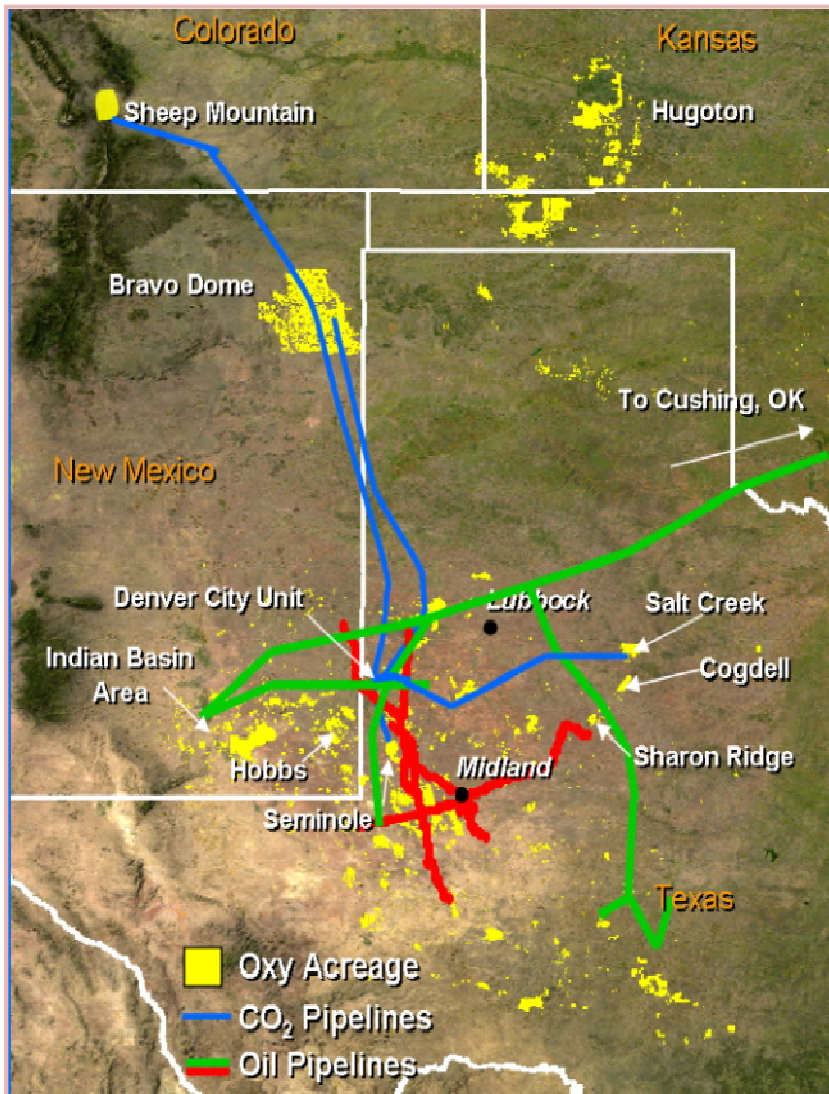


OCCIDENTAL PERMIAN CO₂ EOR BUSINESS

Jim Briscoe - Sr. VP Development, Occidental Petroleum
Carbon Sequestration Leadership Forum
Riyadh, Saudi Arabia
November 4, 2015



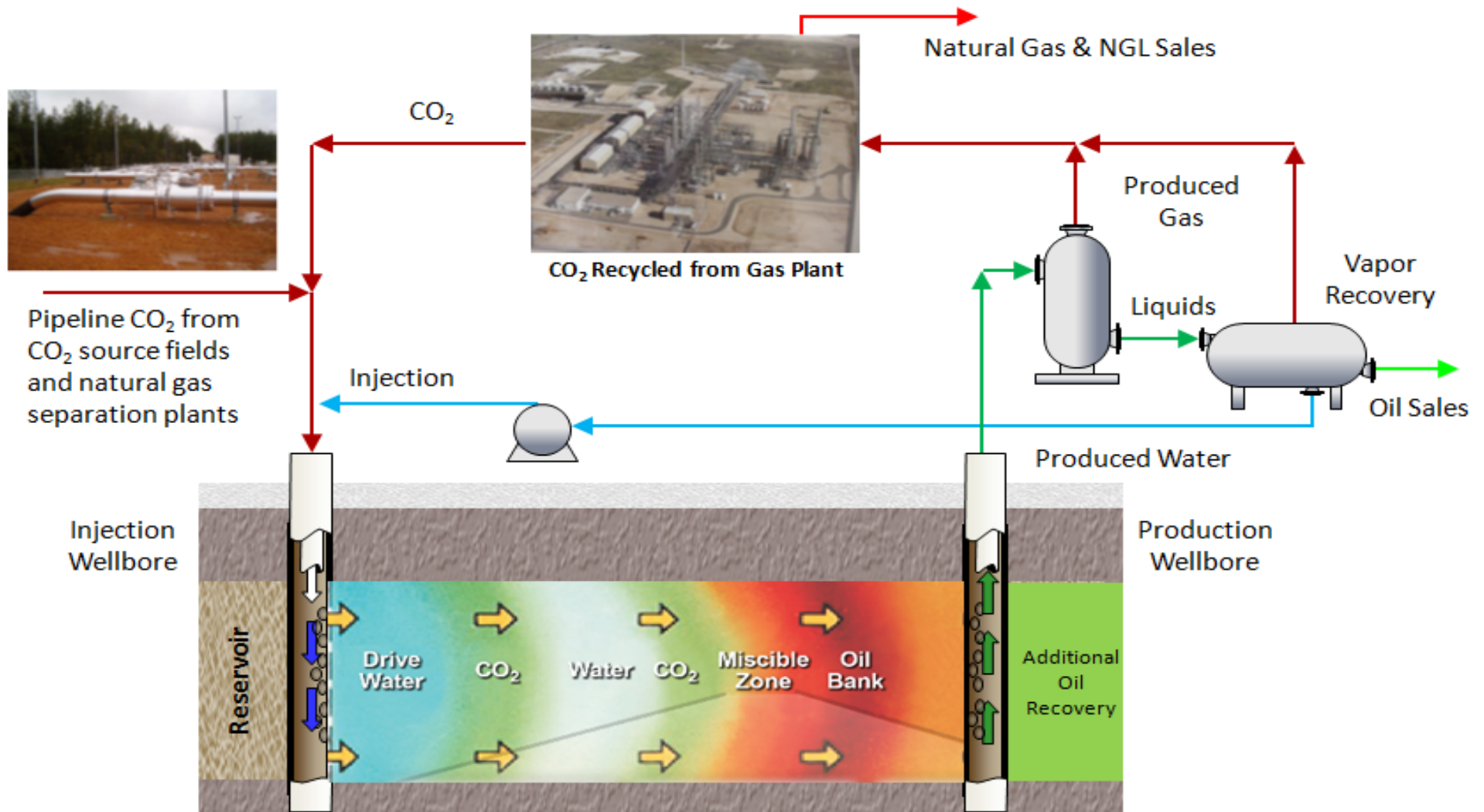
Occidental Permian Operations



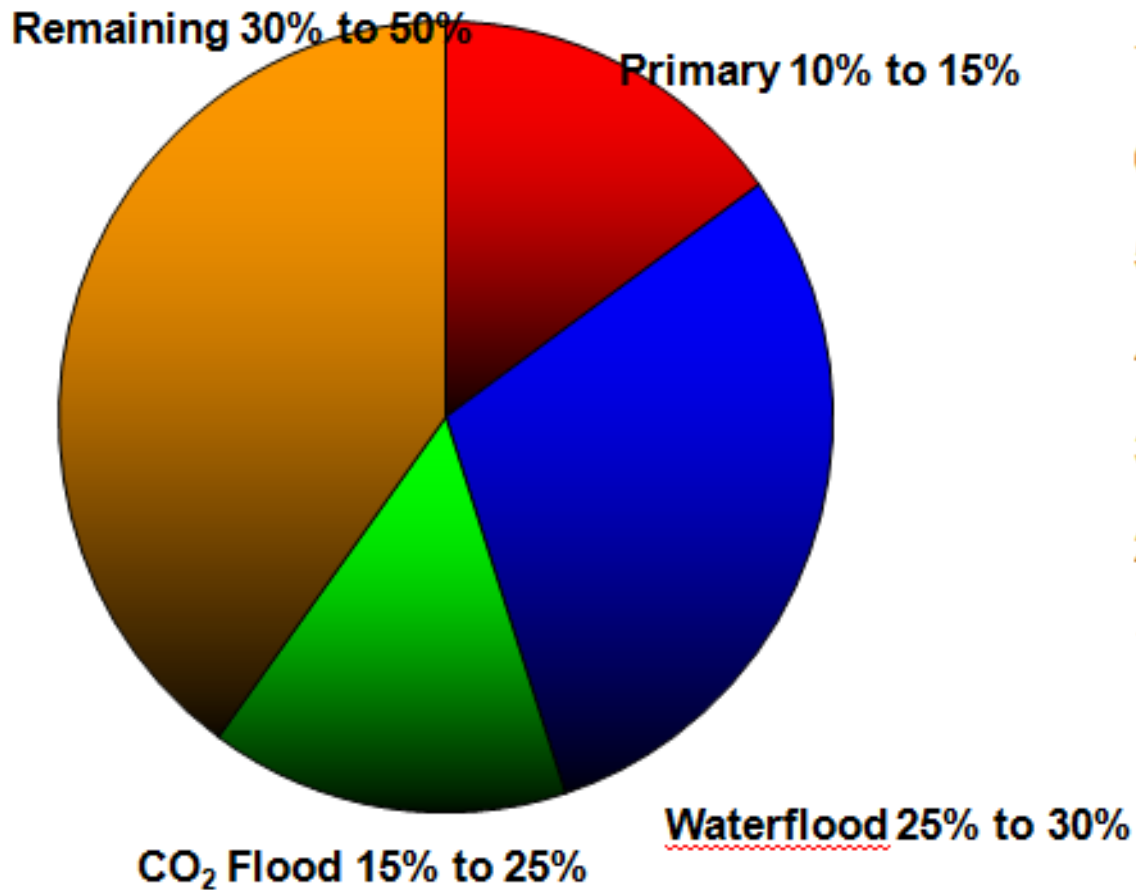
- Largest oil producer in Permian Basin
- 2014 net production of 222,000 BOEPD with 147,000 BOEPD from Permian EOR
- Largest CO₂ flood operator in the world with 1.92 bcf CO₂ injected each day
- More than half of the CO₂ floods in Permian Basin are Oxy Operated (60+ total floods)
- Around 74% of the Permian EOR production comes from fields with active CO₂ flooding
- Oxy Permian drilled 557 wells in 2014 with 277 wells drilled for EOR



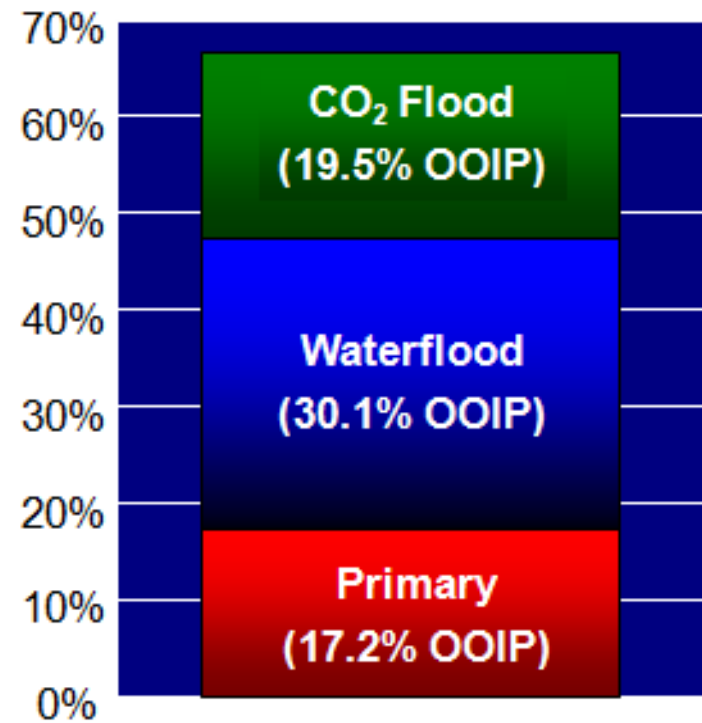
CO₂ EOR Process



Typical Recovery Efficiencies

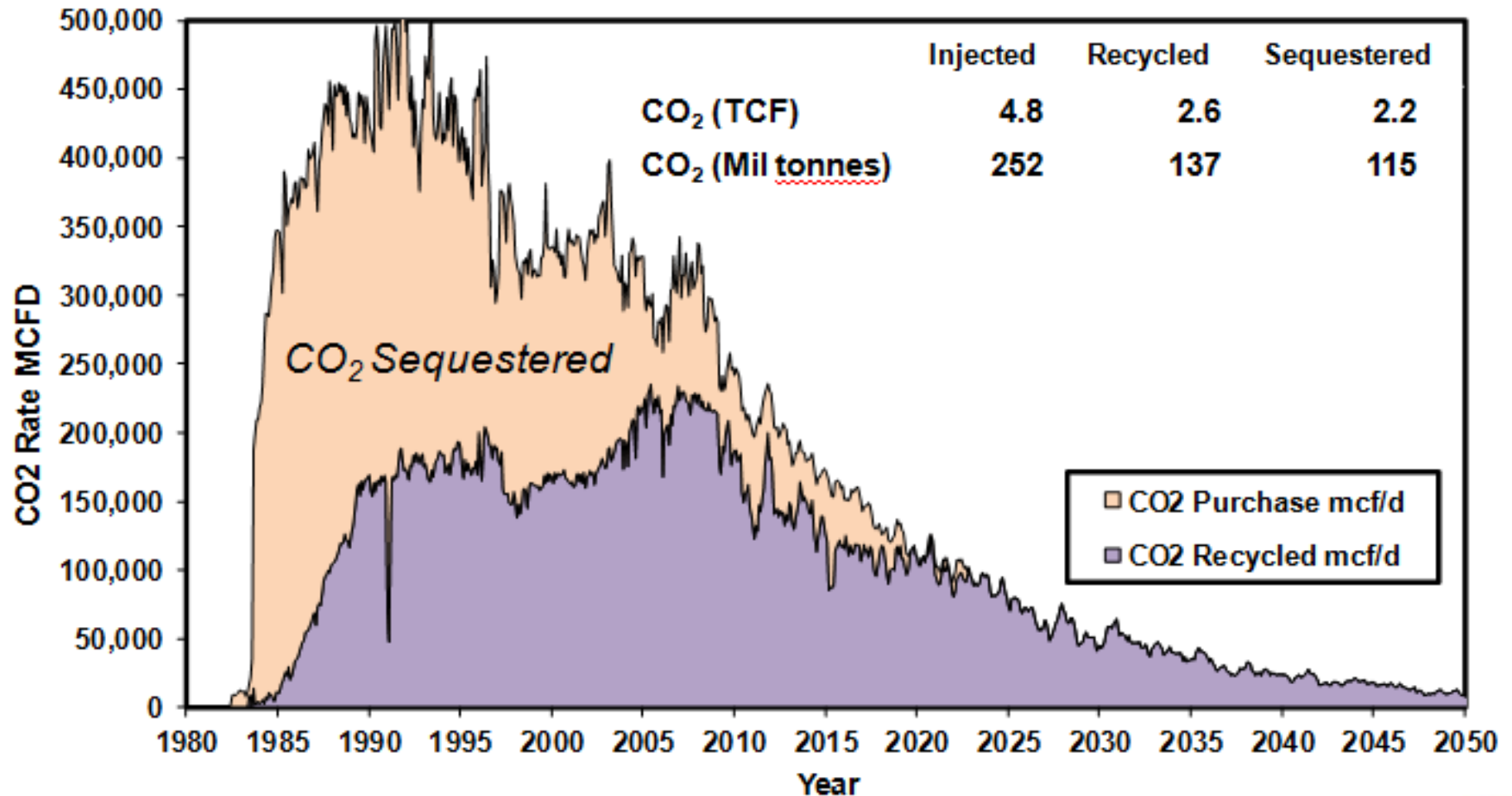


Denver Unit, Wasson Field
(San Andres Formation)
~2 Billion Barrel STOOIP



CO₂ Requirements – Typical Project

Denver Unit (Life of Project)



Conclusions

- CO₂ flooding for EOR has been successfully implemented in the US for over 30 years
- Key success factors for CO₂ flooding include:
 - Detailed reservoir characterization
 - Operational excellence for reservoir, flood, well and plant management
 - Rigorous surveillance and measurement
 - Safety culture
- The techniques used to manage a well operated CO₂ flood are the same techniques that could and should be used to measure and verify the quantity of CO₂ that is sequestered during EOR
- By incorporating a modest amount of reporting to the appropriate authority, a plan based on these management techniques could be reasonably developed which would minimize costs by taking advantage of existing flood operation
- Such a plan could meet the needs of those seeking to reduce CO₂ emissions through geologic sequestration in a credible and transparent manner
- We believe our vision aligns well with the United Nation's 2006 Intergovernmental Panel on Climate Change Geologic Storage Guidelines as well as the U.S. Government's Geologic Storage and Verification Requirement

THANK YOU!

