Resume & CV

Mark Allen Herkommer

6611 FM 3081 Rd Willis, TX 77378

- Licensed Professional Geoscientist, License # 5024, <u>Texas Board of</u> <u>Professional Geoscientists</u>
- Author of more than 70 technical publications relating to geopressure, geomechanics, and geomechanics, including peer-reviewed journal articles, magazine contributions, a mathematics textbook, numerous technical manuals and reports
- Extensive interdisciplinary geoscience training and experience in geomechanics, software engineering, and applied mathematics (MSc Mathematics, BSc Geology)
- Management skills in operations, business and technical areas
- Excellent communication skills, both written and verbal
- Proven full life-cycle solution provider with an entrepreneurial spirit

Employment Summary

09/19 – Present GEOPRESSURE-GEOMECHANICS ADVISOR / LICENSED PROFESSIONAL GEOSCIENTIST Qube Tech LLC 6611 FM 3081 Rd, Willis, TX 77378

08/16 – 09/19 DATA & CONSULTANCY SERVICE LINE MANAGER Excellence Logging USA, Conroe Technology Center 9780 Pozos Lane, Conroe, TX 77303

7/09 - 11/15 GEOMECHANICS DOMAIN HEAD / DIRECTOR, GEOPRESSURE TECHNOLOGY CENTER Schlumberger Technology Company 3600 Briarpark, Houston, TX 77042 3/89 - 7/09 PRESIDENT / CEO Petrospec Technologies (now Geoservices, a Schlumberger Company) 9780 Pozos Lane, Conroe, TX 77303

Education Summary

8/79 - 5/86 University of Texas at Dallas Richardson, Texas 75080 Graduated 5/86, MASTER OF SCIENCE in APPLIED MATHEMATICS

8/74 - 4/79 Eastern Michigan University Ypsilanti, Michigan 48197 Graduated 4/79, BACHELOR OF SCIENCE in GEOLOGY

Offshore Wellsite Credentials

Basic Offshore Safety Induction and Emergency Training (BOSIET; including HUET) IADC RigPass Marine Debris Safety Training TWIC – expires 04/08/2027 UKOG Physical – expires 11/04/2024

Personal

US Citizen, born in Detroit, Michigan; Three children; Excellent health

Curriculum Vitae

Mark Allen Herkommer

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Employment - Detail

09/2019 – Present: Qube Tech LLC GPGM Advisor / Licensed Professional Geoscientist

Mr. Herkommer is a real-time GeoPressure and GeoMechanics (GPGM) advisor and researcher. He has 30-years of experience analyzing seismic and real-time data for drilling risks associated with geopressure and geomechanics. He is the author of more than 70 technical papers on geopressure, geomechanics, and mathematics.

His current research areas include drilling control through analysis of real-time streaming rigbased data, automating decision making, and providing actionable GPGM intelligence to senior management. He is developing next-generation real-time geopressure-geomechanical software tools.

08/2016 – 09/2019: Excellence Logging Data & Consultancy Service Line Manager

Mr. Herkommer worked as the manager of Exlog's real-time GeoPressure and GeoMechanics (GPGM) surveillance service to minimize drilling risk and non-productive time using his unique GPGM service delivery model. Mr. Herkommer's responsibilities include service line governance, new product development in real-time drilling geomechanics, wellsite incident investigation, and surface logging technology integration.

07/2014 – 11/2015: Schlumberger / Geoservices Geomechanics Domain Head

After the successful development of three Geopressure Technology Centers (Houston, Paris, and Kuala Lumpur) Mr. Herkommer was repositioned as Geoservices' Geomechanics Domain Head. In this role, he developed technology integration plans to deploy the Schlumberger's Real-Time Drilling Geomechanics (RTDG) product offering. RTDG brings together real-time wellsite surveillance with RTO geomechanical surveillance. In addition, Mr. Herkommer was the principle investigator for geopressure related wellsite incidents, In this role he determined root-causes of lost time events and recommended mitigation and remedial strategies.

07/2009 – 07/2014: Schlumberger Director, Geopressure Technology Centers

Following the successful acquisition of Petrospec Technologies by Geoservices, Mr. Herkommer was appointed head of the Geoservices' PreVue service. In this role he managed a team of more than 100 pore pressure field engineers worldwide, developed training curricula, set wellsite analysis workflows, and collected key performance indicators. He successfully grew the PreVue service from \$4 million/year revenue to more than \$20 million/year over a four year period.

03/1989 – 07/2009: Petrospec Technologies (now Geoservices, a Schlumberger Company) President / CEO

Mr. Herkommer technically designed, coded, and successfully introduced to market several software packages including EquiPoise - Geopressure Analysis and Detection Software, GeoPressure Estimation Software (GPES), pQube - Pore Pressure from Seismic, CoQube Seismic Coherency Analysis, Data Capture Software (DCS), and Mistie. These geological, geophysical, and drilling engineering data analysis programs were implemented using HTML, C/C++, and JavaScript. Responsible for managing a group of 14 programmers on these projects. Clients include Geoservices, Amoco Production Company, ARCO, Mobil Oil Co., Petroleum Computing, Occidental International Exploration and Production Company, Chevron Producing Services Inc., Zales Corporation, Weinman and Associates, Government of Canada, and others.

Education - Detail

University of Texas at Dallas, Graduated with MS (05/1986)

AWARDED the degree of MASTER OF SCIENCE in APPLIED MATHEMATICS with specialization in geological and geophysical applications. Performed research on surface modeling, seismic line depth data tying, and statistical analysis of sandstone grain sizes and textures.

As a master's level Sedimentology teaching assistant in the Geology Department, Mr. Herkommer taught Sedimentology and Oceanography laboratory lessons to undergraduates.

Eastern Michigan University, Graduated with BS (04/1979)

AWARDED the degree of BACHELOR OF SCIENCE in GEOLOGY; minor in MATHEMATICS. Emphasis in geological studies was in structural geology and computer assisted cartography.

Computer Technology and Language Experience

C/C++, JavaScript, FORTRAN, and BASIC are native programming languages and have a working knowledge of Pascal, COBOL, and 8088/86 Macro-assembler. Have developed applications on MS-Windows w/ MFC, MS-DOS, UNIX, and X-Windows and other operating environments.

Peripherals used from applications, either by direct coding or interface libraries, include Versatec dot matrix B/W and Color plotters, Houston Instrument DMP plotters, Calcomp and Summagraphics digitizing tablets, and Tektronix Graphic terminals.

Experienced user of various software systems:

- Schlumberger: Techlog (pore pressure and geomechanics modules), EquiPoise
- Microsoft: Office suite including Access, Visio, Visual C/C++
- Landmark: ZMAP
- Petrospec: GPES, Trans, Data Capture Software, MisTie

Professional Affiliations

American Association of Petroleum Geologists

1444 South Boulder Avenue Tulsa, OK 74119-3604 Active Member / Computer Applications Committee Member, since 1980

Society of Petroleum Engineers

Richardson, Texas Active Member, since 1999

International Association for Mathematical Geosciences

1930 Avenue A Lawrence, Kansas 66044 Active Member, since 1982

Computer Oriented Geological Society - Dallas Chapter

Dallas, TX Active Member Conference Chairman for GEOTECH '90 Charter Member / Past President, since 1985 Other Affiliations San Jacinto County Republican Club Member, 1991 - 1999 Coldspring, TX 77331

North College Park Homeowner's Association Past-President and Crime Watch Block Captain, 1991 - 1999

University of Texas at Dallas Alumni Association Vice-Chairman, Board of Directors -- 1995 - 1997 Active Member, since 1993

Awards

Listed in 2,000 Notable American Men, 1992 American Biographical Institute, Raleigh, NC, 27622

Listed in Who's Who among Young Americans, 1991 American Biographical Institute, Raleigh, NC, 27622

Vice-Presidents Certificate of Recognition, 1987 for development of the Placid-Map Geological Workstation Environment

Eastern Michigan University's "Student Leadership / Service Award" for work rendered while on the Student Senate; 12/78.

Listed in Who's Who on American College Campuses, 1978, 1979

References

Available upon request.

Publications

Manuals, Reports, and Books

Herkommer, Mark A., 2022

Qubex Users Manual: GeoPressure – GeoMechanics analysis software manual for Qube Tech's real-time log and engineering data processing software, Published by Qube Tech LLC, 345pp, with figures.

Herkommer, Mark A., 2022

Qubex-3D Users Manual: GeoPressure – GeoMechanics analysis software manual for Qube Tech's 3-D seismic data processing software, Published by Qube Tech LLC, 123pp, with figures.

Herkommer, Mark; Sharma, Sachin; Lessi, Jacques; Kimour, Farouk; 2017, 2018 Integrated Interpretation Workflow: Xview - Xcheck - Xfield Rev 1.0.1 / May 18, 2018, published by Excellence Logging, US., 147pp with figures

Herkommer, Mark A. ,2016 Geopressure - Geomechanics Services Support: A Full Lifecycle Service Delivery Framework Published by Qube Tech LLC, 32pp with figures

Herkommer, Mark A., 2016 Qubex-3D: GeoPressure – GeoMechanics analysis software manual for Qube Tech's 3-D seismic data processing software, Published by Semicircle LLC, 123pp, with figures.

Herkommer, Mark A., 2015 Patent Memo: Big Data Geomechanics, with figures. Published by Semicircle LLC

Herkommer, Mark A., 2014 Patent Memo: Polycrystalline Diamond Compact (PDC) Bit Drilling Exponent, with figures. Published by Schlumberger

Herkommer, Mark A., 2014 Patent Memo: Normal Compaction Trends using Velocity Inversion Compensation, with figures. Published by Schlumberger

Herkommer, Mark A, 2014 Editor: Schlumberger Geomechanics Community Newsletter (8 Editions) Contributed regularly in the "Geomechanics Technology Corner" and "Schlumberger Technology Onslaught" column. Topics included Bower's method NCT calibration, fracture gradient modeling, estimating shear velocity from interval velocity, and conference reviews. Published by Schlumberger

Herkommer, Mark A, 2012 - 2013

EquiPoise Training Materials and Certification Standards. Published by Schlumberger

Herkommer, Mark A. 2010 - 2014 EquiPoise User's Manual, A geopressure - geomechanics analysis software manual for Geoservices' real- time MWD/LWD data processing software, published by Schlumberger, ~400pp, with figures.

Herkommer, Mark A. 2000 - 2009

EquiPoise User's Manual, A geopressure analysis software manual for Petrospec's real- time MWD/LWD data processing software, Published by Petrospec Technologies, 255pp, with figures.

Herkommer, Mark A., 1998

Number Theory: A Programmer's Guide, A text book about efficient numerical methods in applied number theory and communications, McGraw-Hill Publishing Company, New York, 425pp, with figures.

Herkommer, Mark A. 1998, 1999, 2003, 2007

pQube, A geopressure analysis software manual for Petrospec's 3-D seismic data processing software, Published by Petrospec Technologies, 63pp, with figures.

Herkommer, Mark A. 1996, 1997

CoQube, A coherency/continuity analysis software manual for Petrospec's 3-D seismic data processing software, Published by Petrospec Technologies, 31pp, with figures.

Herkommer, Mark A., 1991, 1993, 1996

GeoPressure Estimation Software: User's Manual, A manual describing how to use GPES to perform geopressure analyses using petrophysical data, Published by Petrospec Technologies, 178 pp, with figures.

Herkommer, Mark A. and Hess, Richard, 1994

Personal Computer Mapping System User's Manual, A manual describing how to use Petrospec's Personal Computer Mapping System, with reference section and examples. Published by Petrospec Technologies, 480 pp, with figures.

Herkommer, Mark A., 1991

GeoPressure Estimation Software: System Manual, A manual describing the architecture and system design of the GPES. Published by Petrospec Technologies, 136 pp.

Herkommer, Mark A., D 'Augustine, Jim M., 1991

MobilGraph Log Analysis Interface Project, A report detailing the design specifications for a petrophysical database using a relational database model. Published by Mobil Exploration and Producing Services, Dallas, Texas, 300 pp.

Herkommer, Mark A., 1991 An Introduction to DOS Workstations, Published by Dallas Computer Oriented Geological Society, Short Course, Part 2, 60 pp.

Herkommer, Mark A., 1987 - 1994

Data Capture Software for Maps, A manual describing the installation and use of a computerized digitizing system for seismic data and geographic mapping. Functional components described included: digitizing, data merging, data splitting. Published by Petrospec Technologies, 168 pp.

Herkommer, Mark A., 1993 - 1994

Data Capture Software for Logs, A manual describing the installation and use of a computerized digitizing system for petrophysical logs. Functional components described included: database functions, importing, editing, and outputting digitized data. Published by Petrospec Technologies, 130 pp.

Herkommer, Mark A., 1987 - 1991

Mistie, A manual describing the installation and use of a computerized system for determining and resolving seismic line data intersection misties. Published by Petrospec Technologies, 45 pp.

Herkommer, Mark A., 1986

Placid Map: User's Manual, A manual describing the installation and use of a computerized mapping and software system. Functional components included: database design, digitizing, and automated contour mapping. Published by Placid Oil Company, 320 pp.

Journal & Magazine Articles

Herkommer, Mark A. 2017 Quantitative Fluorometric Analysis, Guest Speaker, London Petrophysical Society, London, UK

Herkommer, Mark A. 2017

Limits on the Accuracy of Pore Pressure Estimates by Analysis of Random Measurement Error and Means for Improvement, First EAGE Workshop on Pore Pressure Prediction, March 19-21, 2017, Pau, France.

Ablard, P; Bell, C; Cook, D; Fornasier, I; Poyet, J.P.; Sharma, S; Haines, G; Herkommer, M. A; McCarthy, K; Radakovic, M; and Umar, L, 2012 The Expanding Role of Mud Logging, Oilfield Review, A Schlumberger Journal, Spring, 2012, pp 24 - 41

Herkommer, Mark A, 2012 Mud Logging's Contribution to Petrophysical Analysis, Guest Speaker, London Petrophysical Society, London, UK

Herkommer, Mark A, 2012 The Ethics of Pore Pressure Prediction, at SPE Conference on Geopressure Assessment and Its Impact On Wellbore Construction (February, 2012), Phuket, Thailand

Herkommer, Mark A, 2011 Distinguishing Between Influx and Wellbore Breathing, Guest Speaker, London Petrophysical Society, London, UK

Herkommer, Mark A, 2005 Online Pore Pressure and Fracture Gradient Tools: Natural Gas Density, Rectangular Coordinate Transformation, Digitize Graphic Images; http://www.petrospectechnologies.com/resource/tools.htm

Herkommer, Mark A, 2003 Online Pore Pressure and Fracture Gradient Tools: Overburden Gradient, Eaton Exponent, Normal Compaction Trend Equation, Pore Pressure and Fracture Gradient; http://www.petrospec-technologies.com/resource/tools.htm

Herkommer, Mark A., 2000 Velocity Inversion Compensation: A Methodology Enhancement, Overpressure 2000 Conference Proceedings, Overpressure 2000 Workshop, April 2000, London England

Herkommer, Mark A., 1999 Abnormal Formation Pressure: Theory, Prediction, and Estimation, in Conference Proceedings, Geopressure Estimation '99 Conference, October, 1999

Herkommer, Mark A., 1997 Consulting in Today's Energy Industry, in Tidbytes, Computer Oriented Geological Society, Vol. 13, No. 4 (November)

Herkommer, Mark A., 1995 Cartography and Computer Mapping, in Personal Computers and Geology, AAPG Southwest Section Short Course Notes, June 4, 1995, Dallas, Texas

Herkommer, Mark A., 1995 Issues Confronting Richardson, An analysis of statistical data and identification of areas where Richardson city government could improve the quality of service provided. 20pp, with figures, Published by the New Metro Institute, Richardson, TX

Herkommer, Mark A., Whitney, Paul D., 1994 Minimizing Misties in Seismic Data, Computers & Geosciences, Pergamon Press, V. 20, No. 5, pp 767 - 795 Smith, Tom, and Herkommer, Mark A., 1994 Software Merges Interpretation Mapping with PC Workstations, The American Oil & Gas Reporter, July, 1994, pp 55 - 60

Herkommer, Mark A., 1994

ZMAP Plus Under MS-Windows: The Advantages of a GUI, Dallas Geophysical Society Personal Computer Symposium (Invited Speaker), Conference Proceedings, February 24, 1994; also in Computer Oriented Geological Society, Tidbytes Newsletter, V. 9, No. 11 (May, 1994)

Herkommer, Mark A., 1993 How Gas Buoyancy Creates Shallow-Zone Geopressures, World Oil, Gulf Publishing Company, October, 1993, pp 64 - 66

Hess, Richard, and Herkommer, Mark A., 1993 General Principles, Efficient Approaches to Computer Contour Mapping, Earth Observation Magazine, April, 1993, pp 46 - 49

Proehl, T. S; Onyia, E. C.; Herkommer, Mark A., 1992 Assessing the Productivity and Economic Impact of Geopressure Evaluation Software, Society of Petroleum Engineers Petroleum Computer Conference, July 19-22, 1992, Houston, Texas, Conference Proceedings, SPE Paper 24447, pp 231 - 239

Herkommer, Mark A., 1992 Geological Career Options in the 90's, Dallas Geological Society Employment Seminar, Seminar Notes, May 11, 1992

Herkommer, Mark A., 1992 Pressure Estimation Results in Better Well Control, The American Oil and Gas Reporter, April, 1992, pp 36 - 40

Herkommer, Mark A., 1991 Computer Assisted Analysis of Pore Pressures in Overpressured Formations, Computer Oriented Geological Society, Tidbytes Newsletter, V. 6, No. 4 (December, 1991)

Herkommer, Mark A., 1991 Using a Computer to Assisted Analysis of Pore Pressures in Overpressured Formations, Petroleum Engineering Seminar Abstracts, November, 1991, University of Texas, Austin, Texas

Herkommer, Mark A., 1990 An Industry Standard Well Log Database Interface, Transactions, Computer Oriented Geological Society Geotech '90

Waller, Harry O.; Guinn, Don O.; Herkommer, Mark A.; Shaw, Brian R.; 1990

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Exchange Format for Transfer of Geologic and Petroleum Data: AAPG-B, AAPG Bulletin, V. 74, No. 4, pp 787

Waller, Harry O.; Guinn, Don O.; Herkommer, Mark A.; Shaw, Brian R.; 1990 Exchange Format for Transfer of Geologic and Petroleum Data: AAPG-B, Geobyte, April, 1990, V. 5, No 2, pp 11 - 21

Herkommer, Mark A., 1990 Exchange Format for Transfer of Geologic and Petroleum Data: AAPG-A: Discussion, AAPG Bulletin, V. 74, No. 1, pp 95 - 96

Herkommer, Mark A., 1989 Computer Mapping Options, Dallas Computer Oriented Geological Society, Tidbytes Newsletter, V. 5, No. 4 (December, 1989)

Herkommer, Mark A., 1989 Principles of Computer Mapping Seminar, Dallas Computer Oriented Geological Society, Tidbytes Newsletter, V. 4, No. 5 (January, 1989)

Herkommer, Mark A., 1989 Automatic Screen Dumps from a BASIC Program and DOS, Dallas Computer Oriented Geological Society, Tidbytes Newsletter, V. 4, No. 5 (January, 1989)

Herkommer, Mark A., 1988 Computer Mapping in a Microcomputer Workstation Environment, Dallas Computer Oriented Geological Society, Tidbytes Newsletter, V. 4, No. 4 (December, 1988)

Herkommer, Mark A., 1988 Methods for Developing Benchmarking Data Sets; Computers & Geosciences, Pergamon Press, V. 14, No. 2, pp 139 - 150

Herkommer, Mark A., 1987 Contour Mapping using a Microcomputer, Dallas Computer Oriented Geological Society, Tidbytes Newsletter, V. 3, No. 4 (December, 1987)

Herkommer, Mark A., 1987 Using the ANSI.SYS Device Driver, Dallas Computer Oriented Geological Society, Tidbytes Newsletter, V. 3, No. 3 (November, 1987)

Herkommer, Mark A., 1986 Techniques Devised to Improve Contour Mapping by Microcomputer; Geobyte V. 1, No. 2, (Spring, 1986), pp 38 - 41

Herkommer, Mark A., 1985

Data-Volume Reduction of Data Gathered Along Lines Using the Correlation Coefficient to Determine Breakpoints; Computers & Geosciences, Pergamon Press, V. 11, No. 2, pp 103 - 110

Herkommer, Mark A., 1985 A Digitizing Tablet for the Masses, Texas Computer Market, March 1, 1985, pp 12 - 14

Herkommer, Mark A., 1984

Graphics Using a Microcomputer, in Microcomputers in Petroleum Exploration and Production, PETRO-PC '84 Conference, Institute for the Study of Earth and Man, Southern Methodist University, Dallas, Texas

Herkommer, Mark A., 1984

Contour Mapping Using a Microcomputer, in Microcomputers in Petroleum Exploration and Production, PETRO-PC '84 Conference, Institute for the Study of Earth and Man, Southern Methodist University, Dallas, Texas

Herkommer, Mark A., 1984 A PC Pen Plotter; PC Magazine, V. 3 No. 10, pp 383 - 385

Herkommer, Mark A., 1984

Contour Mapping Using a Microcomputer: Techniques for Improving Throughput; CPS-1 Users Conference Transactions, Radian Corporation, Austin, Texas

Herkommer, Mark A., 1984

Contour Mapping Using a Microcomputer: Techniques for Improving Throughput; AAPG Bulletin, V. 68, No. 4, pg 496 (abstract only; paper presented at AAPG 1984 annual meeting)

Herkommer, Mark A., 1984 Contour Mapping Using a Microcomputer: Techniques for Improving Throughput; in Transactions of the 34th Annual Meeting, Gulf Coast Association of Geological Societies, Shreveport, Louisiana, (poster session), pp 471

Herkommer, Mark A., 1984 A Gridding Algorithm designed for Digitized Contours, The Right Stuff: High- Tech Review, V. 1, No. 1, pp 22-23

Herkommer, Mark A.; Denke, Garry W., 1982 Stratigraphy and Hydrocarbons, Parker County, Texas; in Petroleum Geology in the Fort Worth Basin Area, Texas; Charles Martin, Ed., Dallas Geological Society, Dallas, Texas, pp 97 - 128.

Digital Software and Digital Articles

Herkommer, Mark A., 1990

DIGIT, A Map Digitizing Program for Determining XY Coordinates from Paper Maps, Dallas Computer Oriented Geological Society, Dallas, TX, Disk #8

Herkommer, Mark A., 1984 PEEKPOKE.DOC, Peek and Poke -- Method for Accessing System Services on a PC from BASIC, I. B. Magazette, V. 3.7

Herkommer, Mark A., 1984 MEGAMULT.BAS, A Utility Program for Multiplying Extremely Large Numbers Together, I. B. Magazette, V. 3.5

Herkommer, Mark A., 1984 DEMOPLOT.BAS, Raster to Vector Conversion Program for Epson Printers, I. B. Magazette, V. 3.2

Herkommer, Mark A., 1983 REGRESS.BAS, Interactive Regression Analysis for XY Data, I. B. Magazette, V. 2.3

Herkommer, Mark A., 1983 GRID2CON, A Gridding and Contouring Program, Computer Oriented Geological Society, Denver, CO, Disk #2

Non-Traditional and Graphic Art

Herkommer, Mark A., 1993

MATHEMATICS, A book cover with arithmetic nomographs, rulers, geometric formulas, conversion factors, alphanumeric code and clever quips, published by Walraven Book Cover Company, Richardson, Texas. Distributed in the Richardson Independent School District.

Herkommer, Mark A., 1992

The Pore Pressure Calculator, A two-sided slide chart used for determining abnormal formation pressures (pounds per gallon) using resistivity (ohmm) and interval transit time data (msec/ft). Conversion factors for pore pressure units on the reverse side. Published by Petrospec Technologies, Richardson, Texas. Distributed as promotional material at trade shows.

Year	Operator	Country	Area	Environment	Activity
2022	Ascent	USA	Ohio	Onshore	Post-drill study, incident investigation
2022	DOE	USA	Teapot Dome	Onshore	Post-drill study
2021	Enven	USA	Atwater Valley	Offshore DW	Pre-drill study
2021	Gulfport	USA	Ohio	Onshore	Post-drill study, incident investigation
2021	Lukoil	Mexico	Bay of Campeche	Offshore DW	Real-time surveillance
2021	Petronas	Mexico	Salina Basin	Offshore DW	Real-time surveillance
2020	USGS	USA	NPRA	Onshore	Post-drill study
2019	Marathon	USA	Oklahoma	Onshore	Post-drill study, incident investigation
2019	ХТО	USA	Texas	Onshore	Post-drill study, incident investigation
2018	ConocoPhillips	USA	Wyoming	Onshore HPHT	Pre-drill, real-time surveillance
2018	ConocoPhillips	USA	Wyoming	Onshore HPHT	Pre-drill, real-time surveillance
2018	Grupo Synergy	Ecuador	Guayaquil	Onshore	Pre-drill study
2018	Marathon	USA	Oklahoma	Onshore	Post-drill study, incident investigation
2017	ConocoPhillips	USA	Colorado	Onshore HPHT	Pre-drill, real-time surveillance
2017	ConocoPhillips	USA	Wyoming	Onshore HPHT	Pre-drill, real-time surveillance
2015	BP	Azerbaijan	Shah-Deniz	Offshore	Pre-drill, real-time surveillance
2015	ConocoPhillips	Malaysia	Sabah DW	Offshore	Pre-drill, real-time surveillance
2015	Kosmos	Mauritania	Block C8	Offshore	Pre-drill study
2015	Lukoil	Romania	Black Sea	Offshore DW	Pre-drill study
2015	Lukoil	Romania	Black Sea	Offshore DW	Post-drill study
2015	NPDC	Nigeria	Okono	Offshore	Real-time surveillance
2015	Repsol	Norway	North Sea	Offshore	Real-time surveillance

2015	Saudi Aramco	Saudi Arabia	Dammam	Onshore	Pre-drill, real-time surveillance
2015	Saudi Aramco	Saudi Arabia	Dammam	Onshore	Real-time surveillance
2015	Shell	USA	Chukchi Sea	Offshore	Post-drill study
2014	Afren	Nigeria	Nigerian Delta	Offshore	Pre-drill study
2014	Anadarko	USA	East Breaks	Offshore DW	Incident investigation
2014	Anadarko	USA	Walker Ridge	Offshore DW	Pre-drill study
2014	BP	Azerbaijan	Azeri	Offshore	Pre-drill, real-time surveillance
2014	BP	UK	North Sea	Offshore	Real-time surveillance
2014	BP	USA	Mississippi Canyon	Offshore DW	Pre-drill study
2014	Devon	Equatorial Guinea	Blocks B, C, and P	Offshore	Pre-drill study, real-time surveillance
2014	ENI	Gabon	D4 Block	Offshore	Pre-drill study
2014	Husky	Canada	Grand Banks	Offshore	Pre-drill study
2014	Husky	Canada	Grand Banks	Offshore	Pre-drill study
2014	Newfield	Malaysia	Sabah	Offshore DW	Real-time surveillance
2014	Petrobras	Columbia	Orca	Offshore	Real-time surveillance
2014	Shell	Nigeria	Gbaran	Offshore	Real-time surveillance
2014	Statoil	Canada	Logan	Offshore DW	Incident investigation
2013	Addax	Cameroon	Ngosso	Offshore	Real-time surveillance
2013	BP	Angola	Kwanza Basin	Offshore DW	Pre-drill study
2013	BP	UK	West Shetland	Offshore DW	Real-time surveillance
2013	BP	UK	North Uist	Offshore DW	Real-time surveillance
2013	BP	USA	Mississippi Canyon	Offshore DW	Real-time surveillance
2013	Cobalt	Angola	Kwanza Basin	Offshore DW	Real-time surveillance
2013	Cobalt	USA	Keathley Canyon	Offshore DW	Real-time surveillance
2013	Cobalt	USA	Main Pass	Offshore	Pre-drill study
2013	ConocoPhillips	Angola	Kwanza Basin	Offshore DW	Pre-drill study
	Husky	USA	Alaska	Onshore	Post-drill study

2013	InterOil	Papua NG	Antelope	Offshore	Real-time surveillance
2013	Maersk	Angola	Kwanza Basin	Offshore DW	Real-time surveillance
2013	PCSB	Malaysia	Miri	Offshore	Pre-drill, real-time surveillance
2013	Perenco	Brazil	Santos Basin	Offshore	Pre-drill, real-time surveillance
2013	Petronas	Malaysia	Sabah	Offshore	Pre-drill, real-time surveillance
2013	Reliance	India	Krishna Godavari Basin	Offshore DW	Incident investigation
2013	Reliance	India	Krishna Godavari Basin	Offshore DW	Pre-drill, real-time surveillance, incident investigation
2013	Renaissance	USA	Ship Shoal	Offshore	Real-time surveillance
2013	Shell	Australia	WA Block	Offshore	Real-time surveillance
2012	Anadarko	Sierra Leone	Mercury	Offshore DW	Pre-drill, real-time surveillance
2012	Anadarko	Cote d'Ivoire	Kosrou	Offshore	Pre-drill study
2012	Anadarko	Cote d'Ivoire	Paon	Offshore	Pre-drill study
2012	Apache	New Zealand	East Coast Basin	Offshore	Pre-drill study
2012	BG	Tanzania	Deep Water Block	Offshore	Pre-drill study, real-time surveillance
2012	BP	USA	Keathley Canyon	Offshore DW	Real-time surveillance
2012	Chevron	UK	NW Shetland Islands, UK	Offshore	Pre-drill study
2012	Lukoil	Sierra Leone	Savannah	Offshore	Real-time surveillance
2012	Niko	Trinidad & Tobago	Block 2AB	Offshore	Pre-drill study
2012	Niko	Trinidad & Tobago	Block 2AB	Offshore	Pre-drill study
2012	Noble	Israel	Block 12	Offshore	Pre-drill study
2012	Petronas	Malaysia	Miri	Offshore	Pre-drill, real-time surveillance
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2012	Shell	USA	Mississippi Canyon	Offshore DW	Real-time surveillance
2012 2012	Shell Total	USA Norway	Block 30	Offshore DW Offshore	Real-time surveillance

2011	Anadarko	USA	Green Canyon	Offshore DW	Pre-drill study, incident investigation
2011	Anadarko	Sierra Leone	Jupiter	Offshore DW	Real-time surveillance, incident investigation
2011	ENI	Australia	Albers Block	Offshore	Pre-study, incident investigation
2011	ENI	Australia	Camelot Block	Offshore	Pre-drill study
2011	Pemex	Mexico	Bay of Campeche	Offshore	Pre-drill, real-time surveillance
2011	Petrobras	USA	North Padre Island	Offshore	Post-drill study
2011	Petronas	Malaysia	Sabah	Offshore DW	Pre-drill, real-time surveillance
2011	Petronas	Malaysia	Miri	Offshore	Pre-drill, real-time surveillance
2011	Repsol	Brazil	Campos Basin	Offshore DW	Real-time surveillance, incident investigation
2011	Repsol	Brazil	Campos Basin	Offshore DW	Real-time surveillance, incident investigation
2011	Repsol	Guyana	Guyana-Suriname Basin	Offshore	Real-time surveillance
2011	Repsol	USA	Keathley Canyon	Offshore DW	Pre-drill study
2011	Shell	Brunei	Salman	Offshore	Real-time surveillance
2011	Shell	Malaysia	Sabah	Offshore DW	Pre-drill study
2011	Statoil	USA	Walker Ridge	Offshore DW	Pre-drill study, incident investigation
2011	Woodside	Australia	NW Shelf	Offshore	Pre-drill study
2010	Apache	Australia	Zola	Offshore	Pre-drill study review, real-time surveillance
2010	Armstrong	USA	Louisiana	Onshore HPHT	Pre-drill study
2010	BP	USA	Mississippi Canyon	Offshore DW	Real-time surveillance
2010	CNOOC	China	South China Sea	Offshore	Real-time surveillance
2010	ConocoPhillips	USA	Alaska	Offshore	Post-drill study
2010	ESSO	Australia	East Remora	Offshore	Real-time surveillance
2010	Petronas	Malaysia	Sabah	Offshore	Pre-drill, real-time surveillance

2010	Repsol	Brazil	Campos Basin	Offshore	Pre-drill, real-time surveillance, incident investigation
2010	Repsol	Brazil	Espirito Santo basin	Offshore	Pre-drill study
2010	Shell	USA	Mississippi Canyon	Offshore DW	Post-drill study
2010	Total	Brunei	South China Sea	Offshore	Pre-drill study
2010	Tullow	Tanzania	Ruvuma Basin	Offshore	Real-time surveillance
2009	Cobalt	USA	Green Canyon	Offshore DW	Real-time surveillance
2009	Murphy	DR of Congo	Congo River Delta	Offshore	Pre-drill study
2009	Repsol	Venezuela	Perla	Offshore	Pre-drill study
2009	Shell	Nigeria	OPL	Offshore	Pre-drill, real-time surveillance
2009	Statoil	USA	Mississippi Canyon	Offshore DW	Incident investigation
2009	Statoil	USA	Mississippi Canyon	Offshore DW	Real-time surveillance
2009	ΤΡΑΟ	Turkey	Central Black Sea	Offshore	Pre-drill study
2009	ΤΡΑΟ	Turkey	Western Black Sea	Offshore	Pre-drill, real-time surveillance
2009	Vanco	Cote d'Ivoire	Orca DW	Offshore	Pre-drill study
2008	BP	Libya	Gulf of Sirte	Offshore	Real-time surveillance
2008	Callon	USA	Garden Banks	Offshore DW	Pre-drill study
2008	Repsol	Suriname	Guyana-Suriname Basin	Offshore	Pre-drill study
2008	Repsol	Suriname	Guyana-Suriname Basin	Offshore	Pre-drill study
2008	ΤΡΑΟ	Turkey	Eastern Black Sea	Offshore	Pre-drill study
2007	Mariner Energy	USA	Keathley Canyon	Offshore DW	Pre-drill study
2007	Newfield	USA	South Timbalier	Offshore	Pre-drill study
2007	Petronas	Malaysia	Sabah	Offshore DW	Pre-drill, real-time surveillance
2007	Vanco	Ukraine	Moryana	Onshore	Pre-drill study
2006	Shell	Nigeria	Etan	Offshore	Pre-drill study
2005	Energy Partners	USA	South Timbalier	Offshore	Pre-drill study
2005	Hunt Oil	USA	High Island	Offshore	Pre-drill study
2005	Murphy	DR of Congo	Congo River Delta	Offshore	Pre-drill study

2003	Shell	Brazil	Campos Basin	Offshore DW	Pre-drill Study
2003	Wintershall	Brazil	Block BM-S-14	Offshore DW	Pre-drill study
2002	BP	Trinidad & Tobago	Iron Horse	Offshore	Pre-drill study
2002	Nuevo Energy	USA	California	Onshore	Post-drill study
2002	Pioneer NRC	USA	East Breaks	Offshore DW	Pre-drill study
2001	Anadarko	USA	Mississippi Canyon	Offshore DW	Pre-drill study
2001	Chevron	USA	Green Canyon	Offshore	Pre-drill study
2001	Devon	USA	Garden Banks	Offshore	Pre-drill study
2001	Samson	USA	Mustang Island	Offshore	Pre-drill study
2001	Total	USA	Atwater Valley	Offshore DW	Pre-drill study
2001	Total	USA	Mississippi Canyon	Offshore DW	Pre-drill study
2000	Devon	USA	Eugene Island	Offshore	Pre-drill study
2000	Devon	USA	Main Pass	Offshore	Pre-drill study
2000	Rock Oil	UK	NE Irish Rockall	Offshore DW	Pre-drill study
1999	CNG Producint	USA	Texas	Onshore HPHT	Pre-drill study
1999	Vastar	USA	Mississippi Canyon	Offshore DW	Pre-drill study