Cementing
Reasons for Cementing the Casing

- Seal formations penetrated
- Protect casing from burst, collapse, drilling shock, and corrosive fluids
- Maintain control of well
Cement Applications

- Conductor casing
- Surface casing
- Intermediate casing
- Production casing
- Casing shoe
- Reservoir

© 2010 Chevron
Fluid Flows

- The following fluid flow diagrams, while very basic, demonstrate the typical cement job sequence.
Circulating to condition drilling fluid
Pumping Spacer Ahead
Drop bottom plug and Pump Lead Cement
Drop Top Plug & Start Displacing with Water
Cement Bond Log - Production Casing
Pressure Testing

- Production casing is pressure tested to above maximum treating pressure prior to perforating.
- Bradenhead pressure between production and surface casing is continuously monitored during fracturing operations.
- A change in the Bradenhead pressure during the fracturing operations may shut down the operation and indicate wellbore issues.
- Chevron has not had a Bradenhead pressure indicated issue in the Piceance Basin since starting fracturing operations in 2006.
- In the Piceance Basin, Chevron has had one production casing not pressure tested prior to fracturing that required repair.