Capital Market Day
Agenda

Market and Company Overview

A Focus on our Marine Plan

Sercel – From the Sensor to the Reservoir Model

R&D and our Technology Differentiation

The Plan of Action & Conclusions
Today’s Market & Environment

- Energy demand at peak levels
- Reserve replacement remains low
- Exploration is increasingly difficult
- Reservoirs continue to mature
- E&P increases to meet the challenges
Today’s Market & Environment

► Seismic spend expected to grow faster than E&P spend

► Equipment market expected to be up ~5% in 2011: benefited early and remains strong, driven by
  ▪ Innovation
  ▪ Technology intensity
  ▪ Regional activity

► Services market expected up ~20% in volume in 2011: continues to improve
  ▪ Strengthening in most regions
  ▪ Gulf of Mexico uncertainties remain
  ▪ Increasing for high-end technology
Seismic Market Growth Drivers

- Demand: Globally Diverse and Technology Driven

- Arctic Exploration
- Unconventional
- Shale Gas
- Complex Subsalt
- 4D & Permanent Monitoring
- Mature Carbonate Reservoirs
- Technology Refresh
- Pre-salt Exploration
- Frontier Exploration
- Reservoir Delineation
- OBC surveys
CGGVeritas: Uniquely Addresses the Challenges

► A history of innovation leadership

► Leading market positions
  ▪ Across most Divisions
  ▪ Across the E&P workflow
  ▪ Worldwide and local markets

► With long-term client partnerships

► A unique range of technologies across the seismic value chain
CGGVeritas Pioneering Solutions

► Offer: The only company that meets global diverse demand

- Specialized Technology & HSE
- Microseismic SeisMovie™
- Hampson-Russell
- Wide Azimuth
- Fiber Optic Life of the Field
- Sercel 428
- Ultra-High Channel Counts
- Sercel 428
- Nautilus® & Sentinel®
- A Unique Depth Imaged Library
- Global High-End Fleet
- SeaRay®
CGGVeritas Pioneering Solutions

- Offer: The only company that meets global diverse demand

- Specialized Technology & HSE
- Microseismic SeisMovie™
- Hampson-Russell
- Wide Azimuth
- A Unique Depth Imaged Library
- Fiber Optic Life of the Field
- Ultra-High Channel Counts
- Sercel 428
- Sercel 428
- Nautilus® & Sentinel®
- Global High-End Fleet
- SeaRay®
CGGVeritas Pioneering Solutions

► Offer: Subsalt Illumination

Wide Azimuth Acquisition & Imaging
CGGVeritas Pioneering Solutions

► Offer: Carbonate Reservoir Characterization

- Ultra High-Resolution / Productivity
- Imaged Library

Wide Azimuth Fiber Optic Life
- Sercel 428
- Specialized Technology & HSE
- Hampson-Russell Global High-End Fleet
- Microseismic SeisMovie
- Ultra High-Resolution / Productivity
CGGVeritas Pioneering Solutions

► Offer: Unconventional Reservoir Characterization / Fracture Analysis

Hampson-Russell Software and Services

Sercel 428

Ultra-High Channel Counts

SeaRay

Global High-End Fleet

Microseismic SeisMovie

Hampson-Russell Software and Services
CGGVeritas Pioneering Solutions

► Offer: Permanent Monitoring

- Wide Azimuth Fiber Optic Life of the Field
- Ultra-High Channel Counts
- Sercel 428
- Specialized Technology & HSE
- A Unique Depth Imaged Library

SeaRay
Nautilus & Sentinel

Hampson-Russell Global High-End Fleet

Microseismic
SeisMovie

Offshore Life-of-the-Field Fiber Optic
Images Courtesy ConocoPhillips

Onshore SeisMovie™

4D SAGD
Leadership: In Most Segments

Sercel – with over 60% market share and leading profitability

Processing & Imaging – innovation leadership with over 35% market share
Leadership: In Challenging Environments

Unrivaled position and leadership in the Middle East

Unique technology and expertise – a dominant position in the Arctic

HSE Excellence
Leadership: Across Exploration and Production

The most recent, high-end data library – generating many of the latest large discoveries

Gulf of Mexico:
- Tiber
- Jack
- Kaskida
- Julia
- Great White
- Big Foot

Preferred supplier for reservoir property analysis – a growing seismic market
A History of Innovation

Firsts for CGGVeritas

- Creation of CGGVeritas
- 2D Innovation
- 3D Innovation
- Sercel 408
- Sercel 428
- Nautilus
- Kirchhoff PSDM
- Long Offset Marine Acquisition
- 3D SRME/CBM
- 2010
- 2020
- 1930
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000

Reflection Seismic
Digital Innovation
Processing on Micro
RTM 3D Gather
BroadSeis
There are Factors That Must be Addressed

► External factors
  ▪ Uncertainties in the Gulf of Mexico
  ▪ Shift from conventional to unconventional in N. America
  ▪ Overcapacity in the Marine market

► Internal factors
  ▪ Our overall costs base is too high
  ▪ Complexities and inefficiencies in our post merger organization
  ▪ Need for operational optimization
  ▪ Full breadth of our technology needs to be further leveraged
Moving Forward...
Fully Leveraging our Advantages

- Focused on three strategic initiatives
  - Operational Performance
  - Technology and Commercial Differentiation
  - Cost Reduction
Operational Performance: A Step Change

► Marine

- Three strategic initiatives to close the Operating Income Gap
  - Reduce maritime non-quality costs
  - Reduce cost base and seismic non-quality costs
  - Leverage our differentiators
- And, accelerate fleet transformation

► Land

- Strengthen and maintain our business model
  - Select markets, long term partnership, high-end position
- Optimization of our activity in N. America to match seasonality
- Streamline projects start up
Operational Performance: A Step Change

► Data Library
  ▪ Limit further exposure in:
    ▪ Conventional North American gas market
    ▪ Conventional Gulf of Mexico lower-end market
  ▪ Develop global positions in promising basins and non-conventional plays

► Processing, Imaging and Reservoir
  ▪ Continue to develop the high-end position
    ▪ People, R&D, accelerating technology innovation
  ▪ Further extend advanced seismic reservoir characterization leadership

► Sercel
  ▪ Further capitalize on our install base
  ▪ Expand manufacturing knowhow
  ▪ New technology, increased R&D, stay ahead of the curve
Technology Differentiation: Full Advantage

Equipment
- Unite
- Nautilus
- SeaRay

Marine
- X-Bow Vessels
- Variable Depth
- Arctic Expertise

Land
- HPVA
- V1
- EmphaSeis

Processing Reservoir
- CBM
- RTM Gathers
- Emerge

Data Library
- Wide-Azimuth
- Santos Cluster
- Shale Gas

...and more to come

BroadSeis™
BroadSeis: Innovation Across All Divisions

**Equipment Division**
- Ultra low noise solid Sentinel streamer
- Nautilus 3D steering

**Marine Division**
- Acquisition with a calculated streamer shape to maximize quality

**Processing, Imaging & Reservoir Division**
- Revolutionary 2D and 3D processing “making the ghost a friend”, enhancing the seismic signal

Courtesy of Total, the Republic of Gabon and Cobalt
BroadSeis Benefits?
A Picture is Worth 1000 Words

Conventional
BroadSeis Benefits?
A Picture is Worth 1000 Words
BroadSeis Benefits?
A Picture is Worth 1000 Words
BroadSeis Benefits?
A Picture is Worth 1000 Words
BroadSeis: A Stepping Stone for the Future

► A catalyst for future technology innovation
  ▪ Generalize broadband approach
  ▪ Full wave inversion
  ▪ New disruptive acoustic sources

► An opener of business opportunities across the full range of our seismic activities
Clearer Reservoir Characterization

Dukhan Field (Qatar)

- CGGVeritas delivered High-Resolution data for Reservoir Characterization
  - Identifying the static and dynamic rock and fluid characteristics
  - Assessing uncertainties

- Further R&D - Innovation in progress
  - No-DAF, full resolution processing and surface / well data fusion to reach a higher level of reservoir definition
  - 3D numerical modeling of reservoir properties with advanced data fusion and coupling of seismic inversion with dynamic flow simulation

*Ultimately illuminating a level of detail in the reservoir that was not possible earlier*
Expand Further in the Value Chain:
Maximize production & reduce risk in unconventional shale reservoirs

A mixture of water, sand and chemical agents is injected at high pressure in the well.

The challenge: prediction and control of fracturation.

What CGGVeritas brings:
- Seismic Reservoir Characterization
- Stress & Fracture modeling
- Real-time Microseismic

The shale is fractured by the pressure induced in the well.

Based on graphic by Al Granberg
Cost Reductions: Four Strategic Axis

- A focused and lean organization
- Reduce SG&A
- Optimize supply chain
- Reduce costs, and particularly the cost of non-quality
A Focused and Lean Organization

Board of Directors and Chairman

CEO

Sales & Marketing / Geomarkets
Technology
Finance & Strategy
Human Resources
General Secretary / HSE
Global Operational Excellence

Marine
Land
Processing, Imaging & Reservoir
Multi-Client & New Business Ventures
Equipment
In Summary

 ► Cost reductions and performance enhancements will lead to a positive impact on operating income expected to reach $150 million by end 2012
  ▪ Cost reductions estimated at $75 million driven by:
    ▪ Streamlined organization
    ▪ SG&A and overhead reductions
    ▪ Supply chain improvements
    ▪ Lower non-quality costs
  ▪ Performance improvements estimated at $75 million driven by:
    ▪ A significant contribution from Marine
    ▪ The positive impact from technology and commercial differentiation

 ► 2011 Capex at $600 million, with $85 million for the Oceanic Sirius

 ► One off exceptional charges expected in Q4 2010 of up to $130 million
  ▪ Multi-client net book value adjustments of $90 million
  ▪ Restructuring charges of $40 million

Our goal with this program is to generate positive cash flow at a cycle low and to...
Fully reap the advantages of our unique portfolio