PROBLEM ADDRESSED
With independents responsible for increasing percentages of drilling and oil and gas production, independents must take advantage of available applied R&D opportunities, and their role in encouraging human resource development must increase if academia is to deliver future geoscientists. To overcome hesitance that they can profitably apply newer technologies, independents rely heavily on other's experiences or case studies to develop the confidence they need to implement technologies. This workshop addressed the case study/confidence aspect by documenting specific results obtained when similar independents applied a buffet of technologies to revitalize production in mature leases.

TECHNOLOGY OVERVIEW
The workshop focused on technologies applicable to mature US reservoirs. All speakers confirmed the role of continuing technology advancements and application in maintaining profitability in mature reservoirs.

Based on a workshop sponsored by PTTC's West Coast Region on December 8, 2000 in Los Angeles, California

SPEAKERS:
- Operating Without a Research Lab, New Infrastructure for Independent Producers
  - Iraj Ershaghi, USC

- DOE's Stripper Gas Well Program
  - Brad Tomer, U.S. DOE National Energy Technology Lab

- Optimal Application of Advanced Exploitation Technology
  - R. G. (Bob) Knoll, Maurer Engineering, Inc.

- Technology Applications at Thums Long Beach Unit
  - James Eastlack, Thums Long Beach Inc.

- Nuevo's Operations in California
  - Neal Livingston, Nuevo Energy Company

- Berry Petroleum's Operations in California
  - Mike Starzer, Berry Petroleum Company

Since independents now drill 85% of the wells in the U.S., produce 40% of the oil and 65% of the gas, they must assume a role in fostering future R&D, including human resources aspects. The US Department of Energy (DOE) recognizes the importance of R&D for stripper wells and has several stripper well initiatives in place. For many reservoirs, horizontal technologies are appropriate for optimal exploitation. Three California producers shared their experiences in applying a buffet of technologies to improve profitability in mature California fields.

New R&D Infrastructure for Independents. With their increasing role in US production, independents now have a responsibility for encouraging R&D and human resource development. This includes supporting academic R&D since that is where future geoscientists learn problem-solving skills. Independents must also be open to campus recruitment and hiring, providing promising students encouragement to enter geoscience fields. Since computer skills are inherent to most technology solutions, new graduates with problem-solving skills can quickly make major contributions. The old adage of having to have years of experience to work for an independent no longer applies.

DOE's Stripper Gas Well Program. The National Energy Technology Laboratory (NETL) became DOE's 15th national laboratory in late 1999, the only one...