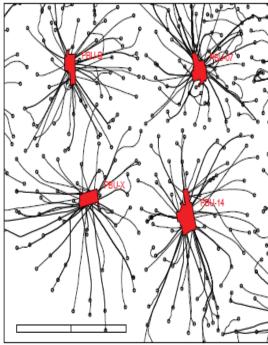
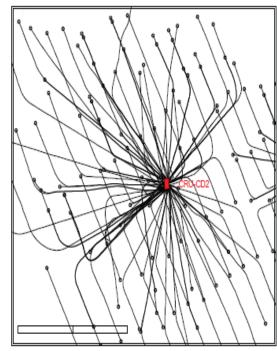
## Drilling technology

Advances in drilling technology have greatly advanced the reach of modern exploration and development wells.

- The Alpine field discovered in 1994 and delineated in the late 1990's was the first North Slope field to be developed exclusively with all horizontal wells, both producers and injectors.
- The use of multi-lateral technology has improved the economics and oil recovery of the West Sak and Schrader Bluff formations (Shallow Sands)
- Horizontal and multi-lateral drilling technology represents a cost-effective method to develop remaining oil or oil located in isolated but closely stacked sandstones separated by shale.
- The use of multi-lateral wells helps to keep the numbers up. Each lateral counts as a separate well so comparing activity to a time when laterals were not common may not give an entirely accurate picture. On the other hand, extended-reach horizontal drilling also means that today, the same level of production can be achieved with a fewer number of wells.
- This means not only that more complicated stratigraphic plays can be developed, but also that any formations can be more efficiently drilled and produced with a smaller number of wells.



Prudhoe Bay



Alpine

Division of Oil and Gas, 4/2/2010







