



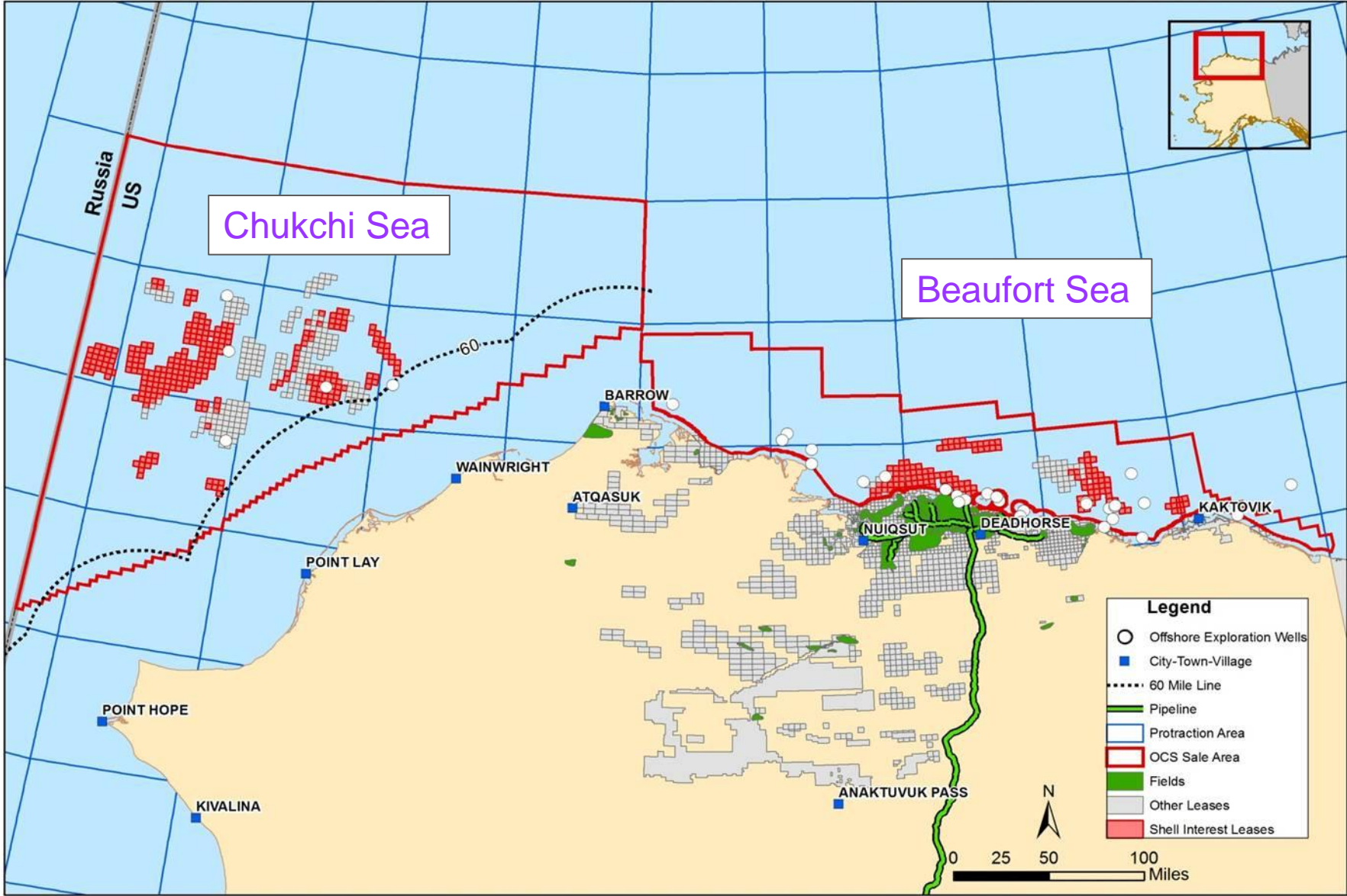
Shell Beaufort and Chukchi Sea Program Update

Cam Toohey
Shell Alaska

September 2011



Chukchi and Beaufort Seas



Shell's 2012 Drilling Plan

- Up to three wells in Chukchi
- Up to two wells in Beaufort
- Two drilling rigs working in parallel



World Class Oil Spill Response (pre-Macondo)

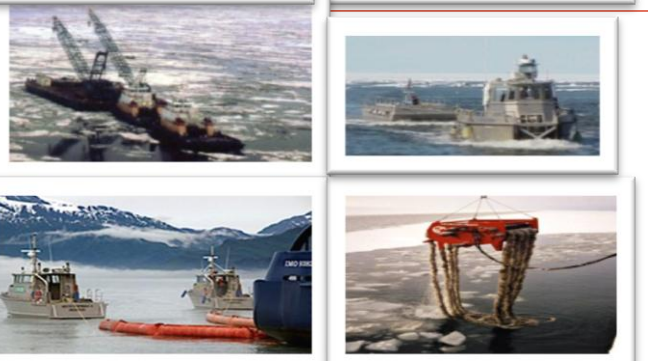
Offshore Recovery

Subsea Containment System
OSR Vessel (OSRV) Nanuq with Skimming Vessels
Arctic Tanker
Vessel of Opportunity
Booms, Skimmers, and Pumps



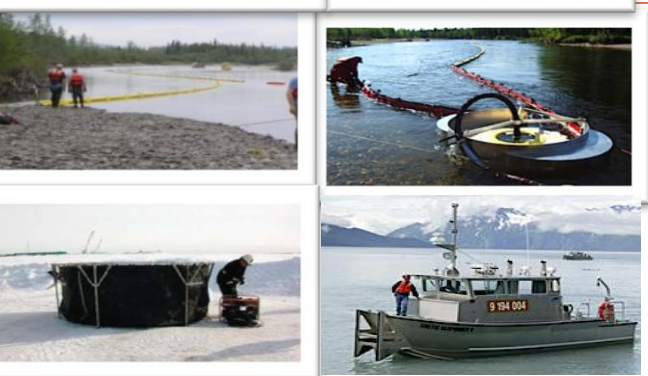
Nearshore Recovery

Oil Spill Response Barge (OSRB)
Skimming Vessels
Mini Barges
Booms, Skimmers, and Pumps



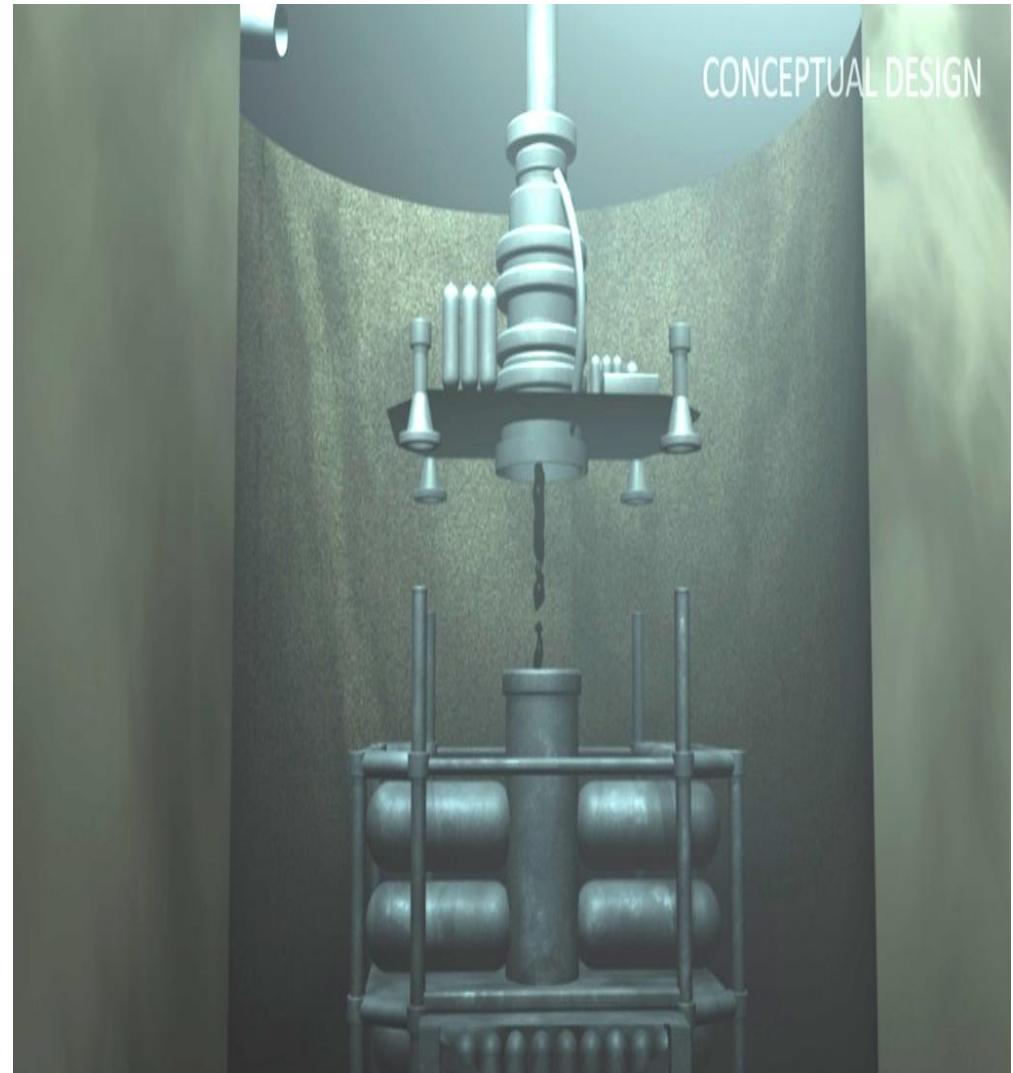
Onshore Recovery

Pre-staged Equipment and Personnel
Protection Booms
Landing Craft and Utility Vessels
Skimmers



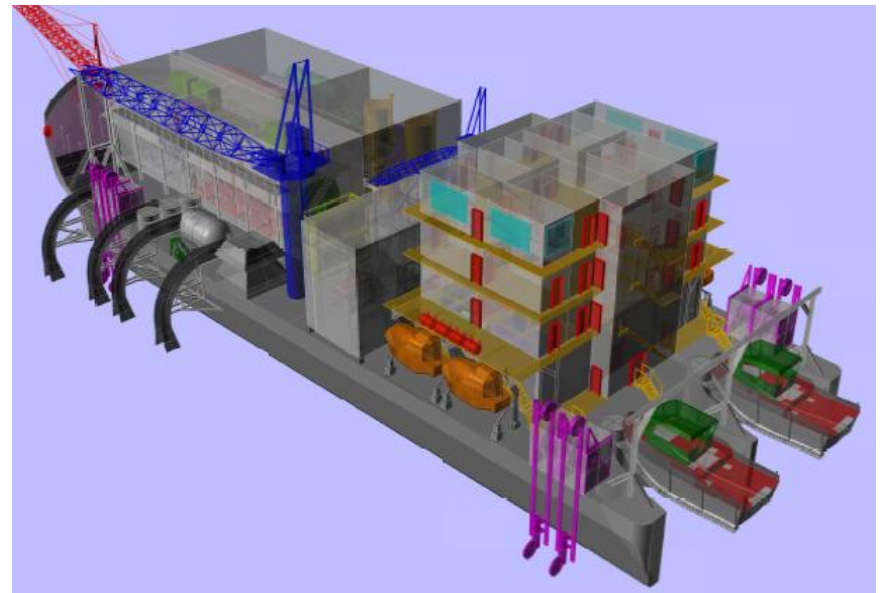
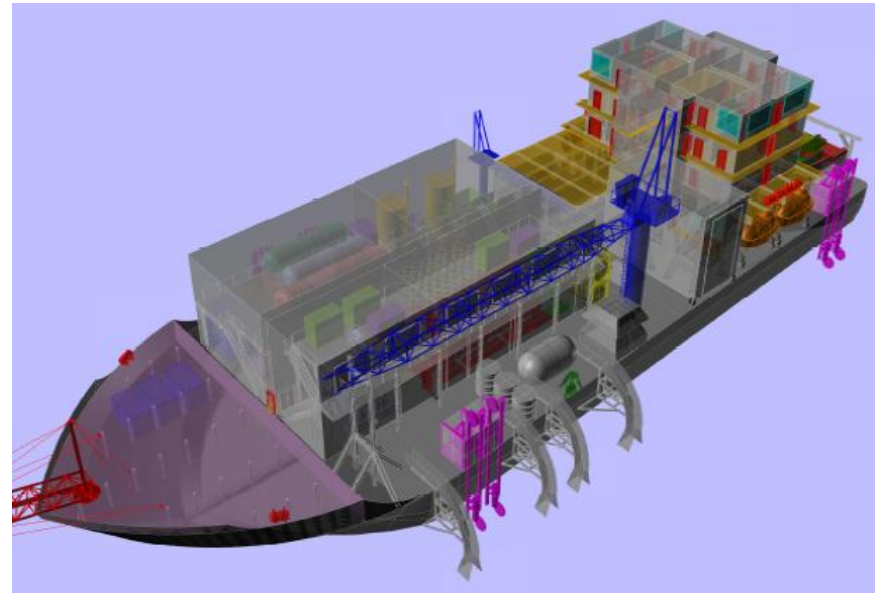
All-Systems Check

- Shell Implements New Safety Measures Post-Macondo:
- Capping and containment system
- Enhanced BOP
- More frequent testing



Containment System

- Developing Arctic Containment System
- System provides a toolkit to capture oil for multiple potential well control scenarios
- Primary components:
 - Subsea – umbilical, well intervention connections, ROV
 - Containment vessel
 - Processing - separation equipment

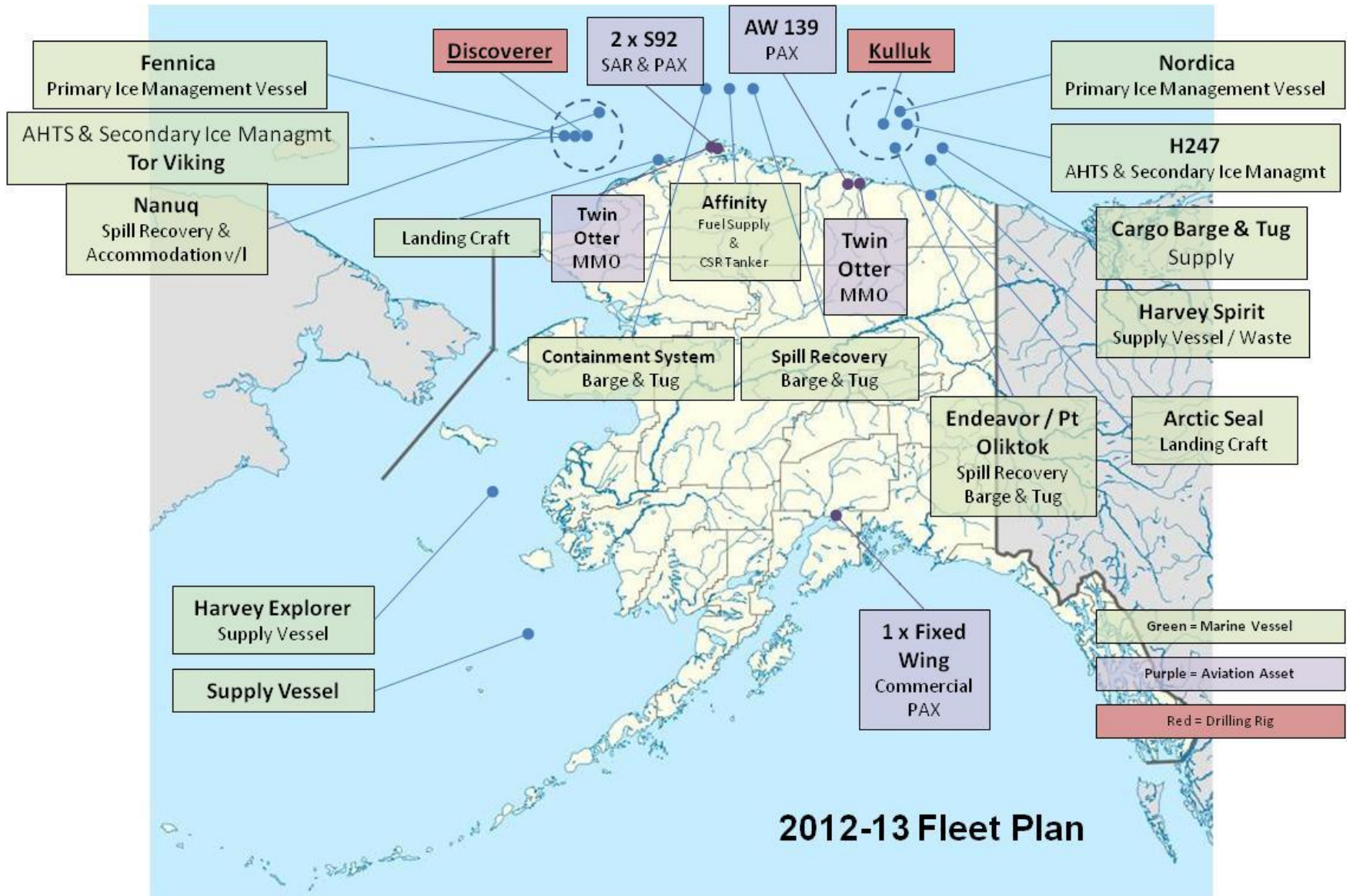


Building for Success

- Kulluk upgrades in Seattle, WA
 - \$100+ million
 - Over 400 workers
- Hull 247 in Houma, LA
 - \$150+ million
 - Over 900 workers
 - 360 x 70 feet
- Capping & Containment System
 - \$200+ million
 - Alaska Native Corporation contracts
- Arctic assets in place



Logistics – At a Glance



Permitting Status

- July 1, 2011 - EPA delivers draft air permits for Noble Discoverer
- July 22, 2011 - EPA delivers draft air permits for Kulluk
- August 4, 2011 - BOEMRE gives conditional approval on Beaufort Sea (Camden Bay) POE
- Cautiously optimistic about 2012 drilling



BOEMRE

Materiality: The Size of the Prize

- USGS: Alaska OCS = 25 Billion Barrels of Oil
- ISER/Northern Econ: Alaska OCS = 54,000 Jobs for 50 Years
- \$145 Billion in Payroll
- \$200 Billion in Federal Treasury
- Estimated 700,000 new barrels of oil per day for TAPS



A CULTURE OF EXPERIENCE

POSITIVELY PREPARED

Shell has a long, proud history in Alaska – most of it as a pioneer in offshore exploration, drilling and production. In fact, **Shell has successfully drilled and produced from offshore wells across the state for decades** – in the Beaufort and Chukchi Seas in the 1980s and 1990s and for nearly 35 years in Cook Inlet – all without an incident. That experience gives us great confidence that we can do it again.

Employees like Les Skinner also inspire confidence. An oil rig roustabout when he first started out, Les is now a professional engineer with more than 45 years of oilfield experience. Today, **Les is part of our experienced team charged with designing wells and integrating well controls and relief well capabilities into Shell's Alaska exploration programs in the Chukchi and Beaufort Seas.**

Shell's reputation as a global offshore leader is hard earned. Preparation, vigilance and continuous learning are all part of responsible development. Les and others like him prove that experience is not just measured in years, but by what those years have taught you.

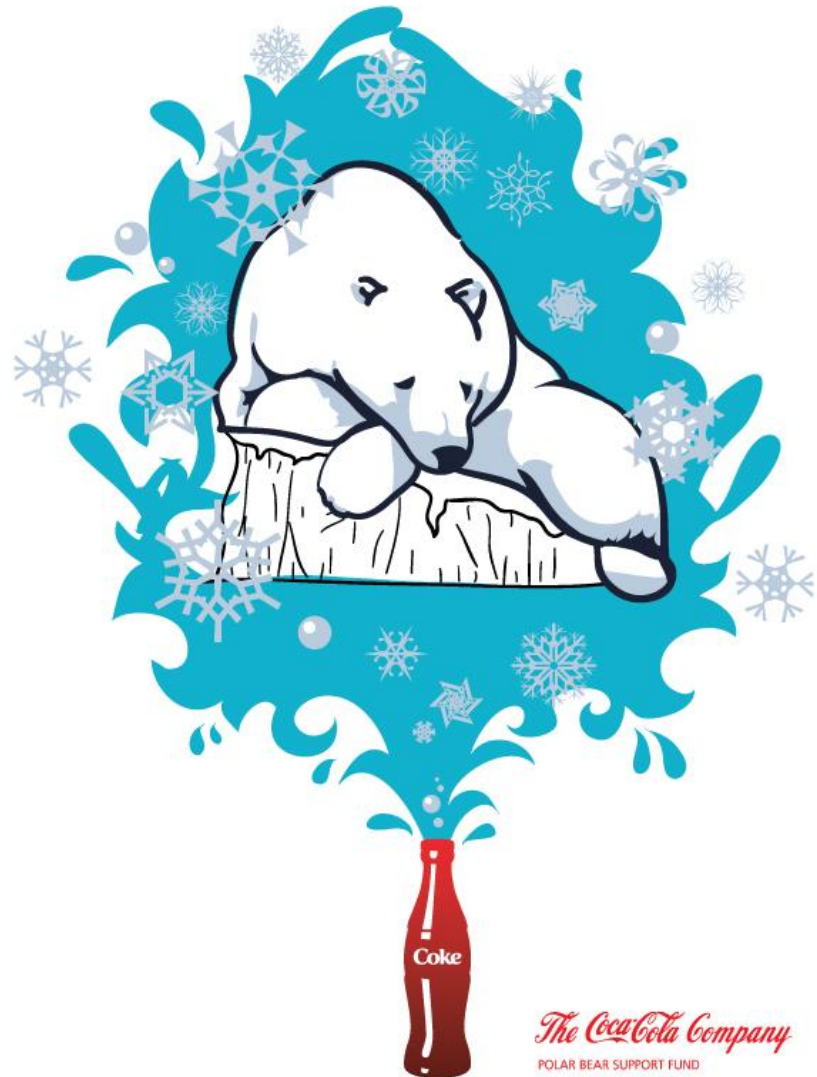
As Alaska writes the next chapter in its oil and gas history, Shell stands ready to be a major contributor – by providing thousands of jobs to Alaskans, energy security for America and new oil for the Trans-Alaska Pipeline.

That's an experience we could all benefit from.



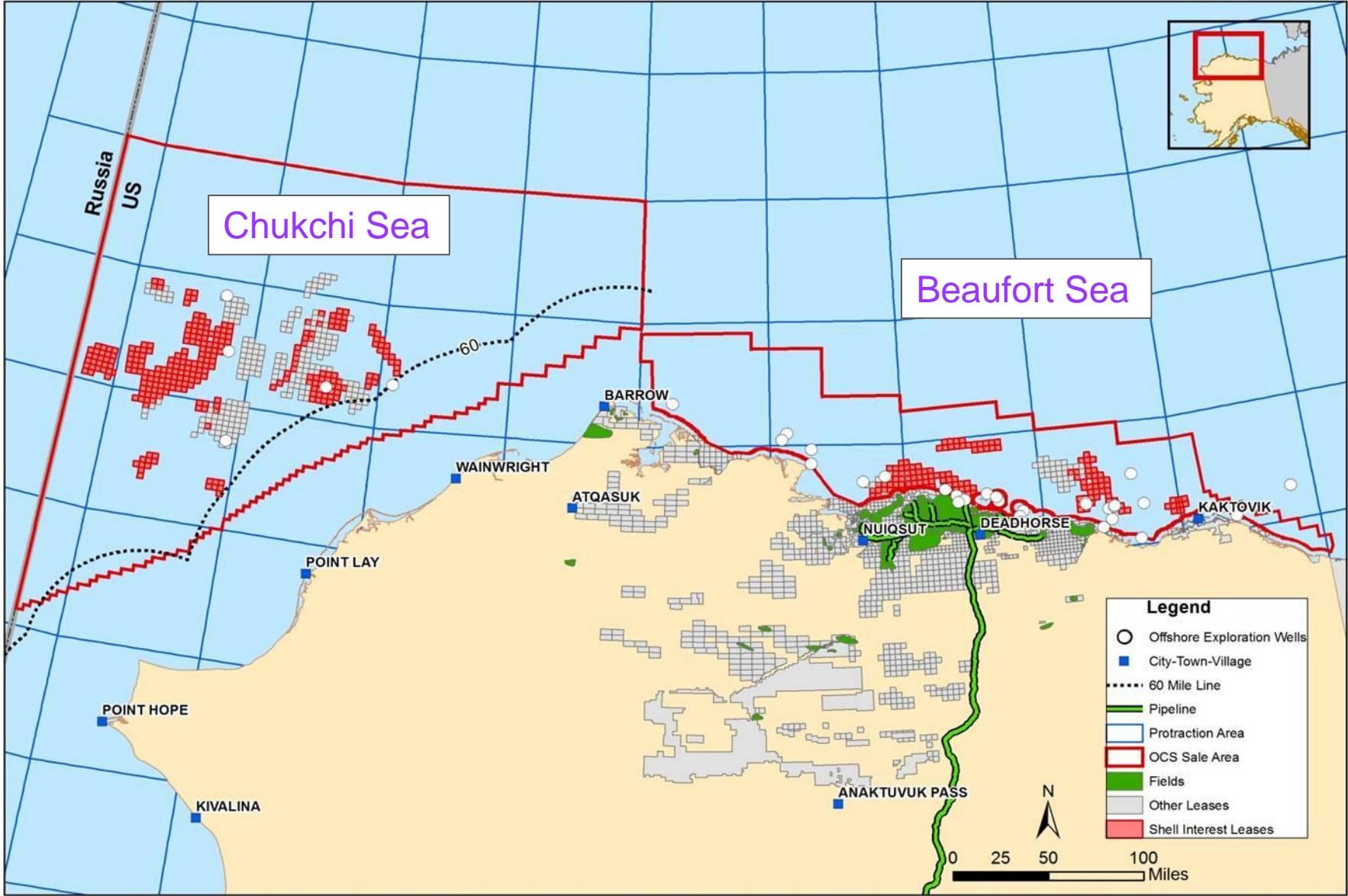
The Path Forward towards 2012 Drilling

- Ramp-up costs significant
- Frequent “tent checks” to measure confidence
- Arrival of timely permits to be watched closely
- OCS opponents ramping up



The Coca-Cola Company
POLAR BEAR SUPPORT FUND

Chukchi & Beaufort Seas – Planning for Success



Pipeline route selection considerations

- Many factors to be balanced in determining a pipeline route.
- Must consider, in no particular order, the following examples:
 - Land ownership
 - Stakeholder input
 - Hydrology
 - Threatened and Endangered species / critical habitat
 - Subsistence activities
 - Potential onshore development
 - Existing or planned infrastructure
 - Cost
 - Environmental sensitivity
 - Ability to respond to oil spills
 - Geotechnical (soil, permafrost, etc)
 - Shore crossing location
 - Elevation; gravel & water sources



Ice resistant winter platforms



Logistics Solutions

- Variable environmental conditions requires a toolbox of solutions
- Will consider all options & combinations

