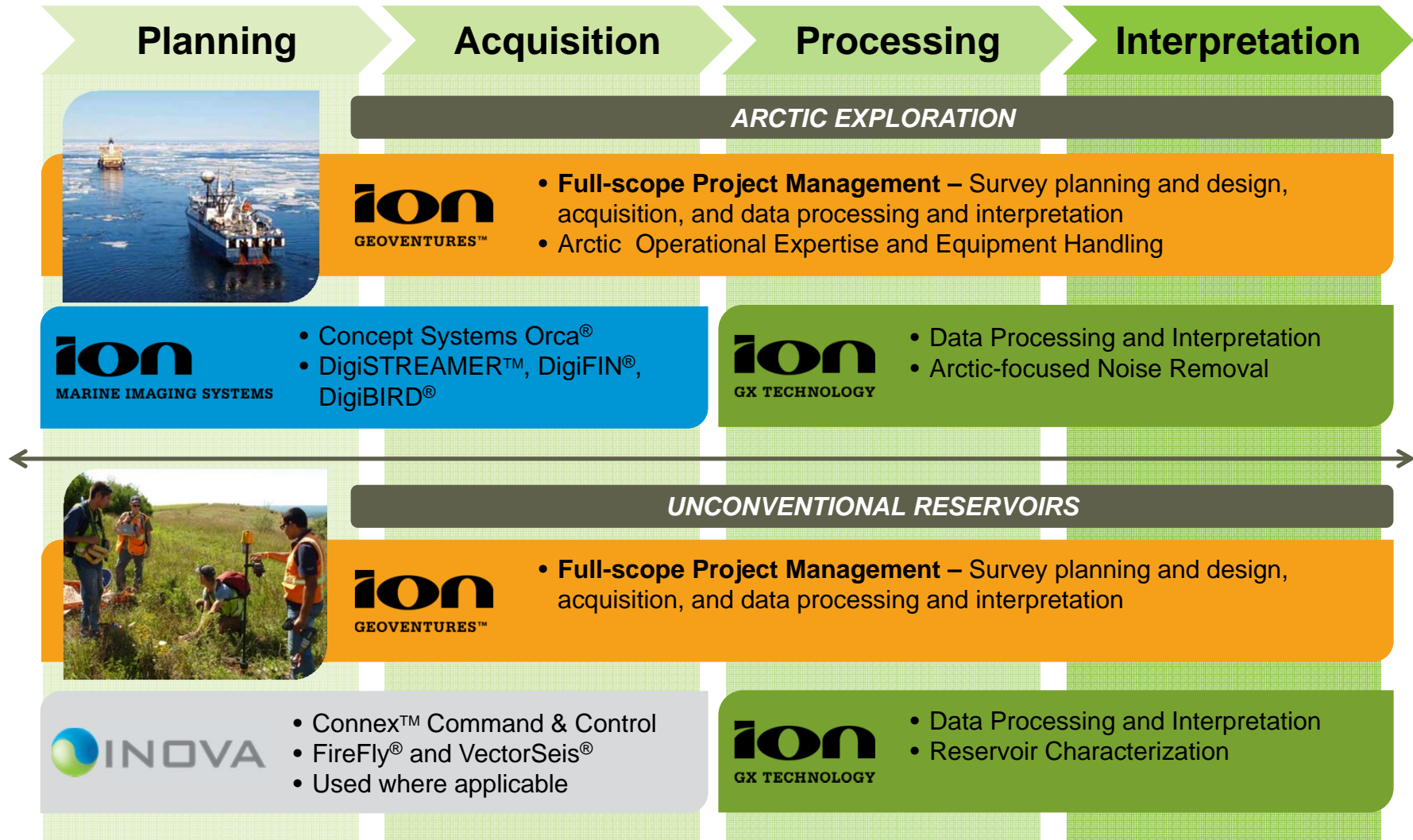
# ION Strategy

## Participation by Business Unit



# ION Strategy

Bringing the Whole of ION to Solve Industry Problems





## Areas of Expertise & Recent Examples

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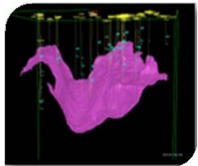
# Areas of Expertise

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## Challenging Environments

*Arctic, Shallow/Obstructed Water, Transition Zone and Desert*



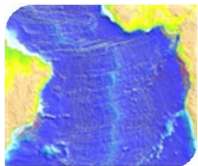
## Complex Geologies

*Subsalt, Sub Basalt, Thrust Belt and Carbonates*



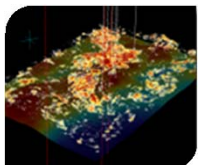
## Unconventional Reservoirs

*Shales, Tight Gas, and Oil Sands*



## Basin Exploration

*BasinSPAN Data Library*



## Reservoir Exploitation

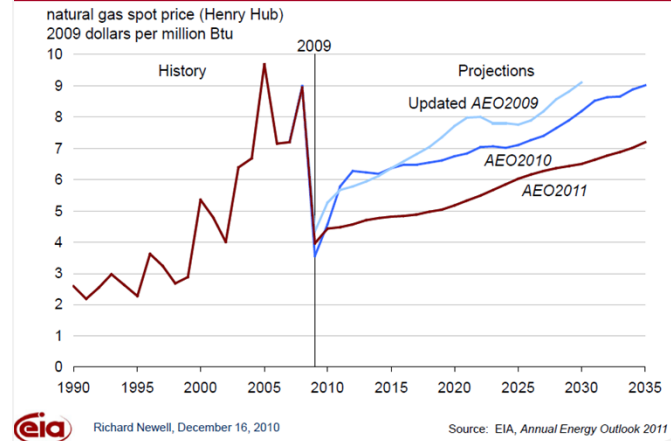
*4D Marine Seismic Acquisition*

# Unconventional Reservoirs

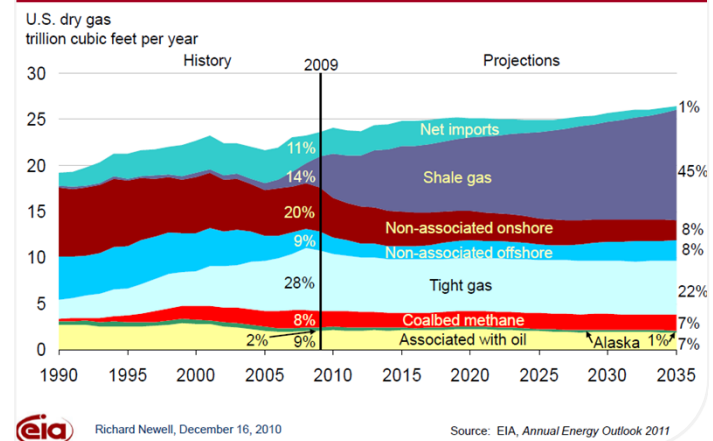
## Macro Challenges

- Natural gas prices predicted to remain depressed due to an expanded shale gas resource base
- Short-term shift in activity from gas to oil shales, but shale gas predicted to continue exponential growth
- Economic viability has resulted from advancements in horizontal drilling and hydraulic fracturing technologies, but the cost benefits of these techniques have begun to plateau
- To economically develop these plays, operators must optimize well locations and completion strategies

### Natural gas price projections are significantly lower than past years due to an expanded shale gas resource base



### Shale gas offsets declines in other U.S. supply to meet consumption growth and lower import needs



# Unconventional Reservoirs

## ResSCANS

- **The ResSCANS Difference**

- Rely on upfront geological, petrophysical, and rock physics analysis
- Establish what seismic attributes tie the geology and rock physics for a given shale play and impact an operator's drilling and completion engineering decisions and parameters
- Leverage BasinSPANS business model - program managed by GeoVentures; use of INOVA technologies (where applicable); advanced imaging by GXT
- Deliver 'business volumes', not 'science volumes'

- **Programs Underway (600 square mi.)**

- Marcellus: ClearfieldSCAN, Phase 1 acquisition nearing completion
- Three additional programs sanctioned, one in the Niobrara and another in the Marcellus



# Unconventional Reservoirs

## Cost-Saving Completion Strategies in the Marcellus

- **Challenges**

- Better understand the variability in rock properties
- Optimize drilling plans and frac designs
- Achieve enhanced ROI on their capital investments

- **Approach**

- Brittleness and fracture network were mapped and calibrated with production results so that hydrofracing design can be implemented for the area.

- **Result**

- Well B yielded twice the “production per foot” compared to Well A in this survey. Client plans to apply learnings to future operations to reduce the cost of hydrofracing.

### SHALE PLAY ECONOMICS

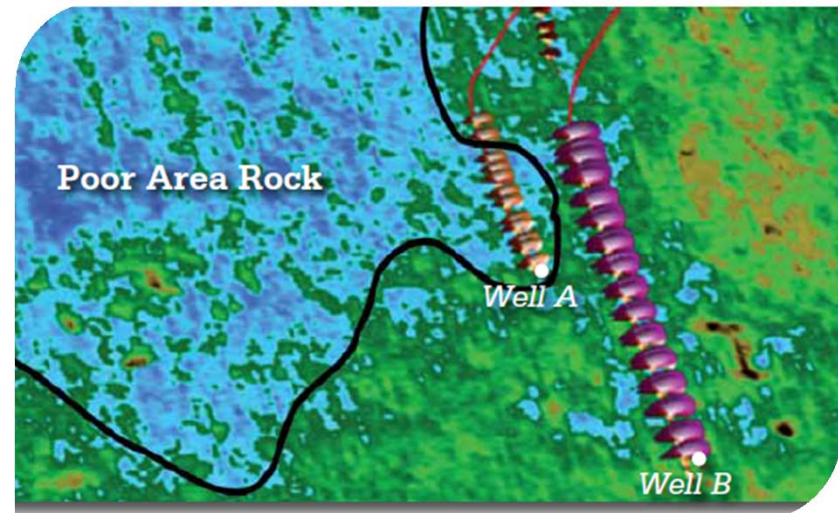
(Figures provided by client)

#### **OPERATING COSTS:**

Drilling: \$4-8 million per well x 8 wells per section  
(80-acre drainage strategy)

Hydraulic Fracturing: \$500K per frac stage x 10-15 stages per well

**SEISMIC COSTS:** \$20,000 per well - \$160,000 per square mile



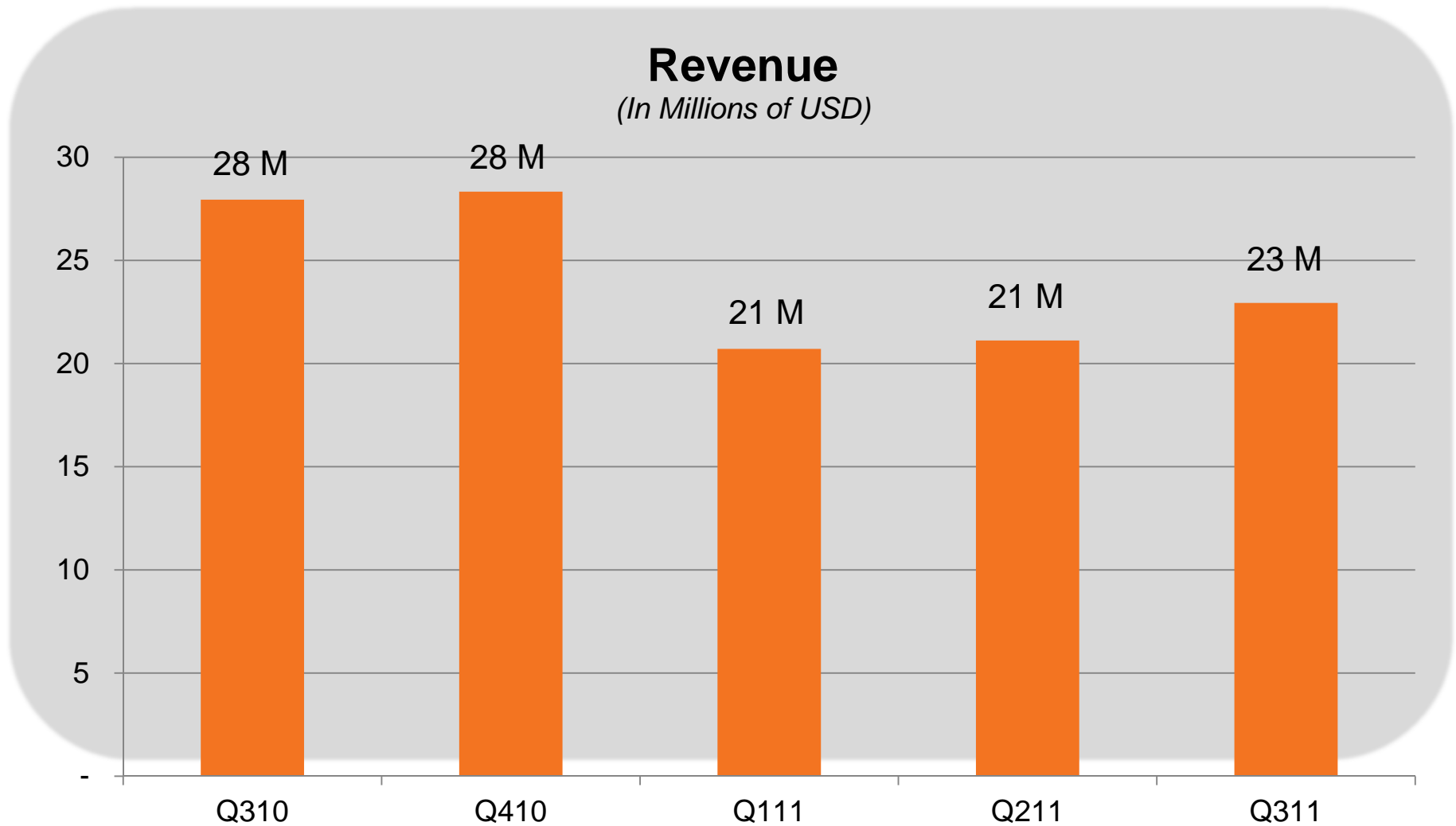


## Current Business Issues

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# Data Processing - Total

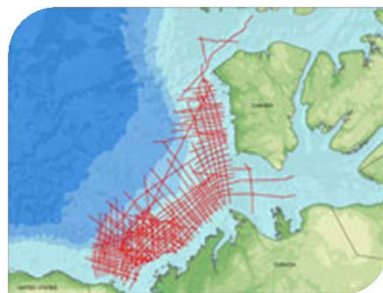
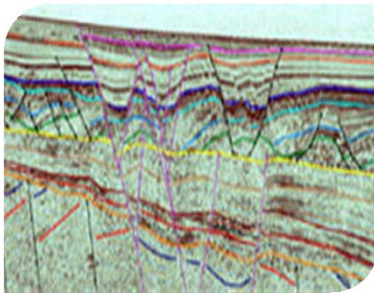
Revenue by Quarter



# Current Business Issues

## New Ventures

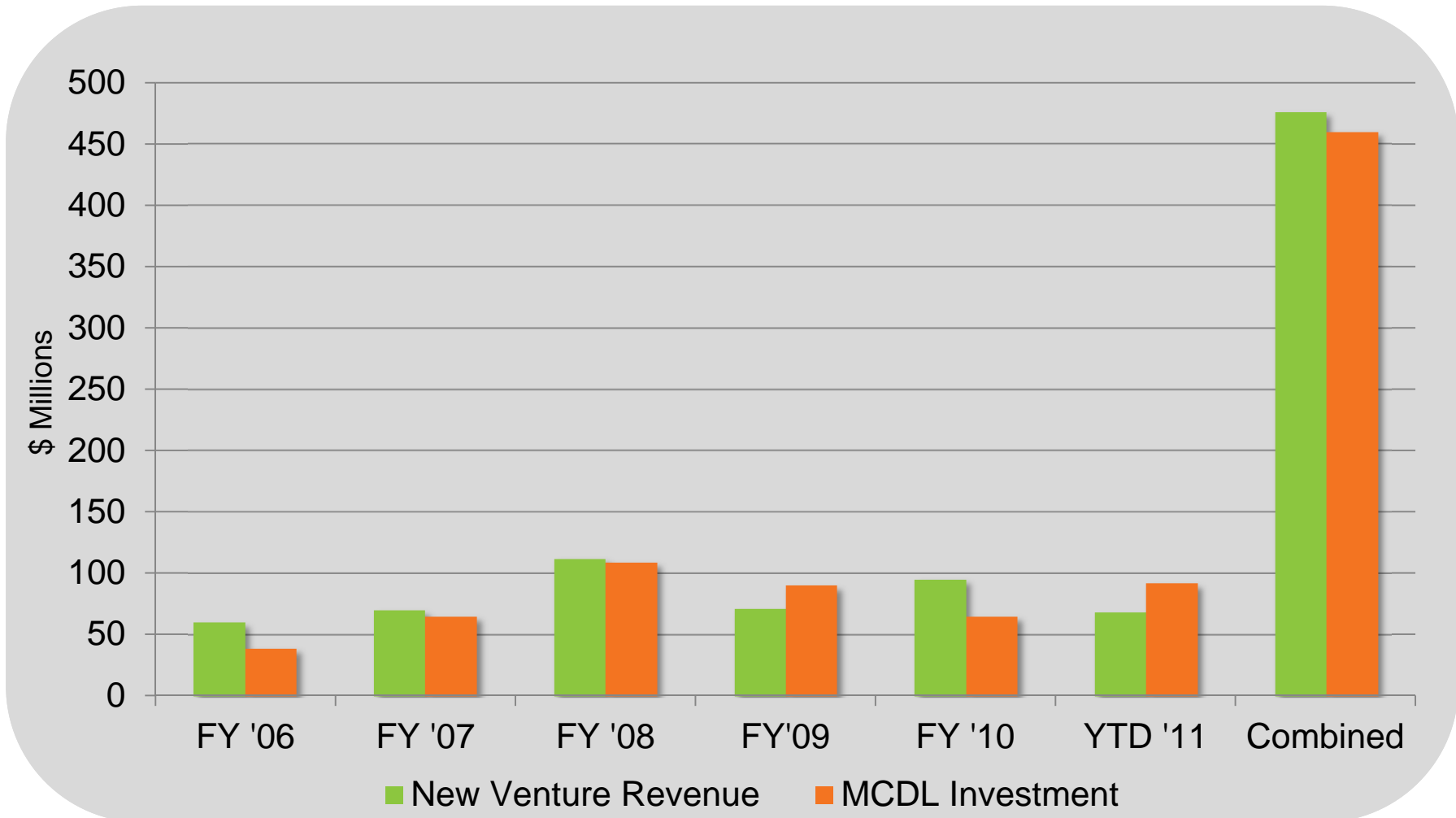
- Strong performance of new ventures due to portfolio of new ventures activity in shale plays and continued strength in marine programs
  - Four new ResSCAN projects in flight
- Record investment in multi-client libraries (\$110 to \$130 million)
- Anticipate benefit of normal back-end loading due to E&P budgeting cycles
- Year-to-date multi-client investment of \$92 million
- 2011E: 1/3 on Land, 2/3 Marine



# ION Capital Expenditures Relative to Revenue

Average Per Year

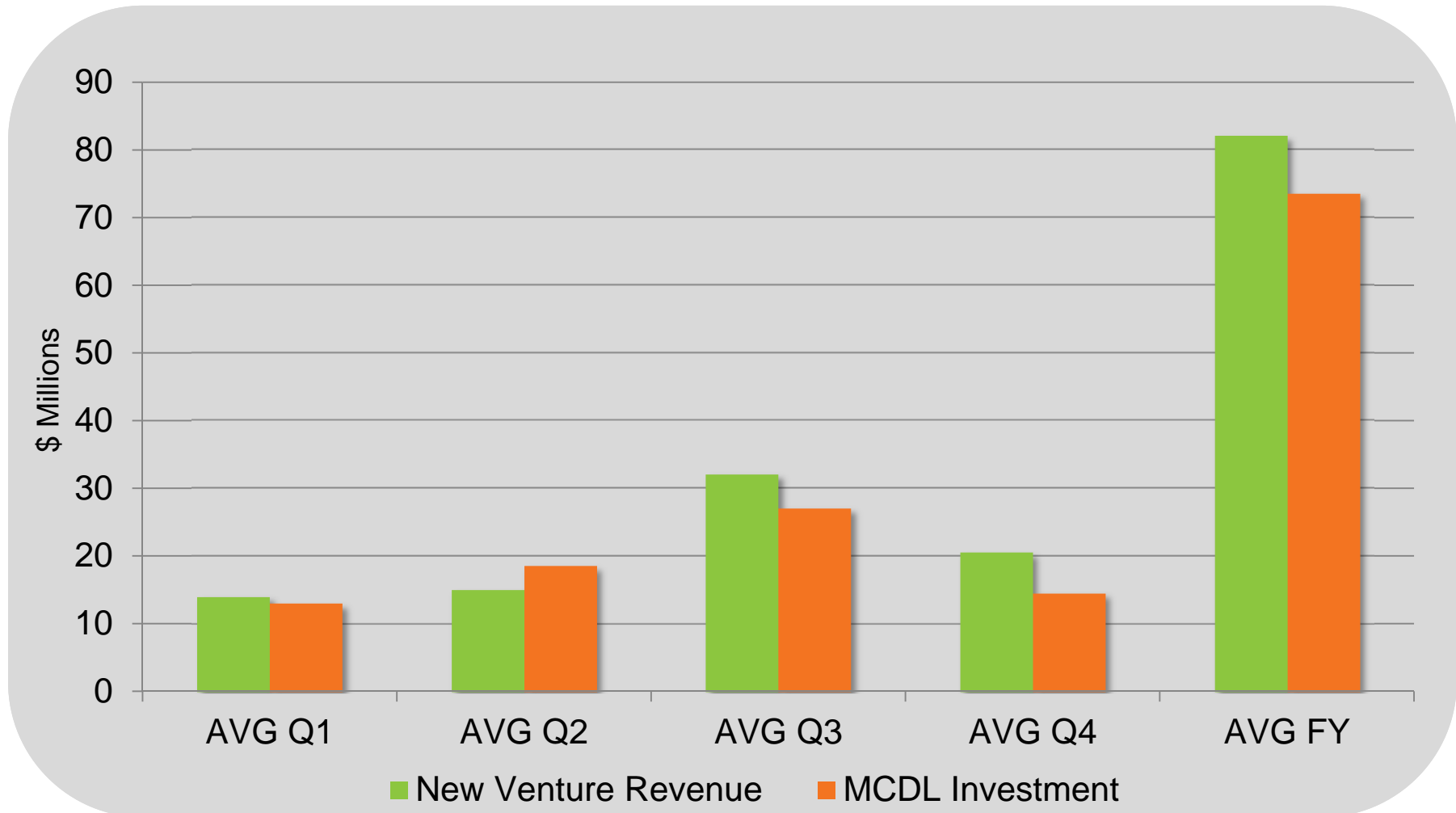
'06 - YTD '11 NV Revenue vs MCDL Investment



# ION Capital Expenditures Relative to Revenue

Average Per Quarter

2006-2010 Qtr Pt Avg. NV Revenue vs Avg. MCDL Investment



# Current Business Issues

## INOVA

- Strong vibrator sales
- Continued BGP purchases totaling 50% of YTD INOVA sales
- Effect of situation in Libya, Yemen and other Middle East/North Africa countries negative in the short term; possibly positive in the long term if replacement equipment is needed
- Introduction of next gen FireFly, node, smaller vibrator, cabled system for 2012






# Summary

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## Summary

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- Improved YTD 2011 results compared to 2010
- Sequentially improving recovery of data processing business
- Anticipate data processing be at our near capacity by end of year
- Strong performances of new ventures and data libraries into 2012
- Increased penetration of new ventures in shale plays
- Strong performance of DigiFIN and DigiBIRD in our marine business
- INOVA's contributions expected to turn positive 2012
- Introduction of next gen FireFly, node, smaller vibrator, cabled system for 2012



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## Appendix: Financial Information

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- Selected Financial Highlights

# Financial Overview

Q3 2011

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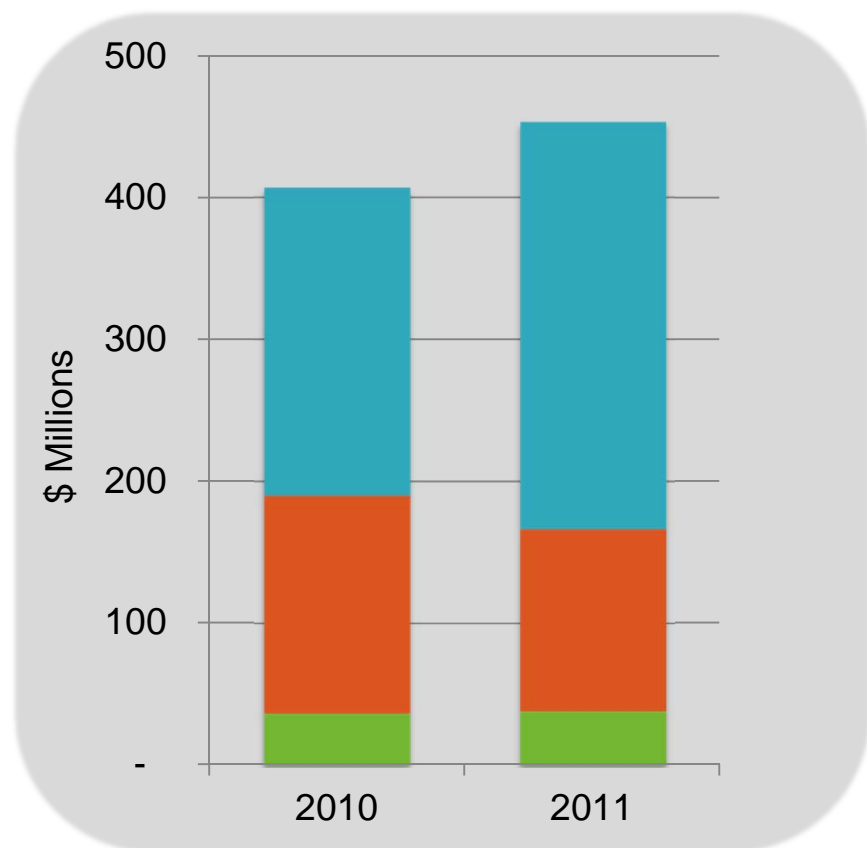
- ION delivers \$0.06 of diluted EPS for the third quarter.
- Revenues of \$116 million for the third quarter with year-to-date revenues of \$295 million compared to \$286 million for the prior period. Excluding Legacy Land Systems (INOVA), year-to-date revenues increased 10% to \$295 million compared to \$269 million.
- Multi-client revenues grew 29% for year-to-date 2011 compared to the prior period driven by demand for our multi-client marine programs in Africa and Greenland and by land new venture activity in North America.
- Solutions backlog averaged approximately \$110 million for the first three quarters of 2011.
- During the third quarter, the Software segment achieved a milestone of 50 Orca installations while delivering its best quarter ever in terms of operating income on a Pound Sterling basis.
- Systems revenues increased 20% for year-to-date 2011 compared to the prior period due to continued strong demand for marine positioning equipment.
- Year-to-date multi-client investment of \$92 million, or approximately 77% of the full-year expected investment of \$110 million to \$130 million.
- Expectation of solid fourth quarter financial performance.

ION delivers Q3 EPS of \$0.06 and expects solid fourth quarter financial performance.

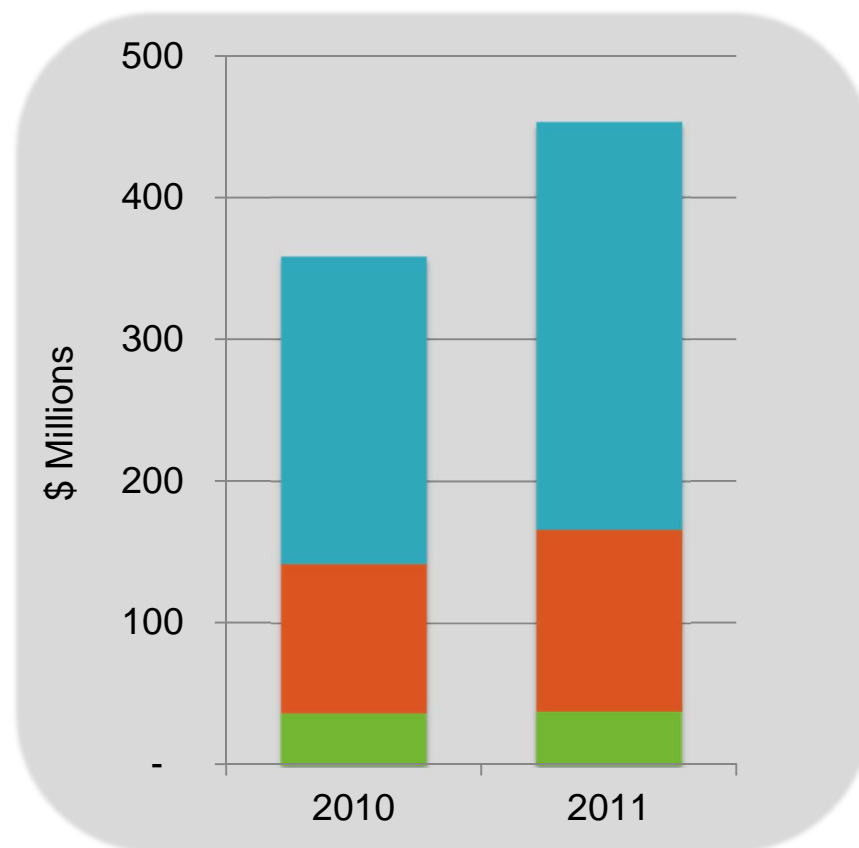
# Financial Overview

## Trailing Twelve Month (TTM) Revenue Comparison

Including Legacy Land Systems



Excluding Legacy Land Systems

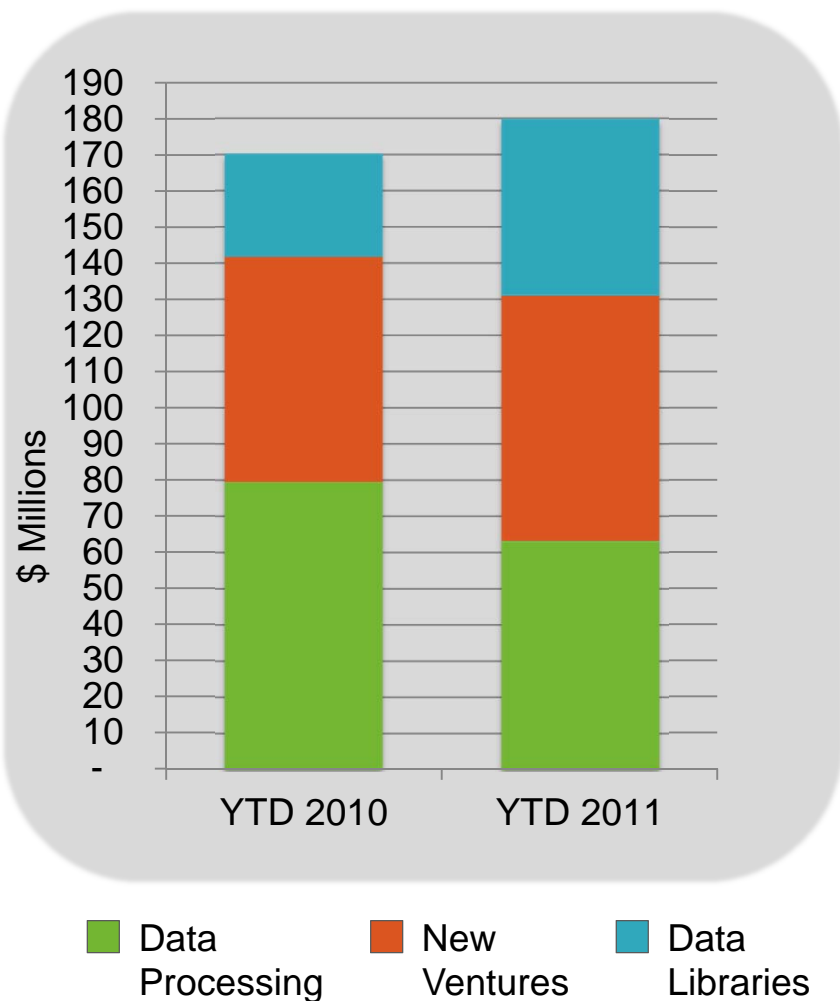


■ Software   ■ Systems   ■ Solutions

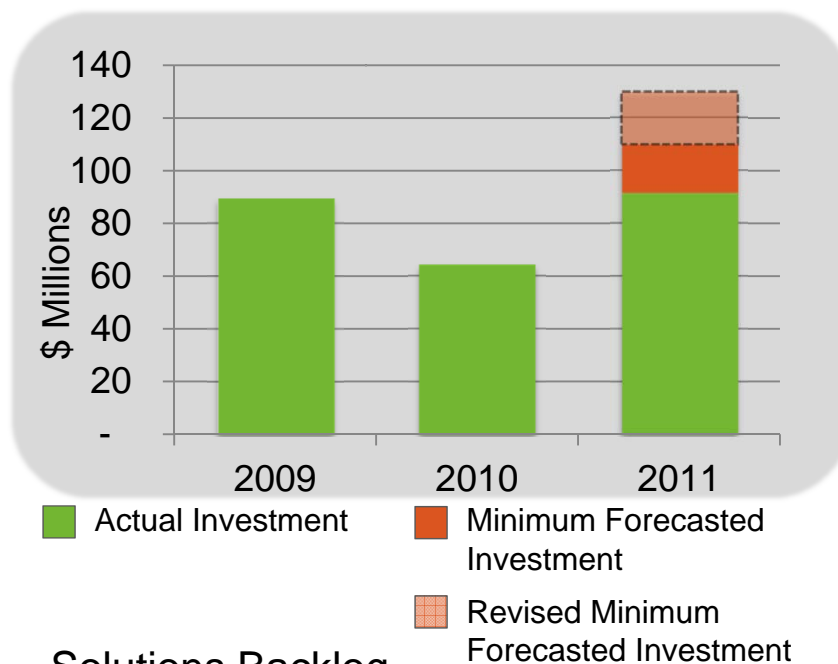
# Solutions Segment

## Q3 2011 Financial Overview

Revenue by Type



Multi-client CapEx Investment



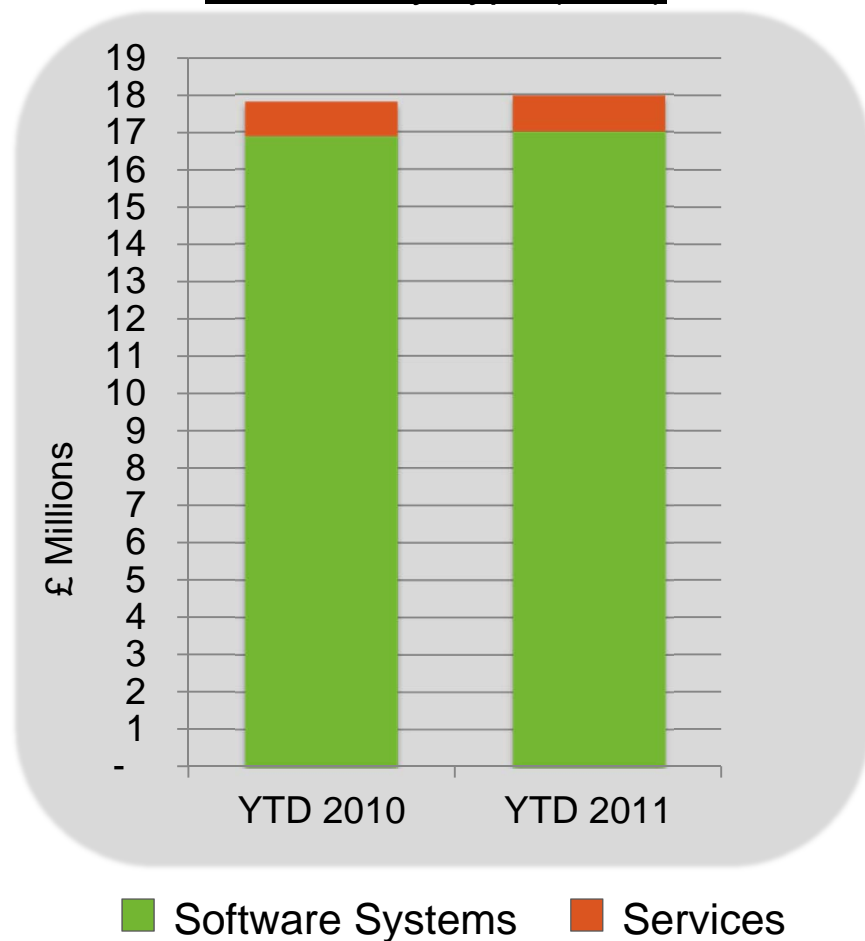
Solutions Backlog



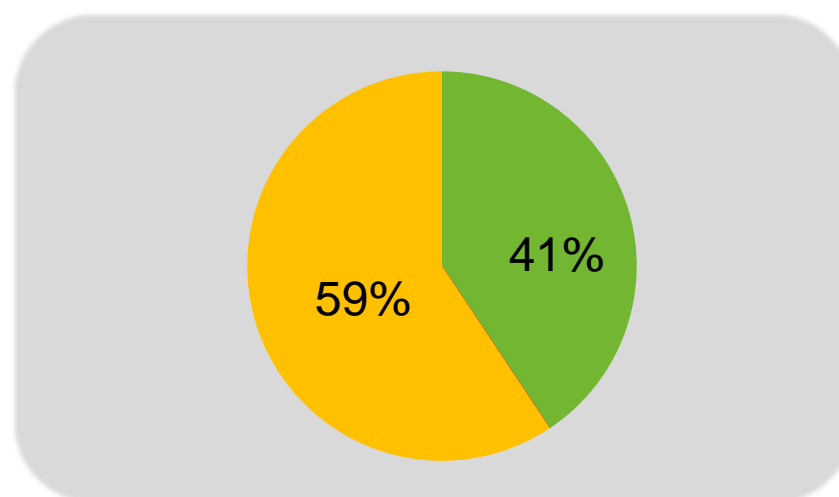
# Software Segment

## Q3 2011 Financial Overview

Revenue by Type (GBP)

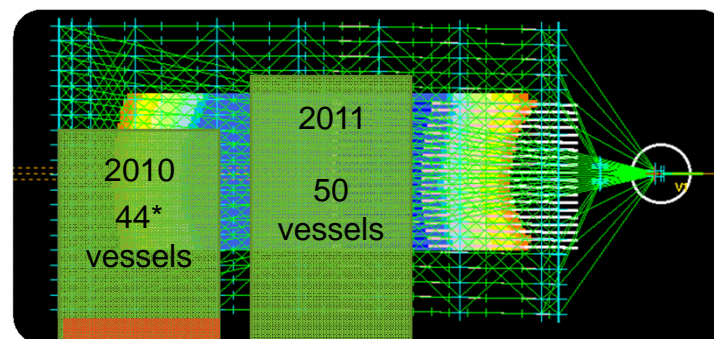


% of Seismic Vessels with Orca



■ Orca-Permanent ■ Other

Orca Vessel Conversion

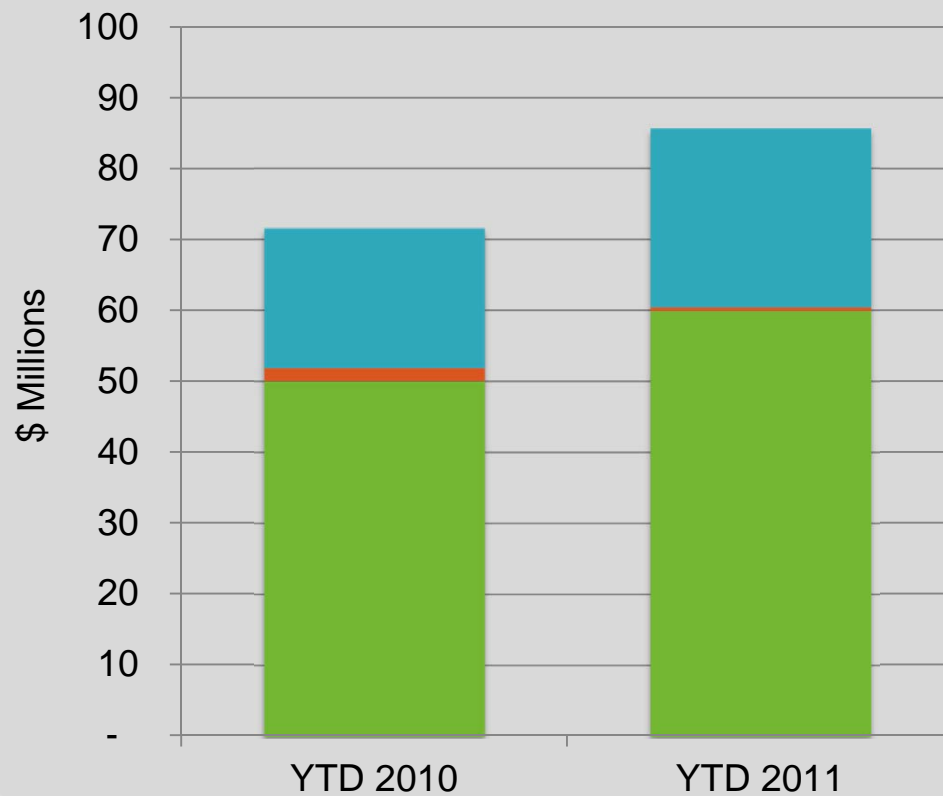


\* Includes 42 permanent installations and 2 rental system installations

# Systems Segment

## Q3 2011 Financial Overview

Revenue by Type

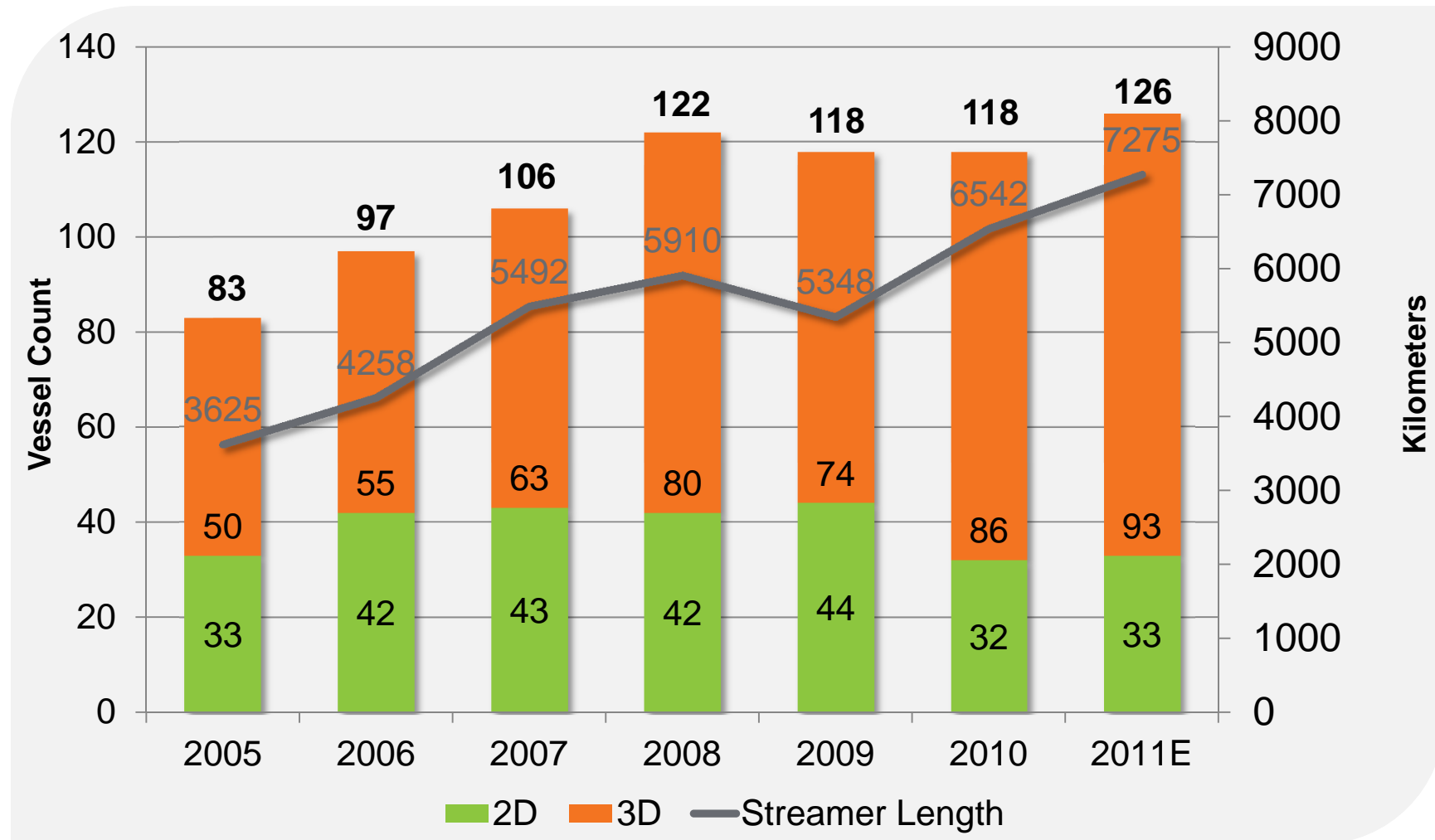


■ Towed Streamer Equipment ■ OBC ■ Other



# Systems Segment

## Vessel Count & Streamer Length Segmented by Survey Type



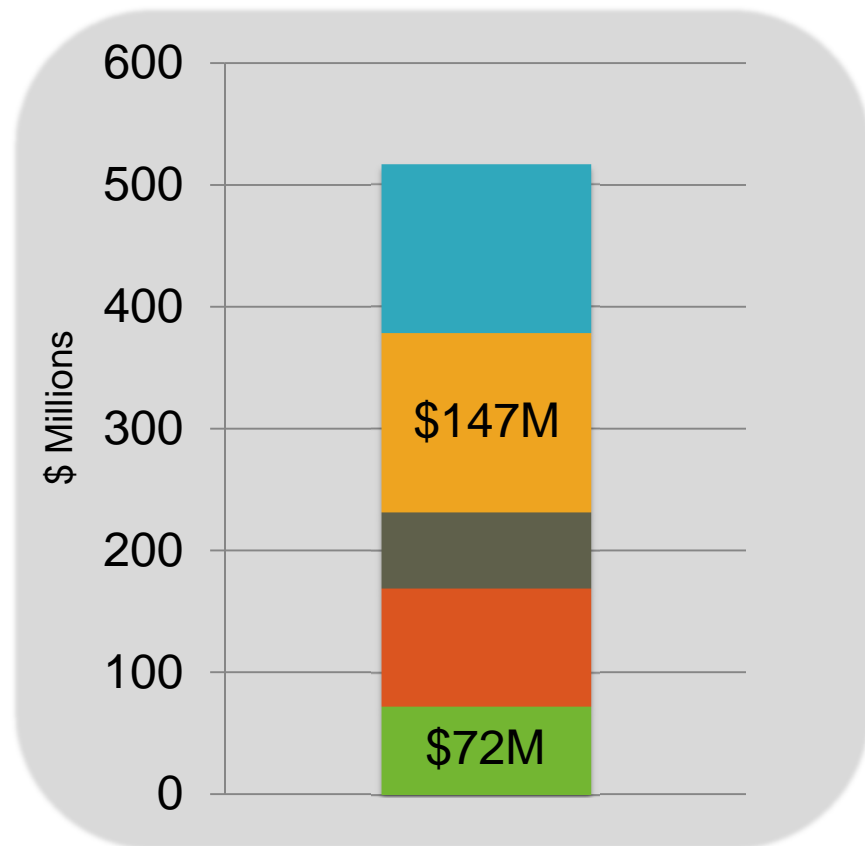
2D – One streamer    3D – Two or more streamers

Streamer length – Aggregate kilometers measured from vessel connection to end of streamer

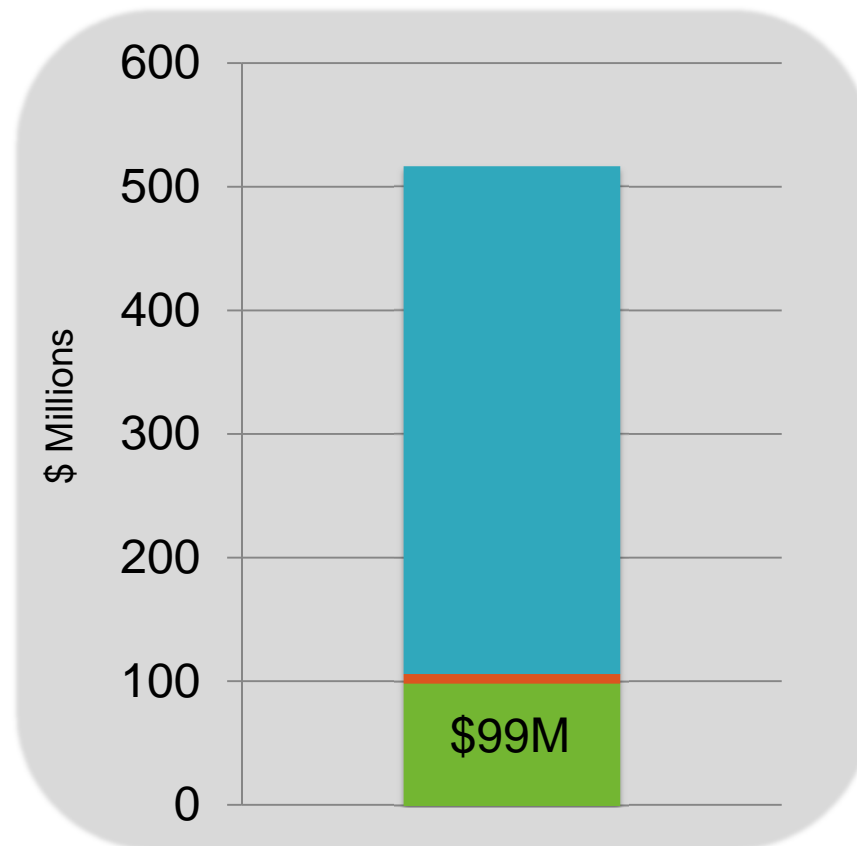
# Financial Overview

Balance Sheet as of September 30, 2011

Capital Employed



Financing



- Cash & ST Investments
- Remaining Working Capital
- Net Fixed Assets
- Multi-Client Data Library
- Goodwill & Equity in INOVA

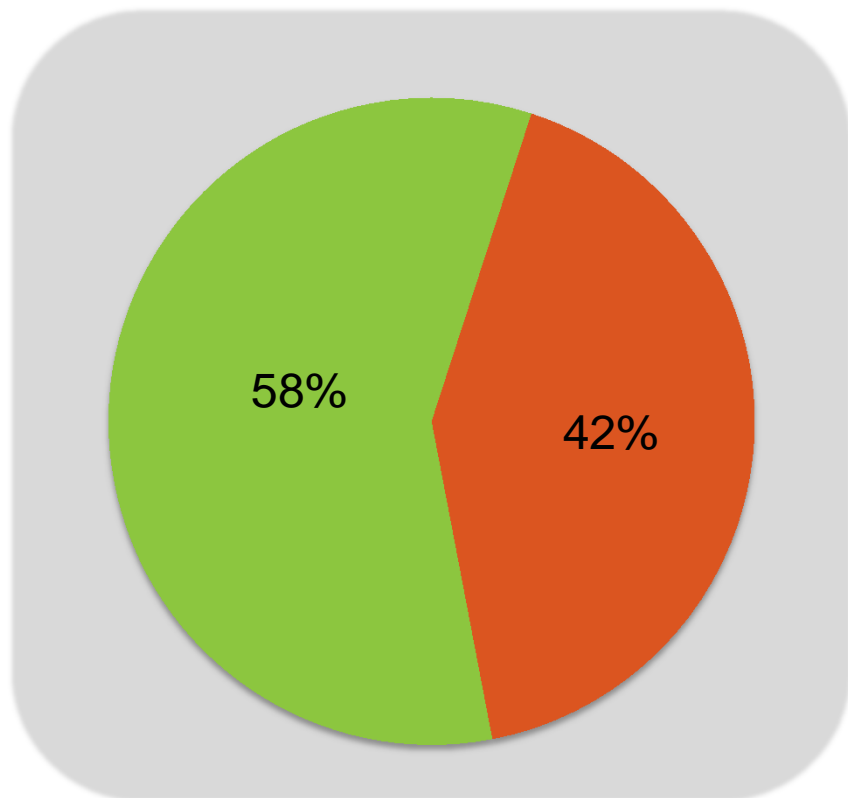
- LT Debt
- Other
- Equity

Net Debt of \$32M\*

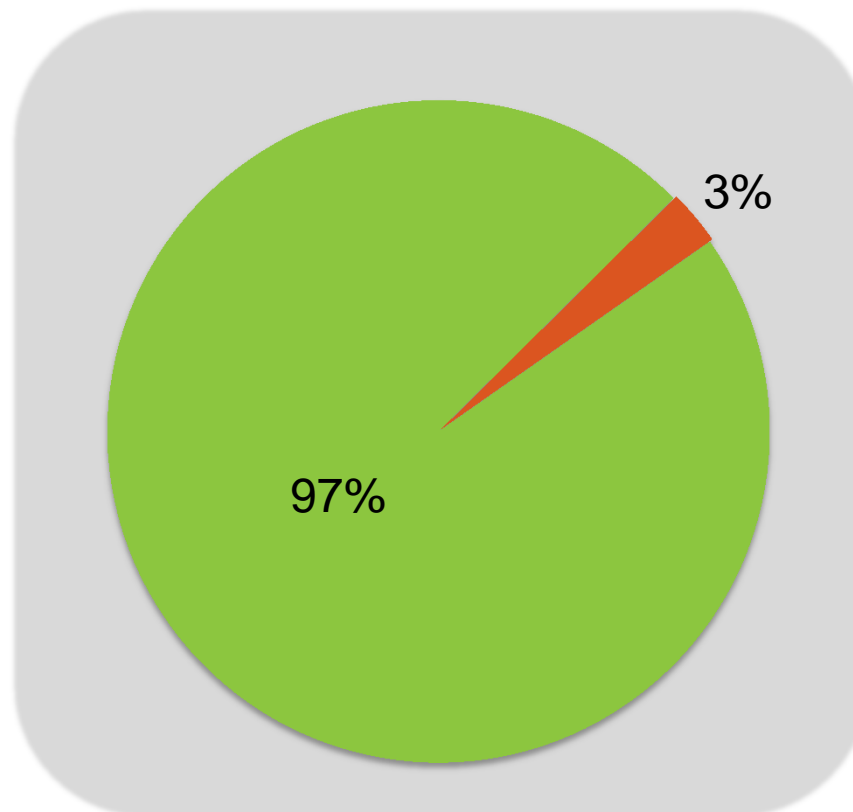
# Financial Overview

Liquidity & LT Debt as of September 30, 2011

Liquidity of \$172M



LT Debt of \$99M



■ Undrawn Revolver ■ Cash & ST Investments ■ Term Loan ■ Facility & Equipment Leases

Revolver and Term A both mature in March 2015

# Financial Overview

## Cash Flow

### SUMMARIZED CASH FLOW

	Nine Months Ended September 30,	
	2011	2010
Cash from operations	84,879	87,081
Working capital	1,242	(29,848)
Multi-client investment	(91,594)	(58,866)
PP&E Capital Expenditures	<u>(9,024)</u>	<u>(7,014)</u>
Free Cash Flow*	(14,497)	(8,647)

\*Non-GAAP Measure

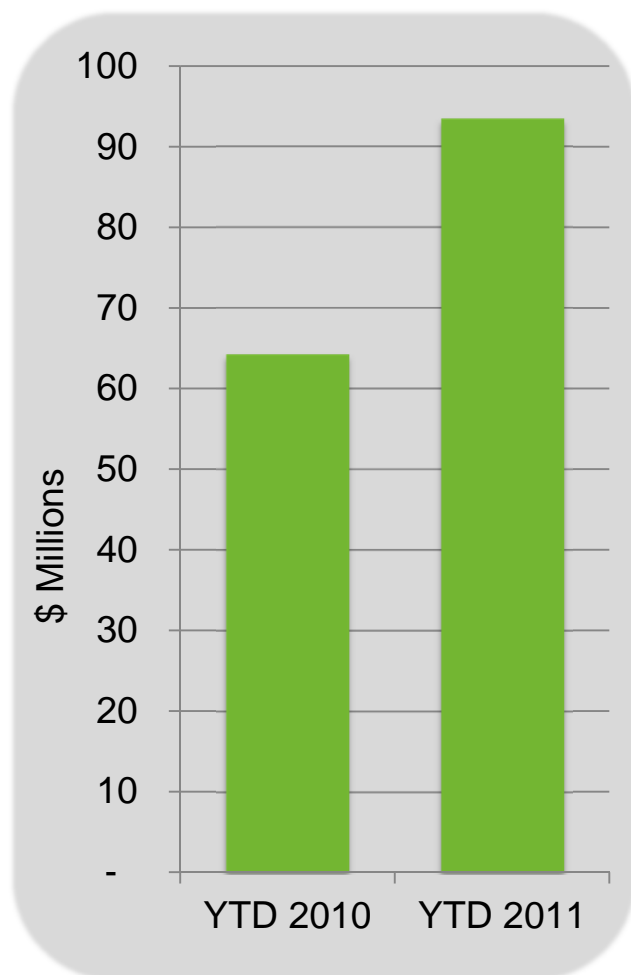
Multi-client investment of \$92 million increased 56% over prior period.

# INOVA Geophysical

## Q3 2011 Financial Overview



### Q310 vs Q311 Forecasted Revenues



- Estimated Q3 revenues of \$25 to \$29 million with operating loss of \$8 to \$10 million and net loss of \$10 to \$12 million\*
- YTD revenue increased 45% over same period last year.
- Inventory stable in Q3.
- Credit line capacity of \$27 million in place to support 2012 growth.

\* ION to share in 49% of these estimated results