

# TECHNICAL REPORT NO. 29 (2008)

## Table of Contents

Research Staff .....	ii
Acknowledgment .....	iii
Table of Contents .....	iv

---

CHAPTER 1	Response of a Triaxial Induction Logging Tool in a Homogeneous Biaxial Anisotropic Formation, by Ning Yuan, Xiaochun Nie and Richard Liu.....	1
CHAPTER 2	Simulation of LWD Tool Response Using a Fast Integral Equation Method, by Xiaochun Nie, Ning Yuan and Richard Liu.....	44
CHAPTER 3	Analysis of Dielectric Enhancement of Periodic Composite Materials at Low Frequencies Using Numerical Methods, by Miao Luo and Richard Liu.....	70
CHAPTER 4	LWD Induction Tool Response in an Eccentric Cylindrically Layered Formation, by Mark Collins and Richard Liu.....	107
CHAPTER 5	Improvements on One-Dimensional Simulation of Triaxial Induction Tool in Dipping Transverse Isotropic Formations, by Zhijuan Zhang and Richard Liu.....	144
CHAPTER 6	Modeling Coil-Type Tools in Axially Symmetric Formation Using a Finite Element Method, by Jinjuan Zhou and Richard Liu.....	165
APPENDIX A	3XTI08 User's Guide.....	224
APPENDIX B	TRIBIA08 User's Guide.....	247
APPENDIX C	Telemetry_3.2 User's Guide.....	266
APPENDIX D	List of Theses and Dissertations.....	290
APPENDIX E	List of Technical Paper Publications.....	297