Jan W. Ciaston is a Staff Reservoir Engineer in the Shell Division of Shell Offshore, Inc. His current assignment to the Cognac project includes responsibility for surveillance, workover, and development activity in the field. Prior to his current assignment he has been responsible for surveillance on the Cedar Creek Anticline and Michigan Basin and for development planning/pilot testing associated with Shell’s Gulf Coast EOR effort. He joined Shell in 1981 after receiving a B.S. in Chemical Engineering from Wayne State University.

MICHAEL A. DANAHY—Biographical Sketch

Mike received a B.S. in geology from the University of Maryland in 1976 and joined Shell’s Western Region the following year. Initial geologic work included secondary recovery projects in the San Joaquin Valley, and primary development in the Rockies. Mike spent three and one-half years with two Houston independents in a variety of Gulf Coast Tertiary projects, but primarily focused on an extensive South Texas drilling program in the Lobo trend. He then joined Tenneco’s Gulf Coast Division in 1984 with a four-year assignment in the onshore South Louisiana Miocene. After the sale of Tenneco in late 1988, Mike consulted for two years prior to rejoining Shell in New Orleans. His current assignment in the Shell Division Production Geology group is the further study and development of Cognac Field - MC 194.

MISSISSIPPI CANYON 194
1989-91 “A” PLATFORM REDEVELOPMENT

Mississippi Canyon 194 (Cognac) is located 12 miles southeast of the mouth of the Mississippi River in 1024 feet of water. The field extends over four OCS blocks acquired by Shell, Amoco, and partners in the March, 1974 Federal lease sale. Evaluation drilling started in 1975 and a 62-slot, two-rig platform was installed in October, 1978. The initial development consisted of 61 wells drilled between 1978-82. “Produce-while-drilling” production began in 1979 with permanent facilities installed in 1982.

Production peaked during 1984 at 83,000 BOPD and 130 MMCFPD. Prior to shut-in for redevelopment drilling in 1989, production declined to 11,000 BOPD and 45 MMCFPD. Cumulative production at that time was 120 MMBO and 220 MMCF. A 20-well redevelopment drilling program was executed during 1989-91. Production after the re-development peaked at 28,000 BOPD and 75 MMCFPD.

Preparation for the redevelopment began in 1987 with acquisition of a 3-D seismic survey. The interpreted survey indicated targets in new fault blocks as well as undrained areas in developed reservoirs. The seismic leads were supplemented by engineering and geological concepts on drainage and sand distribution in the field. The integration of geophysical, geological, and engineering data and concepts in planning and executing the redevelopment program is the subject of this presentation.