

Contributors

Martyn Beardsell, Senior Reservoir Engineer, Elf Petroleum Norge, in Stavanger, Norway, is responsible for the follow-up on Oseberg and surrounding fields and has been leading a subsurface evaluation team in building a volumetric model of Oseberg. He played a major role in the evaluation and testing of the GeoFrame* 3.0 system and has considerable experience in mapping, kriging and grid manipulation. He has been with Elf for eight years, after working at Schlumberger Wireline & Testing for 10 years. Martyn is a graduate of King's College, Cambridge, England, with an MA degree in engineering; and of Heriot-Watt University in Edinburgh, Scotland, with an ME degree in petroleum engineering.

Willy Brandt, Vice President of Business Development at Sedco Forex headquarters in Montrouge, France, is responsible for the initiation of new businesses from a global perspective. He began with Schlumberger in 1975 as an engineer trainee and worked in several different assignments in Europe, Africa, the Far East and North America. Previously, he managed Sedco Forex activity in the North Sea while based in Aberdeen, Scotland. Willy completed training in mechanical engineering at the Higher Technical College in Apeldoorn, complemented by study at the Technical University of Delft, both in the Netherlands.

Alain Brie, Head of the Interpretation product line for Schlumberger KK in Japan, is an expert in log interpretation, and specializes in the processing and interpretation of sonic measurements. He is also experienced in rock mechanics and in the interpretation of resistivity, electromagnetic and nuclear measurements. Since joining Schlumberger in 1973, Alain occupied positions as interpretation development expert, research scientist, log analyst, training manager and field engineer. He is a graduated engineer from Ecole Nationale Supérieure de Mécanique et Aérotechnique (ENSM) in Poitiers, France.

Heather Buscher, who markets geological and petrophysical GeoFrame applications, has been a senior geologist at GeoQuest in Houston, Texas, USA, since 1996. She joined the London, England, Data Services Centre in 1989 to interpret borehole dip and image data. In 1992 she transferred to Hannover, Germany to serve as product champion of RM* reservoir modeling software and to provide training in the use of integrated reservoir characterization software. Before her current post, she was supervisor of data services in Almaty, Kazakhstan. Heather has a BS honors degree in geology from the University of Western Ontario at London, Canada, and an MS degree in petroleum geology from the University of Aberdeen, Scotland.

Chung Chang, based at Schlumberger KK in Fuchinobe, Japan, is a senior engineer assigned to the Borehole Acoustic Reflection Survey (BARS) tool project. Previously he was a research scientist at Schlumberger-Doll Research, Ridgefield, Connecticut, USA, where he worked on acoustic measurements, wave propagation theory and acoustic sensor design, as well as signal processing and control. Chung has a BS degree in physics from National Cheng-Kung University, Tainan, Taiwan, and MS and PhD degrees in theoretical and applied mechanics from Cornell University, Ithaca, New York, USA.

Richard Coates, program leader for deep acoustic imaging at Schlumberger-Doll Research, Ridgefield, Connecticut, heads the team that is working on sonic and seismic single-well imaging. Previously (1992 to 1996) he was a research scientist in the seismic department at Schlumberger Cambridge Research in England, where he worked on multiple attenuation and numerical modeling of wave propagation including anisotropy, attenuation and borehole effects. Richard has a BA degree in physics and a PhD degree in geophysics from the University of Cambridge, England and also did postdoctoral research at the Earth Resources Laboratory, Massachusetts Institute of Technology, Cambridge, USA.

Daniel Codazzi is sonic section manager, Anadrill, Sugar Land, Texas, in charge of developing the 8 $\frac{1}{4}$ - and 6 $\frac{1}{4}$ -in. ISONIC* IDEAL sonic-while-drilling tools. He joined the Dowell sensors group in 1983 at St. Etienne, France. Six years later, he transferred to Anadrill in Sugar Land to develop KickAlert* early gas-kick detection system. In 1992 he moved to Anadrill in Calgary, Alberta, Canada, responsible for engineering Slim 1* measurements while drilling. He returned to Sugar Land the following year to serve as section manager for this tool. He assumed his current position in 1995. Daniel has a PhD degree in fluid mechanics from the Université Louis Pasteur, Strasbourg, France.

Dave Crowley, who is based in Aberdeen, Scotland, has been marketing and sales manager for the Sedco Forex North Sea Division since 1995. His main responsibilities have been the utilization and pricing of the North Sea fleet of 10 semisubmersibles and one jackup drilling unit. Previously he served in various positions including country manager for Angola, operations engineer for special projects based in Singapore, and country manager for Malaysia. Since joining the company in 1980, he has held supervisory positions offshore in the barge, subsea and drilling departments and onshore managerial positions. Dave received a BS degree in marine engineering from Massachusetts Maritime Academy, Buzzards Bay, and holds marine licenses for US Chief Engineer for Column-Stabilized Drilling Units, US Second Engineer for motor vessels of any horsepower, US 3rd Engineer for Steam Vessels of any horsepower and Liberian Master for Column-Stabilized Drilling Units.

Anh Son Dang has been a marketing and communications staff engineer at Sedco Forex in Paris, France, since 1997. He joined the company in 1993 as an engineer and later was an assistant driller, working both on land and offshore. He has also been operations staff engineer in Balikpapan, Indonesia, providing operational support to rigs operating in that area. In 1996 he became sales and quality, health, safety and environment (QHSE) staff engineer in Jakarta, Indonesia where he oversaw rig safety issues, cost estimation, and legal and technical issues in the bidding process. Anh received a BE degree in electrical and electronic engineering at the University of Adelaide, South Australia, Australia.

Stan Denoo joined Schlumberger in 1971 after graduating from the University of Wyoming in Laramie, USA, with a degree in mechanical engineering. He worked as a field engineer in the western US, a synergetic engineer in the New Orleans, Louisiana, USA computing center, a sales engineer in Oklahoma, USA, a member of the interpretation development staff in Houston, and served with the product development group in Denver, Colorado, USA. Now based in Denver, Stan is currently lead petrophysicist for the Schlumberger Western States Division.

Larry Denver, Manager of Product Planning, heads a group that collects client requirements for all GeoQuest products and helps prioritize those needs with software engineering. He joined GeoQuest in 1994, having previously served as vice president of Stratamodel, a geological modeling software company, where he worked from 1986 to 1994. His first assignment at GeoQuest was in product planning, focusing on mapping and modeling requirements. He became group manager in 1996. Larry has a BS degree in geology and an MS degree in sedimentology, both from the University of Kansas at Lawrence, USA.

Kevin Dodds, who is based in Aberdeen, Scotland, is Schlumberger regional geophysicist for the North Sea. Since 1990, he has been responsible for borehole seismic marketing for the UK. Prior to this he was based at Services Techniques Schlumberger, Montrouge, France, coordinating issues related to borehole seismic techniques for countries outside North America. He joined Schlumberger in 1979 as a field engineer and spent three years in the Middle East. He then served as a division geophysicist in Egypt until 1986. Kevin holds an MS degree in applied geophysics from the University of Birmingham, England. After receiving his BS degree in physics from the University of New England, Armidale, New South Wales, Australia, he studied the aurora australis in Antarctica for the Australian government's Department of Science Research Office. In July 1998 Kevin will become geophysics research manager, CSIRO (Australia).

Takeshi Endo, product manager of sonic interpretation engineering at Schlumberger KK in Fuchinobe, Japan, is responsible for software and interpretation development for the DSI* Dipole Shear Sonic Imager tool. He joined the company in 1985 in Fuchinobe as an engineer in the seismic department and reservoir modeling group. From 1988 to 1990, he was a project engineer with the reservoir modeling group in Schlumberger Austin Product Center in Texas. Takeshi has BS, MS and PhD degrees in geophysics from the University of Tokyo, Japan.

Cengiz Esmeroy manages the Deep Measurements group at Sugar Land, Texas, Product Center. He joined the Schlumberger-Doll Research (SDR) seismics program in 1984 and worked on seismic imaging and multicomponent borehole seismic techniques. In 1990 he became leader of the sonics program at SDR. Commercial products initiated by this program include DSI anisotropy logging, permeability inversion from Stoneley, and BARS borehole sonar. He was transferred to Anadrill in 1996 as manager of the project, Look Ahead & Around for Optimum Well Placement. He received his current assignment the next year. Cengiz holds a BS degree from the Technical University of Istanbul, Turkey; and MS and PhD degrees in electrical engineering from Massachusetts Institute of Technology in Cambridge. He has served *Geophysics* as the Associate Editor for Reservoir Geophysics and Borehole Geophysics.

Jerome Foreman has been an advanced technical specialist with Texaco UK in London since 1990. He is currently involved in various geotechnical issues related to the development of the Guillemot West oil field as well as exploration of surrounding acreage in the western platform area of the Central Graben, North Sea. Other projects have included development of Captain and Highlander fields. From 1982 to 1990, he was senior geophysicist and supervisory geophysicist with Sohio Petroleum, and later British Petroleum with assignments in San Francisco, California and Anchorage, Alaska (USA); and in Aberdeen, London and Glasgow (UK). He has also been a geophysicist with the United States Geological Survey in Los Angeles, California (1979 to 1982). Jerome has a BS degree in general science (geology) from Pennsylvania State University, University Park, USA; and MS and PhD degrees in oceanography (marine geology and geophysics), both from the Hawaii Institute of Geophysics, Honolulu, USA.

Rutger Gras is currently a senior geoscientist with product marketing, GeoQuest, in Houston, Texas, where he is responsible for the marketing of the GeoFrame geophysics product line. Previously he was senior geophysicist and interpretation team leader for the GeoQuest Africa-Mediterranean region, and a seismic interpreter contracted to various oil companies in Pakistan and Libya. He joined the Schlumberger group of companies in 1990, when he took a position with Delft Geophysical in The Netherlands as a senior seismic interpreter, working on a Persian Gulf project. From 1984 to 1990, he was a geologist with British Petroleum in The Hague, The Netherlands, involved in exploration in the Dutch North Sea region and The Netherlands onshore. Rutger obtained an MSc-equivalent degree in geology from Utrecht University, The Netherlands, in 1984. A founding member of the EAGE (European Association of Geoscientists & Engineers), he has also published various papers on the structural geology, basin history and petroleum geology of rift basins, as well as on petroleum geochemistry and exploration geophysics.

Mike Hodder, Manager of the Dowell Technical Center, New Orleans, Louisiana, is responsible for establishing a new technical center that will focus on well construction issues, such as drilling fluids and cement, in deepwater wells. He began his career in 1977 in drilling fluids research with International Drilling Fluids (IDF). After serving as a field engineer, he had various management positions in technical services, research, quality assurance, training and HSE. After joining Dowell in 1993 as part of the IDF acquisition, he was assigned to marketing in Paris, France (1994) and then as marketing representative at the Clamart, France engineering center (1995 to 1997). He assumed his current post in September 1997. Mike has an MS degree in natural sciences (geology and chemistry) from the University of Cambridge, England.

Kirsten Houston is with the communications group at Schlumberger Oilfield Services Marketing Department in Aberdeen, Scotland. Before joining Schlumberger in 1997, she spent three years as an associate director with TMA Communications in Glasgow, Scotland. There she managed public relations and media relations for a group of clients that included Schlumberger Wireline & Testing and Dowell. Kirsten holds a BA honors degree in English from the University of Stirling, Scotland.

David Hoyle, who manages the sonic product line at Schlumberger KK, in Fuchinobe, Japan, is responsible for the development and support of wireline sonic tools and sonic acquisition software. In 1984 he joined Schlumberger engineering in Houston, Texas where he worked as mechanical engineer on the DSI project. Six years later, he transferred to Schlumberger-Riboud Product Centre in Clamart, France, where he managed the PLATFORM EXPRESS* Deep Measurements program, and later the PLATFORM EXPRESS product team. He assumed his current position in 1996. David received a BA degree in physics from Kenyon College, Gambier, Ohio, USA, and an MS degree in mechanical engineering from the Massachusetts Institute of Technology in Cambridge.

Kai Hsu received his MS and PhD degrees in electrical engineering from the University of Texas at Austin. From 1979 to 1981, he was a research engineer at Scientific Systems, Inc., where he worked on biomedical signal processing and pattern recognition applications. He joined Schlumberger-Doll Research, Ridgefield, Connecticut, in 1982 to work on acoustic well logging, ultrasonic imaging and borehole seismic problems. Since his transfer to Anadrill in 1992, Kai has been responsible for developing downhole and surface processing, interpretation and answer products for the ISONIC tool. He is currently an engineering specialist in the formation evaluation product line, Sugar Land Product Center in Texas.

Ricardo Juinito is a petroleum engineer with a background in subsea completions, who is based in Macae, Brazil, the headquarters of Campos Basin operations. He works in the Petrobras Dynamically Positioned Vessel Safety Program. Ricardo joined Petrobras in 1984 after his graduation as a mechanical engineer in 1983. He has worked as a field engineer on several deepwater development projects.

Michael Kane is a senior research associate in the Reservoir Definition/Evaluation Department at Schlumberger-Doll Research (SDR) and the Reservoir Definition/Imaging Department at Schlumberger Cambridge Research. His recent activity has focused on downhole formation fluorescence measurement, acoustic definition of near-borehole geomechanical damage, and deep acoustic reservoir imaging. He joined Schlumberger as a field engineer in the Lake Charles, Louisiana Offshore District in 1978 and had various assignments in wireline operations before his appointment to SDR in 1992. Michael earned a BS degree in philosophy and a BS degree in physics at North Texas State University in Denton.

Eric Magne, who is marine section manager for Sedco Forex in Montrouge, France, heads a team of naval architects and marine and structural engineers responsible for marine and structural elements of offshore vessels. Before assuming his current position in 1993, he spent four years as an independent consultant involved in the conception of floating production supports, design of tension leg platforms and preparation of pipe-laying operations for both contractors and oil companies. From 1985 to 1987, he was a senior naval architect with Earl & Wright in San Francisco, California, working primarily on hydrostatic and hydrodynamic studies for semisubmersibles. He also was a research and development engineer and from 1981 to 1985 headed the naval architecture group for Sedco Forex. Eric has a degree in naval architecture from Ecole Nationale Supérieure de Techniques Avancées, Paris, France.

Michael C. Mueller, Senior Geophysical Associate in the Strategic Exploration Organization (SEO) for Amoco Exploration and Production, is based in Houston, Texas. His current focus is multicomponent seismic technologies and he has been responsible for integrated multicomponent applications including vector and multiscale interpretation (sonics, borehole and surface seismic studies.) He joined Amoco in 1981 and had various exploration and technology application assignments involving numerous basins and continents. Michael earned a BS degree in geophysics from State University of New York at Binghamton, and an MS degree in applied mathematics from the University of Houston. Among his accomplishments are the first commercial use of "Alford-style" multicomponent shear-wave data for fracture intensity prediction (USA) and first use of multicomponent data in Australia.

Shiniti Ohara is a petroleum engineer for Petrobras with a background in subsea drilling, who is based in Rio de Janeiro, Brazil. He works in the Offshore Rig Contracting, Deepwater Well Control and Dynamically Positioned Vessel Safety Programs. He has been with Petrobras since 1980, following his graduation as a civil engineer in 1979. He holds an MS degree in petroleum engineering from the Universidade Estadual de Campinas in Brazil and a PhD degree in petroleum engineering from Louisiana State University in the USA. He held many other positions within Petrobras including Manager of the Directional Drilling Sector and Manager of Exploratory Drilling for south and southeast regions of Brazil.

Tom Plona is a senior research scientist in the petrophysics program at Schlumberger-Doll Research (SDR), Ridgefield, Connecticut. He is currently working on new sonic logging methods as part of the Stress-Dependent Acoustic Project to enhance understanding of geomechanics problems. Since joining SDR in 1976, he has been program leader of various groups including Ultrasonics, Rock Physics and Near Wellbore Acoustics. He has conducted basic rock physics acoustics studies and participated in numerous acoustic tool development projects such as ISONIC tool and Circumferential Microsonic (CMS). Tom spent 1994 at Schlumberger Cambridge Research, applying sonic logging knowledge to geomechanics problems. He has a BS degree in physics from Providence College, Rhode Island, USA; and MS and PhD degrees in physics from Georgetown University, Washington, DC, USA.

Andrew Rennie is a sales engineer at Sedco Forex in Aberdeen, Scotland. He began his career as a roustabout for Bow Valley Offshore Drilling Partnership in Halifax, Nova Scotia, Canada in 1988. From 1993 to 1995, he was with Santa Fe Drilling North Sea Limited as a drilling engineer in the Greenbank Crescent. He joined Sedco Forex in 1995 as rig engineer on *Sedco 714* working on the Heron field. Later he was project engineer in charge of planning, execution and certification for the *Sedco 714* upgrade. Andrew has a BE degree in engineering technology from the Robert Gordon University in Aberdeen.

Simon Rushton, based in Macae, Brazil, is the operations manager for Sedco Forex, which currently has three dynamically positioned rigs in operation. He joined Schlumberger Oilfield Services in 1983 and has worked in various line management and staff positions in the Far East, Middle East, Europe and Latin America. Simon holds a BS degree in mechanical engineering from University of Houston, Texas.

Ram Shenoy is program manager of the Formation Evaluation Sensors program, within the Reservoir Definition (Evaluation) Department at Schlumberger-Doll Research. He oversees research on nuclear and acoustic sensors for formation evaluation. He joined SDR as a research scientist in 1991. Before his current assignment he was leader of the acoustic measurements group. Ram has BA and MA degrees in electrical sciences from the University of Cambridge, England, and a PhD degree in electrical engineering (signal processing) from Cornell University, Ithaca, New York.

Bikash Sinha is a senior research scientist in the Modeling and Inversion Program at Schlumberger-Doll Research (SDR) in Ridgefield. He joined SDR in 1979 and has contributed to the research and engineering of the CQG* Crystal Quartz Gauge unit. He has also been a technical advisor at Schlumberger KK Japan (1986 to 1989) where he was assigned to the pressure sensor development project. He is currently involved in studying effects of mechanical alteration, intrinsic and stress-induced formation anisotropy on borehole sonic measurements. Bikash received a BS (honors) degree from the Indian Institute of Technology at Kharagpur; and an MS degree from the University of Toronto, Canada, both in mechanical engineering. His PhD degree in applied mechanics was earned at Rensselaer Polytechnic Institute, Troy, New York. An IEEE fellow, he received the 1993 outstanding paper award for work on CQG development in the *IEEE Transactions*.

Rip Stringer, who is based in New Orleans, Louisiana, is well construction services operations manager for the Gulf of Mexico. Since joining Dowell in 1987, he has been Schlumberger Integrated Services coordinator located in the British Petroleum office in Houston, Texas. There he was involved in the BP deepwater Pompano Project. Most recently he was marketing manager for Well Construction Services in North America. Rip earned a BS degree in petroleum engineering from the University of Missouri at Rolla, USA.

Keith Tushingham, a geoscientist at GeoQuest in Houston, Texas, has marketing responsibilities for seismic and geological products. He joined Geco-Prakla in 1985 in the mapping department and then moved into Charisma* product support. In 1990 he became a support geoscientist in Norway. Four years later he moved to Jakarta as marketing support manager for Indonesia. Keith holds a BS degree in geology from the University of Portsmouth, England.

Paul Vernay has been at the Exploration Division of Elf Norge in Stavanger, Norway, since 1993. He has been in charge of the follow-up and evolution of the subsurface technical information system and currently leads the exploration support and data management group. He began his career as a mining geologist in the mid 1970s in Morocco and France. From 1985 to 1990, he worked for Institut Aquitain d'Informatique in Pau, France, where he headed various training programs in computing sciences. In 1988 he was contracted by Elf to organize and lead training programs on exploration software. Since joining Elf in 1990, he has had various assignments involving technical information systems and has served as leader of computer-aided interpretation teams. Paul completed his third cycle thesis in structural geology and University Diploma of Technology in computing sciences from Université de Montpellier, France.

Shinichi Watanabe is a staff engineer working on interpretation methodology development in the Interpretation product line at Schlumberger KK, Fuchinobe, Japan. His main responsibilities are to develop algorithms and software for sonic imaging processing and to process data acquired by the Borehole Acoustic Reflection Survey (BARS) tool for evaluation purposes. He joined the company in 1984 to work on RM system 2D and 3D seismic data management. From 1988 to 1990, he was at the Schlumberger Austin Product Center in Texas. He then spent two years working on software development for Versys in Japan before transferring to the Schlumberger KK sales department. He also worked on sonic simulation and modeling for the DSI tool and data evaluation and software development for the BARS tool. Shinichi obtained a BS degree in earth sciences from the University of Kobe, and an MS degree in statistics from the University of Osaka, both in Japan.

An asterisk () is used to denote a mark of Schlumberger.