RICHARD L. CLAMPITT
Resume

PETROLEUM SERVICES/DRILLING & PRODUCTION OPERATIONS/
RESEARCH & DEVELOPMENT

CAPABILITY SUMMARY

Fifty years comprehensive managerial and technical experience with demonstrated strengths in developing new technology, products and markets. Proven general management skills with a take-charge, high-energy leadership style. Outstanding track record of consistently creating new products and processes, and in maximizing profits. A confident, aggressive, creative senior manager with recognized technical expertise. Reputation as the world leader in profile modification technology for enhanced oil recovery by developing both crosslinking technology and new polymers for hostile environments of high temperatures and hard brines. Managed teams of engineers designing well treatments, drilling fluid systems, polymerfloods and computer modeling for both Custom Oil Recovery Technology Company, a subsidiary, and for Phillips Petroleum Company. Expertise in production chemicals, profile modification treatments, designs of polymerfloods, the development of new synthetic water soluble polymers for improving waterfloods, and in conducting contract research for the U.S. Department of Energy on Enhanced Oil Recovery techniques with emphasis on profile modification in steamfloods.

EXPERIENCE

1986-2009: **R.L. Clampitt and Associates, Inc.,** ***Bartlesville, Oklahoma.*** Petroleum Consultant on international problems with loss circulation, optimum drilling fluid systems, enhanced oil recovery techniques, oil and gas production methods, use of water soluble polymers, on selection of drilling fluid additives, on contract research for U.S. Department of Energy, and operate as an independent oil and gas producer in Oklahoma. **Own and operate an oil field chemical sales activity in a Division called CORT (CUSTOM OIL RECOVERY TECHNOLOGY), a Division that markets drilling mud additives, lost circulation products, production chemicals, paraffin inhibitors and paraffin dispersants and stimulation chemicals.**

1979-1986: **Phillips Petroleum Company,** ***Bartlesville, Oklahoma.*** **General Manager** for worldwide oil field and mining chemical (extractive chemicals) operations - product development, manufacturing, marketing/sales and technical

services, with P&L responsibility for four diverse subsidiaries producing $38-96 million in annual revenues. These were:

General Manager, Drilling Specialties Company, *Bartlesville, Oklahoma*
Branch Manager, Mining Chemicals Company, *Bartlesville, Oklahoma*
Senior Vice President & General Manager, Alamo Manufacturing Company, *Conroe, Texas*, **Manufactures SOLTEX**
General Manager, over Custom Oil Recovery Technology Company, a Phillips Petroleum Company subsidiary, which conducted many polymerflood applications (business sold later and now owned by Clampitt and Associates).

In 1985 and 1986 supervised construction of plant to manufacture SOLTEX, industry's most effective sulfonated asphalt, a drilling mud additive. A major responsibility at Drilling Specialties Company from 1980 to 1986 was to conceive and to initiate the development of several new synthetic water soluble polymers that would be effective in hostile environments of very high salinity brines, with emphasis on profile modification treatments and to reduce the high temperature fluid loss of drilling fluids. Several new polymers were developed for enhanced oil recovery at these severe reservoir conditions where polyacrylamides fail.

1969-1979: **Phillips Petroleum Company,** last position was **Manager**, Production Research Branch, Research and Development Department, *Bartlesville, Oklahoma*. Managed a highly skilled, highly educated staff of over 50, with the direction to conceive, implement, and to execute research for enhancing recovery of petroleum, natural gas, heavy oil, geothermal energy and minerals. Initiated, evaluated and recommended projects. Provided scientific assistance to worldwide drilling and production operations; recommended the optimum recovery techniques. Managed in-house budget of $5 million, plus multi-million dollar field implementation activities, including core analysis, chemical, polymer and CO2 flooding, reservoir simulation and corrosion prevention.

Assembled a research staff that earned a worldwide reputation for expertise in enhanced oil recovery technology with emphasis on profile modification technology with polymers. Directly involved in the development of polymer technology for fluid diversion applications. Conceived, implemented and executed research for enhancing recovery of petroleum by inventing and developing new gelled polymer systems for improving sweep in waterfloods and

gas floods over 200 U.S. patents were obtained by the staff. Designed and assisted in implementing large multi-million dollar field tests of polymer floods, surfactant floods and many near well fluid diversion field tests with water soluble polymers like the polyacrylamides. Technology was licensed to fourteen companies by Phillips Petroleum Company. R.L. Clampitt and Associates is a licensed company.

1959-1969: **Phillips Petroleum Company, *Bartlesville, Oklahoma.* Petroleum Engineer**. Progressed through various petroleum and reservoir engineering and supervisory positions for the Exploration and Production Division in seven field locations through *Texas, Oklahoma and Colorado*. Experienced in oil and gas drilling and production, waterflood unit operations, reservoir engineering and optimizing economics of overall field operations. Experienced in artificial lift methods of rod pumping, chamber lift and continuous gas lift designs, and in the design and installation of electric submersible pumps for oil wells and water supply wells. Also experienced in well stimulation methods and in particular fracturing fluids for carrying proppants.

Author of 32 U.S. Patents, many Foreign Patents and more than 20 professional publications.

Initiated development of new gelled acid polymer which received the prestigious IR 100 award as one of the most innovative new products in the U.S. for 1986. It has proven most effective in fracture acidizing of oil and gas wells.

B.S., Petroleum Engineering, 1959, University of Oklahoma.

Patent Number	**Exact Title As Shown on Patent**
Re 29716	"Methods of Drilling a Borehole Using Gelled Polymers"
4,120,361	"Method for Reducing the Permeability of Subterranean Formations to Brine"
4,079,785	"Oil Recovery Method Using in-situ Partitioning Surfactant Flood Systems"
4,076,628	"Drilling Fluid Compositions and Methods of Preparing Same"
4,072,191	"Fire Flood Process"
4,068,719	"Method for Acidizing Subterranean Formations"

4,048,079	"Aqueous Gels and Uses Thereof"
4,043,921	"Cellulose Ether-Polyacrylamide Aqueous Gels"
4,007,789	"Acidizing Wells"
3,993,133	"Selective Plugging of Formations with Foam"
3,978,928	"Process for the Production of Fluids from Subterranean Formations"
3,971,440	"Method for Treating Subterranean Formations with Cellulose Ether-Polyacrylamide Aqueous Gels"
3,955,998	"Aqueous Gels for Plugging Fractures in Subterranean Formation and Production of Said Aqueous Gels"
3,949,811	"Method for Reducing the Permeability of Subterranean Formations to Brine"
3,921,733	"Method of Drilling a Borehole Using Gelled Polymers"
3,919,849	"Process for the Agglomeration and Stabilization of Unconsolidated Soil"
3,909,423	"Gelled Polymers and Methods of Preparing Same"
3,908,760	"Method of Treating Subterranean Formation With Aqueous Gels"
3,900,406	"Aqueous Gels and Uses Thereof"
3,872,924	"Gas Cap Stimulation for Oil Recovery"
3,848,673	"Recovery of Hydrocarbons"
3,845,822	"Plugging or Sealing Fractures in Formations"
3,785,437	"Method For Controlling Formation Permeability"
3,757,863	"Secondary Recovery Methods"
3.749.172	"Methods of Using Gelled Polymers in the Treatment of Wells"
3,727,689	"Hydraulic Fracturing"
3,727,688	"Hydraulic Fracturing Method"
3,727,687	"Aqueous Gels and Uses Thereof"
3,551,322	"Conversion of Oil Shale Retorting Gases"

NEW PATENT ON SULFONATED GILSONITE-ISSUED IN FEBRUARY OF THE YEAR 2003-Patent Number 6,514,916

Several Publications by R.L. Clampitt:

1. Trantham, J.C. and R.L. Clampitt. "Determination of Oil Saturation After Waterflooding in an Oil-Wet Reservoir-The North Burbank Unit, Tract 97 Project". JPT of SPE, Page 491, May 1977.

2. Boneau, D.F. and R.L. Clampitt. "A Surfactant System for the Oil-Wet Sandstone of the North Burbank Unit", SPE 5820, SPE-AIME Symposium on Improved Oil Recovery, Tulsa, Oklahoma, Mar. 22-24, 1976.

3. Clampitt, R.L. and T.B. Reid. "An Economic Polymer Flood in the North Burbank Unit", SPE 5552, 50the Annual Fall Meeting of SPE AIME, Dallas, Texas. Sept. 28-Oct. 1, 1975.

4. Clampitt, Richard L. and P.D. Fleming III. "Research Digs Into Micellar Flooding Processes:, Oil and Gas Journal, Jan. 14, 1980 Edition.

5. Clampitt, R.L. et al, "North Burbank Unit Tertiary Recovery Pilot Test", First Annual Report, BERC/TPR-7612, July 1976. (170 pages)

6. Clampitt, R.L. and P.D. Fleming III. "Theory and Laboratory Investigations of the Micellar Flooding Process", Enhanced Oil Recovery Symposium, USSR Ministry of Oil Industry, Moscow, Oct. 1978.

7. Clampitt, R.L. "Proprietary Water Diversion Technology With Partially Hydrolyzed Polyacrylamides" To Licensees of Phillips Petroleum Company, Sept. 1971.

8. Clampitt, Richard L. "Checklist for Vertical Conformance in Waterfloods", Presented SPE Section, Oklahoma City, 1980.

9. Smith, R.V., A.F. Bertuzzi, E.E. Templeton and R.L. Clampitt, "Recovery of Oil by Steam Injection in the Smackover Field, Arkansas", Journal of Petroleum Technology, August 1973, page 890.

10. Clampitt, R.L., R.L. Eson, and R.W. Cooke. "Applying a Novel Steam-CO2 Combination Process in Heavy Oil and Tar Sands", SPE Thermal

Operations Symposium Held in Bakersfield, California, February 7-8, 1991. SPE Paper 21547.

11. Patton, J. T., and R. L. Clampitt, "Computer Simulation of Cyclic Steam Diversion Treatments with High Temperature Gelled Polymers and CO2 in Midway Sunset Field, California", Final Report Department of Energy Research Contract, August 1991.

12. Clampitt, R. L., "Organic Crosslinking New Water Soluble Polymers for Profile Modification in CO2 Projects", U. S. Department of Energy SBIR 88-1 Proposal, January 19, 1988.

13. Clampitt, R. L., "Organic Gelation Systems For Biopolymers for Permeability Modification in Reservoirs", U. S. Department of Energy SBIR 88-1 Proposal,12 pages, January 21, 1988.

14. Clampitt, R. L., J. W. Hasz, K. I. Jagel and J. E. Lawson, "Gas Combustion Retorting Performance in a Large Demonstration Oil Shale Retort, American Chemical Society, Los Angeles, March 1971.

15. Clampitt, R. L., "Gelled PROD Fluid for High Temperature Acid Fracturing", Presented Southwestern Petroleum Short Course, Twenty-Second Annual Meeting, Texas Tech University, Lubbock, Texas, April 1975, Pages 109-114.

16. Clampitt, R. L., "Improved Enhanced Oil Recovery Processes Using New and Novel Synthetic Copolymers Containing Large Amounts of Acrylamide", Final Report U. S. Department of Energy, February 1991.

17. Clampitt, R. L., Al-Rikabi, H. and Dabbous, M. K. ,"A Hostile Environment Gelled Polymer System For Well Treatment and Profile Control", SPE Paper 25659, Published 1993.

18. Clampitt, R. L., "Profile Modification and Water Shut- Off Treatments, Offshore Bombay High Field, India" for United Nations, May 1993.

19. Clampitt, R. L., “Methods to Improve Drilling and Completion of Multilateral Wells, and Techniques to Reduce Channeling of Injected Sea Water”, Zakum Field (10 Billion Barrel + Reservoir) ZADCO TECHNOLOGY WORKSHOP February 22-23, 2005, Abu Dhabi, U.A.E. (Multiple visual presentations.)

20. Clampitt, R. L., "A New Lost Circulation Additive to Cure Loss Circulation Problems in Oil and Gas Fields-Persian Gulf" Presented to Abu Dhabi National Oil Company in Abu Dhabi, U.A.E. November 19, 2005. (Visual presentation on LCM materials to improve drilling losses, and to stop losses ahead of cementing the intermediate 9 5/8-inch casing strings, and on more optimum drilling fluid systems for productive intervals.)

21. Clampitt, R. L. SPE, Custom Oil Recovery Technology; Bartlesville, Oklahoma USA and Adel Ahmed Baobaid, Al Mansoori Specialized Engineering; Abu Dhabi, U.A.E. "SULFONATED ASPHALT-THE NUMBER ONE MOST EFFECTIVE DRILLING FLUID ADDITIVE IS NOW 50-YEARS OLD" Proposed to be Presented at IADC International Well Control Conference & Exhibition, Nov. 7-8, 2006, Abu Dhabi, U.A.E.