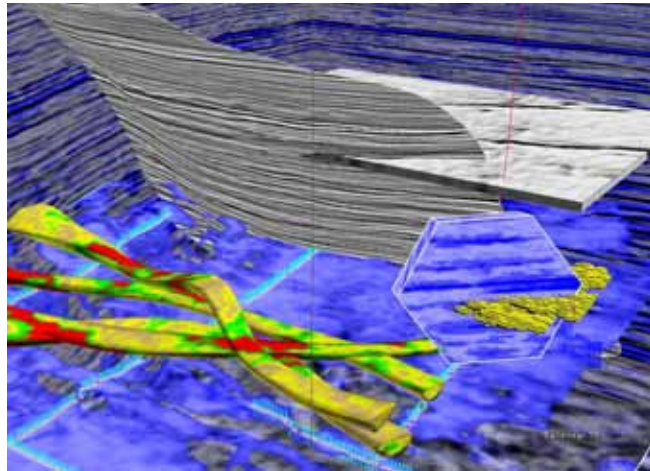


AAPG Annual Meeting and Exhibition Dallas – April 2004



Earth Decision Science's GoCad¹

The 2004 AAPG was moderately well attended (5000) but as ever, popular talks and the immense Dallas Convention Center meant that exhibit visitors seemed thin on the ground. A session on '**lessons learned from failures**' succeeded in providing entertaining accounts of past glories. But those who have truly failed are not ready to 'tell all'. The **big picture**, as determined by consultancies like Wood Mackenzie, Robertsons and IHS Energy is that we may really be seeing a move to **durably higher** oil prices. Industry has failed to replace consumption for some 20 years now and once profitable basins like the North Sea are now '**value destroyers**'. Hope and economic viability can still be found in the deep offshore.

Paradigm and CGG were noteworthy by their **absence** at the AAPG this year. But there were plenty of smaller software houses around to show their wares. Earth Decision Sciences appears to be turning GoCad into a fully featured interpretation and modeling environment and SMT is expanding its Windows-based Kingdom Suite to offer 'seismic to simulation' technology. The majors failed to generate much excitement. Landmark made heavy weather of selling its consultancy and outsourcing services while Schlumberger's cluster-based visualization lacked pizzazz.

We noted further developments from various universities in the field of laser mapping of **outcrop geology** – for integration within Virtual Reality environments. Applications for capturing awkward geo-data types like **cores and cuttings** from companies such as Core Laboratories, HRH Ltd., Cambrian and Pason show that these field-work derived applications have established themselves in their particular niches.

Looking forward we heard several companies describe emerging interpretation software that is developed, not with the ubiquitous OpenGL interface, but with Microsoft's **Direct-X**. Whatever the politics of this move, Direct-X may change the game in the near future as supercomputer graphics capability is available from PC-based graphics cards selling for a few hundred dollars.

There was some interesting research from the Kansas Geological Survey on the use of Semantic Web technologies to describe geological terms – notably formation names and chrono-stratigraphic units. Such '**ontologies**' are used to tie together maps from different areas.

¹ All images in this report are © and courtesy of the companies involved.

Highlights

- [Wood Mackenzie – Oil and Gas reserves](#)
- [Chevron Texaco’s Tech Teams](#)
- [Get Back to Exploration](#)
- [Cyber Infrastructure](#)
- [3D VSP Modeling](#)
- [EDS GoCad](#)
- [‘No glasses’ 3D Display](#)
- [Core Imagery](#)
- [Biostrat Web Portal](#)

Contents

Presidential Address and Keynotes	5
<i>Presidential address - Steve Sonneberg on ‘declining professionalism in our industry’</i>	<i>5</i>
<i>Special Session on ‘Lessons Learned from Failures’</i>	<i>5</i>
Bypassed Pay - Bob Sneider, Sneider Exploration, Houston.....	5
Human factors and system failures in industrial disasters - James Chiles	6
<i>Wood Mackenzie – Reserves, the big picture</i>	<i>6</i>
<i>Tech Teams and portfolio analysis in ChevronTexaco – Rob Ryan</i>	<i>6</i>
<i>COTS technology in Apache - Mike Bahorich.....</i>	<i>7</i>
<i>‘Get back to exploration’ – Pete Stark, IHS Energy.....</i>	<i>7</i>
Poster Sessions	8
<i>Automatic Fault Extraction (AFE) and AHAA attribute analysis from BP Center for Visualization.....</i>	<i>8</i>
<i>Net to gross estimation from visual histograms - ChevronTexaco</i>	<i>8</i>
3D VSP ‘VISUS’ from GeoTomo.....	9
Gravitas from HRH Geological Services.....	9
Cyberinfrastructure and the Chronos Network, Kansas Geological Survey.....	10
Recon Cube from Landmark.....	10
Relative Geologic Time Volume from Stark Research.....	11
3D digital photorealistic outcrop imagery and visualization from University of Texas at Dallas	11
Fast track interpretation from Veritas Exploration Services.....	12
Exhibitors.....	12
Commercial release of SBED from Austin Geomodeling.....	12
FaultED from Badleys.....	12
WellLink and LiveWire from Baker Atlas.....	12
Ceres from Beicip.....	13
Rapid core database and RIB HTML browser from Core Laboratories	13
Deepwater Field and Reservoir Database and Reports from Cossey & Associates.....	14
Envision VSX from Divestco.com.....	14
Real Time mudlogs in myWells.com. from Epoch Well Services.....	14
Tellus 2004 and new functionality in GeoScout from Fugro Robertson.....	15
LithoTect Interpreter from Geo-Logic Systems	15
Well Explorer from Geologix	16
Thematic Mapper product. from Geoplus.....	16

<i>Isatis V5.0 from Geovariances</i>	16
<i>MetaCarta GeoDrive</i>	17
<i>4D Vista from Midland Valley</i>	17
<i>NeuraScanner from Neuralog</i>	18
<i>Oil sample and information database from OilTracers</i>	18
<i>New geomechanics lab in Houston from Omni Laboratories</i>	18
<i>AutoDriller. from Pason Systems</i>	18
<i>Powerlog SE from Geostarsolutions</i>	19
<i>New functionality in Petrosys R14.3. from Petrosys</i>	19
<i>ODM 2.3 & Integration Canvas from PGL</i>	19
<i>Rt-Mod from PSTechnologies</i>	20
<i>Gigaviz on 16 node Cluster from Schlumberger</i>	20
<i>Q-Marine study on Lankahuasa field(Schlumberger)</i>	20
<i>New release of SDI CGM from SDI GGM</i>	21
<i>No glasses 3D Display from SeeReal Technologies</i>	21
<i>EZ Dataroom from Zebra Geosciences</i>	21
<i>Trinity Petroleum Systems Analysis and Genesis basin modeling from ZetaWare</i>	22
<i>Norther North Sea Evaluation from Ternan Ltd</i>	22
<i>GMI Imager from GeoMechanics International</i>	23
<i>EDS new features in GoCad 2.1 and 'Y-Faults' modeling. from Earth Decision Sciences</i>	23
<i>SURE and RC(2) port to Windows. from Seismic MicroTechnology</i>	24
Miscellaneous	24
<i>AMX Lightwave from IVT</i>	24
<i>TIFF format geological map server – Kansas Geol Soc Library</i>	24
<i>Open Spirit version of TerraSciences – and TS II from TerraSciences</i>	24
<i>Rack Saver Blade Clster from Verari Systems</i>	25
<i>Fossil Safaris from Warfield Fossil Quarries</i>	25
Papers of note	25
<i>A1 - Deal Promotion Dave Abbot, consultant</i>	25
<i>A8 Seismic Reservoir Description, Bachrach et al.</i>	26
<i>A9 Exploration Technology, Mike Bohorich, Apache Corp.</i>	26
<i>A10 Pompano field visualization with GeoProbe, Banfield et al.</i>	26
<i>A11 Modeling 3D outcrop data, Barton et all. Shell.</i>	26
<i>A17 Gravity calculations and Visualization, Brew Dynamic Graphics</i>	26
<i>A22 Why accept exploration risk ? Carvagher BP</i>	26
<i>A41 Leveraging GoCad for hydrocarbon migration assessment. Evendi et al ChevronTexaco</i>	26
<i>A43 Improving the E&P value proposition</i>	26
<i>A50 Biostratigraphy Web Portal. Gary et al. Tramontane Inc</i>	26
<i>A64 Model building with remote sensing data. Hodge et al Midland Valley.</i>	26
<i>A67 Volume-based Visualization, Huang et al Landmark</i>	26
<i>A81 Geological uncertainty in reservoir modeling. Laure, ChevronTexaco</i>	26
<i>A86 Value of digital outcrop data in reservoir modeling Loseth et al, Norsk hydro</i>	27
<i>A91 'We deliver what we promise' Bill Maloney, Statoil</i>	27
<i>A92 Beyond outcrop visualization – reservoir models in the CAVE. Martinsen et al Norsk Hydro</i>	27
<i>A95 Design of Experiment techniques in estimations of OOIP. Meddaugh et al. ChevronTexaco.</i>	27
<i>A113 Visualization and Digital Storage of Sedimentological data. Preston et al. HRH LTD</i>	27
<i>A134 BP's AVO Workbench. Sublette, Weinman GeoSciences</i>	27

<i>A138 Outcrop Analog data in 3D world. Thurmond – University of Texas at Dallas.....</i>	<i>27</i>
<i>A150 Decision Support Systems for exploration. Wygrala et al IES GmbH</i>	<i>27</i>
<i>A151 3D photorealistic outcrop mapping. Xueming. University of Texas at Dallas.....</i>	<i>27</i>
<i>A152 3D visualization of VSP. Yang, VS Fusion.....</i>	<i>27</i>
Resources	27
Technology Watch Service	28
