



Great Bear Petroleum LLC

Great Bear Petroleum Update

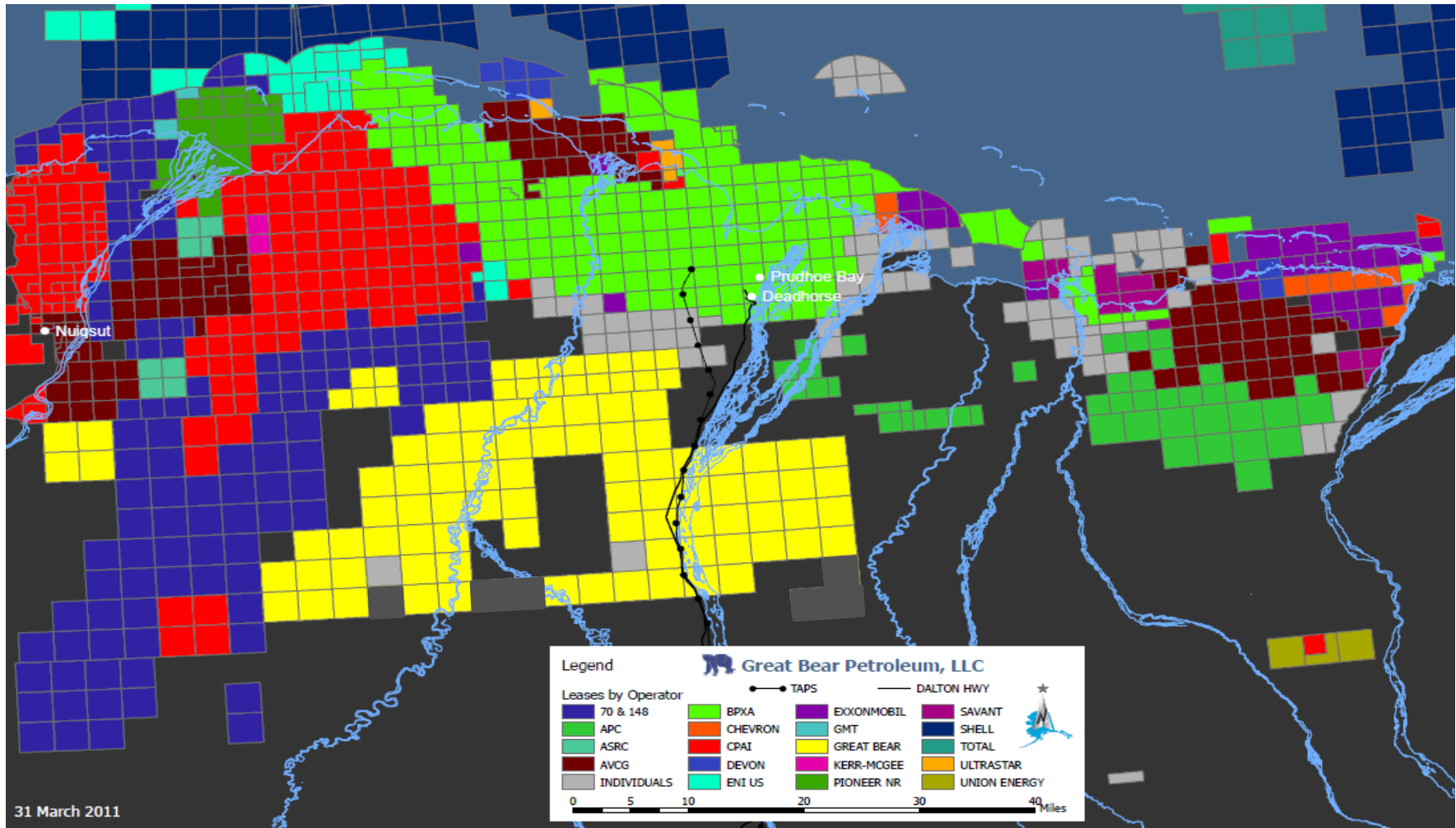
***Presentation to the State of Alaska
House Resources Committee***

Anchorage, November 1, 2011



Regionally Vested Lease Holders

The Solution to Alaska's Grand Challenge Likely Lies on this Map





North Alaska Shale Resource Play Realization: Challenges and Business Development Opportunities

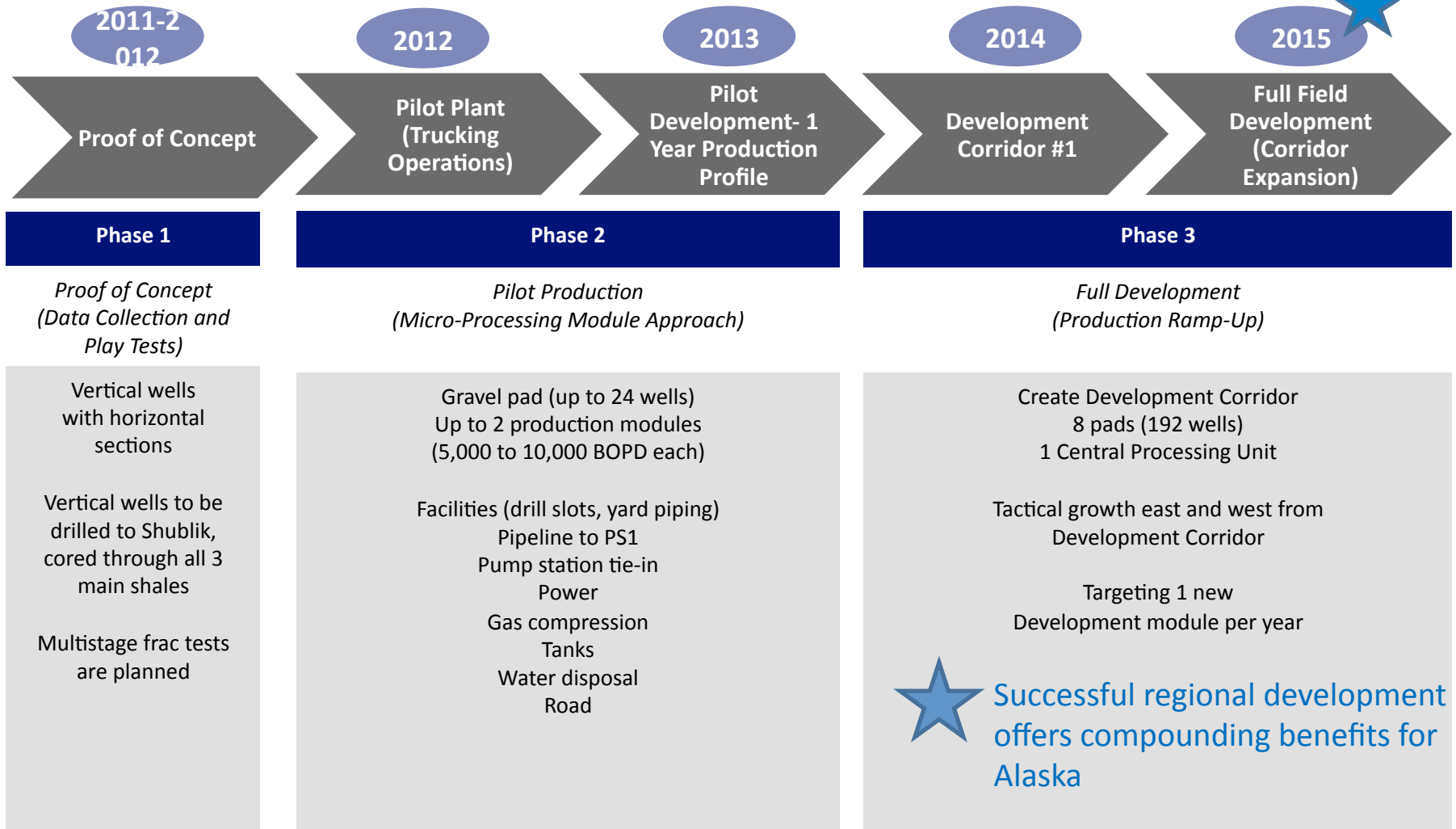
- Gravel Supply: *Regionally available*
- Water Supply: *Extensive subsurface brackish aquifer sources*
- Sand (Proppant) Supply: *Intra-State opportunity and global suppliers*
- Gathering Systems (Tanks/Trucks or Pipelines or Both): *Long term, skilled employment*
- Fluid Disposal/Recycling: *Existing and new facilities*
- Gas use/disposal in area: *Power generation, liquids and longer term gas line export*
- Surface Impacts/Dust and Emissions: *AC Rigs and multi-well development pads*
- Centralized Service Area with power source: *Modular startup transitioning to centralized*
- Power distribution – Stand alone per pad; through power lines: *“Utility” grid corridors*
- Use of Insulation and composite pads to extend ice pads and roads: *Not fit for development*
- Staging area for pipe, equipment, housing, warehousing: *Existing facilities and purpose built*
- Road and bridge requirements: *Design to minimize surface impact*
- Fuel Refining, Storage and Distribution: *Existing facilities and custom*
- Drinking Water Supply: *Multiple options identified included desalination of subsurface water*
- Sewage Treatment/Disposal: *Existing and custom in-field facilities planned*
- Trucking Impacts: *Maximize development design efficiencies*

Challenges are Opportunities that inspire and drive innovation



Plan of Development

A Staged Development Approach



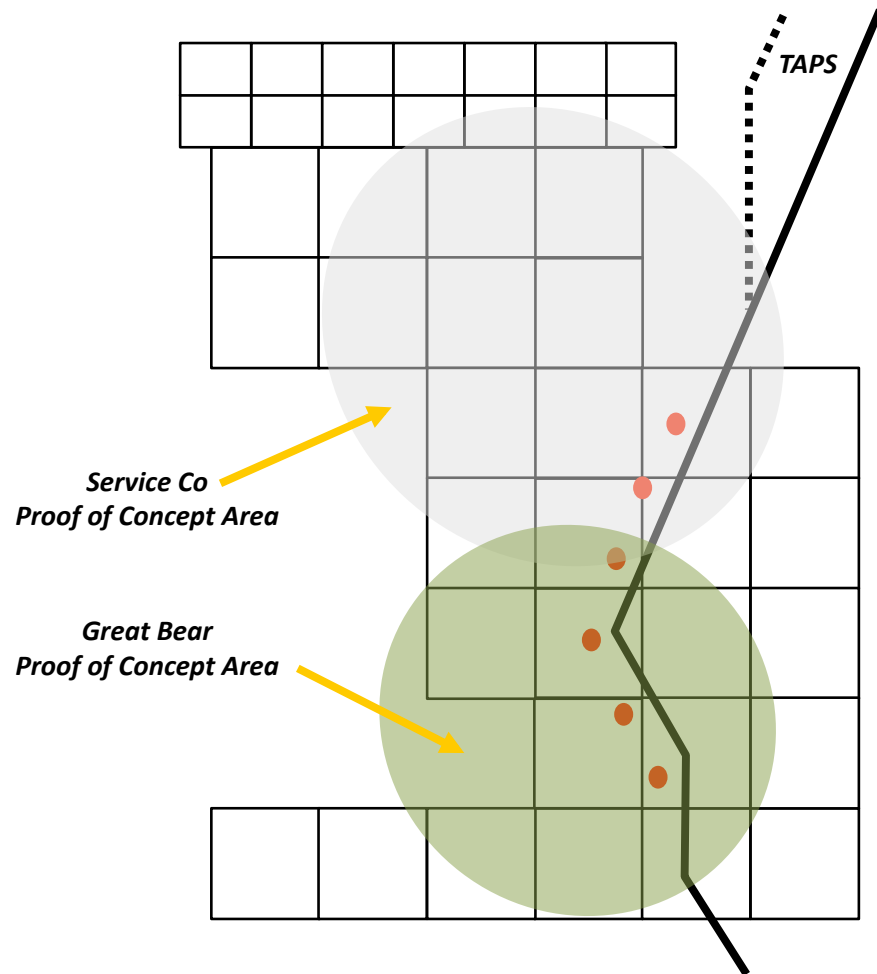
Planning for success and participating in securing Alaska's future



Plan of Development

Proof of Concept – Dual Multi Well Programs

- 2 “Proof of Concept” work programs occurring simultaneously
 - Service Co-led program
 - Great Bear-led program
- Ascertain the productive capacity of the formations
- Determine processing requirements for oil, water and gas
- Drilling, coring, fracture stimulation and evaluation of vertical & horizontal wells
- Utilize disturbed gravel on existing spur roads off the Dalton Highway
- Permitting underway at 6 locations
- Evaluate reservoir characteristics
- Evaluate mechanical properties from core
- Determine in-situ stress
- Well design (vertical/horizontal/multi-lateral)
- Completion design (liner/cement/stimulation)



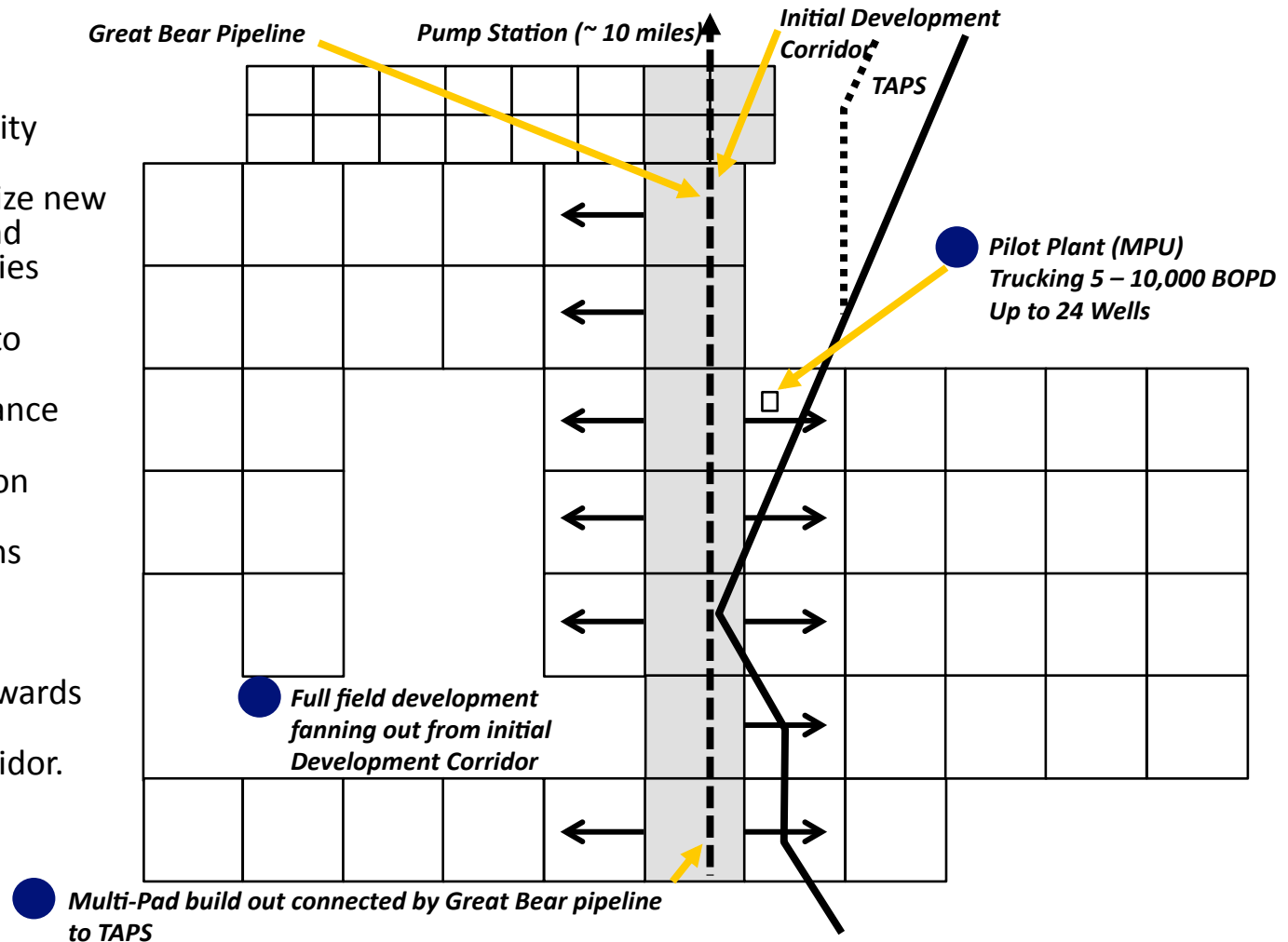


Plan of Development

Phased Development Approach – 3 Main Phases

Key Principles

- Initially focus activity adjacent to Dalton Highway to minimize new surface impacts and maximize efficiencies
- Phased approach to better understand reservoir performance
- Establish production potential and then optimize operations (MPU vs CPF)
- Accelerate full development eastwards and westwards of Development Corridor. F- full CPF concept

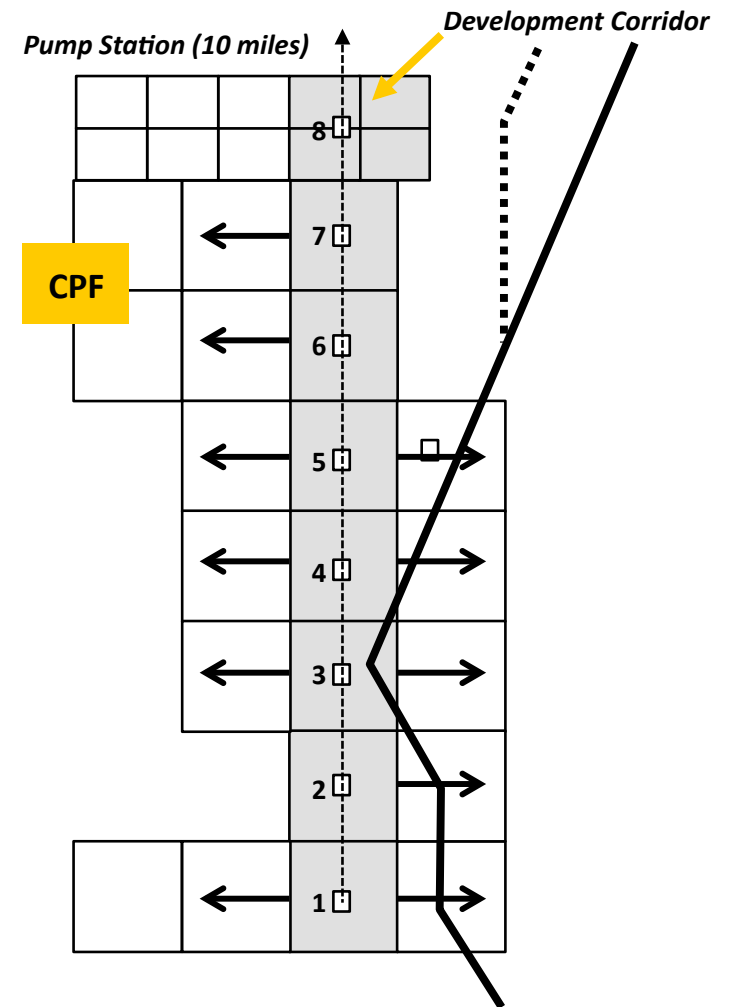




Development Corridor Schematic

Phased Development Fanning Out From Corridor

- Create Development Corridor away from Dalton Highway
- Move from trucking operations to pipelines to PS1
- Phase from MPU to CPF concept
- Each pad manifold building contains single well test separation facilities with associated metering and gas lift distribution
- Production piped to CPF which is combined with production from other pads
- Oil, gas, water and sediment separated at the CPF and tied into TAPS
- Water disposed down dedicated Class II liquid disposal well and produced gas compressed on site and used for power (conservative case assumes excess volume piped to Prudhoe)
- 8 pads, with 24 wells/pad = 192 wells
- Central processing facility
 - Field power generation
 - Liquid disposal
 - Major camp office/warehouse
 - Series of divert tanks
 - Infield roads/power/telcommunications
 - Gas compression
- 20 mile 12" oil pipeline
- 20 mile 4" gas line to Prudhoe Bay
- Connected PAD system
- Ultimately increase production to greater than 100,000 BOPD peak per corridor





Drilling and Completion Operations

Safety and Environmental

Safety

- Safety Management System in place
- Site Specific Safety Plan will be written
- All onsite workers will be certified as required
- Safety briefings will be performed before each task
- The North Slope is one of the safest working environments in the world

Environmental

- All systems will be self-contained
- The target will be zero fluid discharge
- Every fluid drop will be reported and removed for disposal
- ACS will be employed to respond to potential large spills
- Extra booms and spill cleanup equipment will be available
- All workers will be environmentally trained
- Regulatory Spill Plan has been submitted

Note: Our Safety Manager or Drilling Manager can go into as much detail as required.

We are committed to operating in a safe, environmentally responsible manner and desire to be recognized as a great corporate citizen by the State and the communities where we do business.