

M.S., Geology, January 1979, California State University Northridge (C.S.U.N.).

Thesis: "Superposed Mesozoic Deformation, Southeast Inyo Mountains, California".

B.S., Geology, January 1976, C.S.U.N.

B.A., Earth Science, January 1973, C.S.U.N.

MICHAEL R. WERNER
Geologist

I have 40 years of petroleum industry experience, initially working heavy oil projects for the Getty Oil Company in Bakersfield California in 1978. Since 1980, I was employed by ARCO Alaska and its successor ConocoPhillips, working a variety of development and exploration projects. These include the start-up of the Kuparuk, Lisburne and West Sak oil fields, and exploratory drilling projects from the Brooks Range foothills to the Beaufort Sea. The majority of my career has emphasized geologic mapping, reservoir description, and drill candidate selection and planning for both the West Sak and Ugnu heavy oil resources, and Kuparuk light oil and coil-tubing projects. In recent years I have had opportunity to focus on geochemistry and oil quality prediction, as well as permafrost characterization and subsidence issues. I received my Bachelor of Science in Geology in 1976, and Master of Science in Geology in 1979, from California State University, Northridge.

PROFESSIONAL EXPERIENCE

2013 - 2018 (Now retired) Principal Geologist - ConocoPhillips Alaska, Inc.

Responsible for geologic mapping, reservoir description, and drill candidate selection for the West Sak and Ugnu multi-billion barrel heavy oil resources, and Coil Tubing Drilling and fullfield studies of the Kuparuk River field on the Alaskan North Slope. Provided coordination, project review, and support and mentoring of other geoscientists. Helped obtain 3K NEWS Participating Area and participated in expansion of West Sak Pool, Area Injection Order and West Sak Participating Area.

1994 - 2013 Staff Geologist - ARCO Alaska/ConocoPhillips, Alaska Lead Geoscientist Kuparuk Development.

Provided geologic support for 1997 West Sak field startup, and planned and drilled first West Sak multilateral wells in 2000 and 2001. Participated in sanction and start-up of West Sak 1J in 2004-05. Helped develop and implement first fullfield computer mapping process.

1988 - 1994 Senior Area Explorationist - ARCO Alaska Supervisor Central North Slope Exploration.

Responsible for lease sales, exploratory drilling, and seismic and field data acquisition for Central North Slope Onshore/Offshore frontier exploration team.

1986 - 1988 Area Geologist - ARCO Alaska, Inc. Supervisor Lisburne Development Geoscience.

Responsible for operations and development geology for the Lisburne carbonate reservoir after field start-up in 1986. Coordinated revision of reservoir description in response to reservoir performance.

1982 - 1988 Senior Geologist - ARCO Alaska Supervisor of West Sak Extension Exploration.

Gathered extensive shallow data in Kuparuk development wells and dedicated appraisal wells, and coordinated all related reservoir and geophysical studies. Planned and executed the West Sak Waterflood Pilot in 1983.

1980 - 1982 Geologist - ARCO Alaska

Development well planning and operations for the Kuparuk River oil field during field start-up in 1981. Initiated evaluation of the West Sak and Ugnu heavy oil resources.

1978 - 1980 Geologist - Getty Oil Company, Bakersfield, California.

Development geologist for steam enhanced heavy oil recovery and fractured reservoir projects in the San Joaquin Valley.

1978 California Portland Cement Company, Colton, California.

Field geologist for mineral exploration program in the Mojave Desert.