



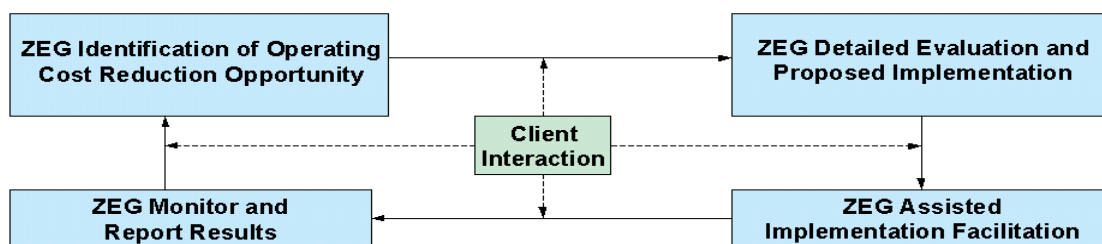
ZEG Launches New Service

With our increasing focus on understanding and supporting the needs of our clients, we have developed the Operating Performance Enhancement (OPE) service. The OPE service is a consulting partnership with our clients which focuses on identifying and implementing high return opportunities in optimizing field operating costs and production. Our world class benchmarking process pinpoints the highest value added opportunities in your specific operations, and the OPE service provides implementation support to your teams by identifying root causes, developing solutions and action plans tailored to your unique operation. Additionally, we will support the implementation and measurement of the initiatives.

- Monitor and report on key performance indicators, results and bottom line impacts, on a timely basis.

How Does It Work?

- This service leverages off our extensive operating cost benchmarking database and our analytical experience to quickly identify high value areas for improvement or production enhancement in specific client field operations.
- After these areas have been identified, senior Ziff consultants work with clients to identify root causes and develop practical solutions.
- Throughout each phase, Ziff will, on a timely basis, monitor and report on key performance indicators, operating results and bottom line impacts to our clients.



We combine the decades of experience of our own senior industry operations consultants with the operating expertise of your staff, while minimizing their time commitment. The service will seek economic solutions to the problems, and support the implementation of the solutions. In addition, we will provide mentorship in dealing with data management and analysis to assist your staff in their ongoing drive to continually optimize operating properties.

Principles of the Service:

- Partnership with our clients to identify and support the implementation of field-specific high return initiatives.
- Quickly isolate and identify prime areas for improvement in specific client operations.
- Isolate root causes, develop solutions, and support the implementation of viable action plans.

What Does OPE Deliver?

- A customized enhanced client analysis of performance trends, drivers and costs on a field basis.
- A customized client improvement implementation plan outlining key milestones, deliverables, and estimated benefits.
- Implementation support to clients to ensure the plan is executed in a timely and effective manner.
- A formal report and presentation to key stakeholders outlining the key findings and results achieved.

For further information or complimentary presentation/initial consultation, please contact: Court Mackid, P.Eng, MBA, Director, Canadian E&P Services: (403) 234-4293 cmackid@ziffenergy.com or Gord Masiuk, VP Human Resources: (403) 234-4295 gmasiuk@ziffenergy.com

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INDEX

1. OPE: E&P Consulting Services
2. NAGS Retainer Service
3. Gas Consulting Services
4. 2002 Conference
5. WPC in Rio De Janeiro
6. GCO Study: Focus on Production Enhancement
7. Deepwater Gulf of Mexico
8. SPE Tour, West Africa & South America
9. New Senior Executives

Ziff Offers North American Gas Strategies Retainer Service

In 2001, Ziff Energy assessed the recently discovered prolific Ladyfern gas field in Western Canada. We provided our expert view on the importance of the emerging gas supply from offshore Nova Scotia, evaluated several policy and market scenarios for natural gas trade and investment in Mexico over the next decade, and outlined our forecast of North American gas prices for NYMEX, notably a new conservative market outlook then many other gas specialists. We have written more than a dozen topic papers analyzing a wide scope of traditional and non-conventional issues.

Do you have a need for access to gas consultants specializing in supply, markets, transmission, storage, utility, regulatory, or gas prices from a North American perspective? Ziff Energy's North American Gas Strategies retainer services provides all that and two private customer-focused bi-annual presentations as well. The service also allows you ongoing access to senior consultants (in person, phone, email) and Ziff research. Who can benefit from this serv-

ice? Pipelines, LDCs, storage operators, producers, marketers, governments and end-users will all find it valuable. The Ziff Energy natural gas team has considerable expertise and experience regarding the key drivers affecting our industry. For further information please contact:

Rick DeWolf	rdewolf@ziffenergy.com Eastcoast, Regulatory
Tom Woods	twoods@ziffenergy.com Markets, Pricing
Bill Gwozd	bgwozd@ziffenergy.com Storage/Western Canada Supply
Bob Reid	breid@ziffenergy.com North American Pipelines
Ron Ford	rford@ziffenergy.com Custom Gas Quotations.

To subscribe to the North American Gas Strategies Retainer Service, email Bill Gwozd at bgwozd@ziffenergy.com.



Clients Rely on Ziff for Gas Consulting

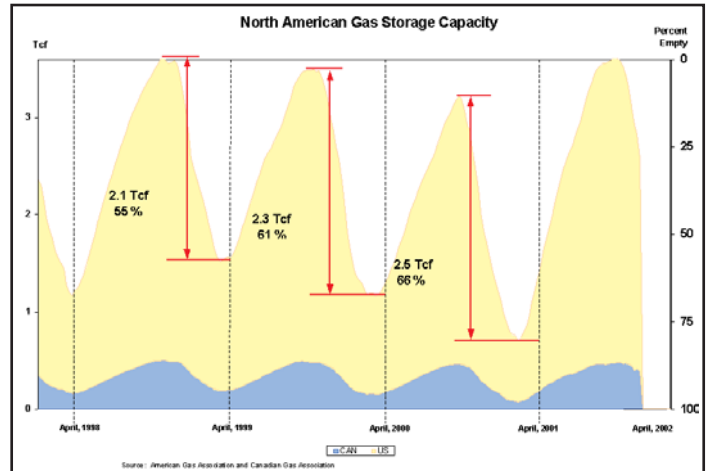
While we often work independently to provide expert advice and opinions, Ziff also consults to clients one-on-one in a variety of areas, from gas storage to regulatory issues, providing the required specialized knowledge with flexible, responsive and interactive client assistance.

Houston VP Dr. Tom Woods is currently working with a leading gas association to provide a North America supply and demand outlook. In Calgary, Bill Gwozd, Manager Gas Storage, and Sr.VP Rick DeWolf are currently working with two separate natural gas distribution companies to analyze their long term requirements for storage services as part of their overall gas supply delivery portfolios. These two distribution companies, situated in distinctly different producing basins in Canada and the United States, have specific needs that required unique solutions.

During 2001, Rick DeWolf provided assistance and independent expert testimony to several clients on toll design and tariff matters relating to an oil pipeline, natural gas pipeline and natural gas distribution system in several Canadian regulatory jurisdictions. These assignments were undertaken on behalf of pipeline companies, shippers and regulators. In addition, Bill Gwozd has consulted to a number of natural gas parties in the areas of long term transportation, gas pricing, and gas supply requirements.

Gas Storage Inventory Utilization is Increasing

While North American Gas Storage inventory did reach a record level in November 2001, Ziff Energy Group analysis indicates the recent storage inventory utilization has increased to 65% from 55%. The improved inventory utilization dramatically reduces the cost of carrying gas storage inventory to the next winter. Many LDC's and marketers typically hold back storage inventory to provide a back stop against sudden and cold winter weather in late February and March. The North American Gas Storage chart opposite includes recent public gas storage inventory data. Bill Gwozd, Manager Gas Storage, may be reached at bgwozd@ziffenergy.com or (403) 234-4299 for further discussion on gas storage issues.



WPC To Inaugurate New Awards

The "WPC Excellence Awards" ceremony will be held during the 17th WPC, in Rio, for the first time. This new corporate award distinguishes oil companies, institutions or any public or private organizations that promote or operate with high standards of excellence. It consists of two categories: "Technological Development" and "Social Responsibility." The winners will be selected by means of such criteria as: technological breakthroughs; cost effectiveness; commitment and involvement of management and employees; wide applicability; and reproducibility for the petroleum industry. The winners will be selected by an international committee consisting of representatives from highly qualified organizations such as: Society of Petroleum Engineers, World Energy Council, International Gas Union, World Wildlife Foundation and United Nations Environmental Organization.

The application form is available from the WPC Secretariat, National Committees or can be downloaded from the WPC web site: <http://www.world-petroleum.org>. Any project material that will facilitate the assessment task of the Selection Committee may be attached. Applications are to be sent to WORLD PETROLEUM CONGRESSES, 4th Floor, Suite 1, Duchess Street, London W1N 3DE, or to the local WPC National Committees.

The winners will be presented with their award during a luncheon at the 17th WPC, when they will have the opportunity to speak about the winning projects and invite the audience to visit the special WPCEA display stands.

Understanding North American Pipeline Networks

With a continuous stream of new gas transport and gas storage project announcements emerging, it is becoming increasingly important to have a clear picture of the impacts in the competitive market place. Through grassroots development, Dr. Robert Brooks has emerged as an industry pioneer with his GPCM (r) North American pipeline network model. Currently 18 senior producers, pipelines, marketers, and natural gas end users have subscribed to this service. Ziff Energy is the *exclusive agent for model distribution in Canada*.

Additional information is available from Bill Gwozd (403) 234-4299 bgwozd@ziffenergy.com.

2002 Conferences Promise Topnotch Speakers

Ziff Energy's 2002 spring Gas Strategies Conference is set for April 15 - 16, at the Houstonian Hotel in Houston, Texas. North American Natural Gas: Surviving Volatility will see industry and government leaders putting forward their ideas on dealing with the impact of increasing volatility in prices, markets and storage on conventional gas trade. Prominent speakers include Steve Malcolm, CEO - Williams, Hon. Murray Smith, Minister of Energy - Alberta, Jay Holm, CEO, Eastern Pipelines - El Paso, Hal Kvisle, CEO - TransCanada Pipelines, Tim Holt, VP Onshore US - BP, Matt Schatzman, CEO, Energy Convergence - Dynegy, David Hager, VP, Worldwide Deepwater - Kerr-McGee, Kyle Sawyer, VP - El Paso Global LNG. Last year's Houston conference was extremely successful as more than 350 executives took part in two days of discussion focused on the escalating interest in frontier gas development in the North. Ziff was privileged to have as its keynote presenter Alaska governor, Tony Knowles, as well as Canadian Premiers Stephen Kakfwi of the Northwest Territories and the Yukon's Pat Duncan.

Ziff decided to expand the number and content of conferences, a decision which was well received by the industry

Ziff Energy Selected as Sponsor of 17th World Petroleum Congress in Rio de Janeiro, Brazil

Ziff Energy was recently selected as a sponsor of the 17th World Petroleum Congress (WPC) to be held September 1 - 5, 2002 in Rio de Janeiro, Brazil. The theme of this five-day global business strategy event is "The Petroleum Industry: Excellence & Responsibility in Serving Society", and will feature 4 outstanding "blocks" of Congress Topics:

- "Excelling in the Exploration and Production of Oil and Gas"
- "Excelling in Refining and Delivering Quality Petrochemicals"
- "Excelling in Delivering Clean Energy and Quality Products from Natural Gas"
- "Excellence & Responsibility in Managing the Petroleum Business with Economic, Environmental and Social Dimensions"

Keynote Speakers will include:

- OPEC Secretary General - Ali Rodriguez Araque
- Petrobras CEO - Francisco R. Gros
- ChevronTexaco CEO - David O'Reilly
- Saudi Aramco CEO - Abdullah X. Jum'ah
- Repsol YPF CEO - Alfonso Cortina
- Norsk Hydro CEO - Egil Myklebust
- Schlumberger CEO - Euan Baird
- Shell Director - Latin America & Africa - Lew Watts

As a sponsor, Ziff Energy will assist with promotion of the event in North America, and also internationally. The firm was both a sponsor and active participant of the 16th WPC, held June 2000 in Calgary. Ziff will exhibit at the 17th Congress, with details to follow in the next issue of this newsletter. In addition, Paul Ziff, CEO will present a paper at the Congress. Mark your calendars now for this important international oil and gas industry event. We look forward to meeting you and/or your colleagues in Rio! For more information, you may contact the 17th World Petroleum Congress at (55 212) 282-2002 or via email at brasoc@wpc2002.com.

even with the aftermath of September 11. The energy industry's enthusiasm for higher-level networking and educational opportunities that deliver unparalleled content, speakers and venues has been the driving force of the expansion.

Hence the positive results of our recent, second annual Gas Storage conference. Redefining the Fundamentals: Is Gas Still in the Storage Game?, which took place February 6 - 7 in Houston. This was designed to meet the demand of members of the gas industry who wanted more information on storage projects, storage operations and storage related technology with a focus on power markets, deliverability and custom service, competitive processes, and pricing and risk management.

Also to come is our flagship North American Gas Strategies Conference, now in its eighth year, scheduled for October 28 - 29 in Calgary, Alberta.

For more information on this or any other Ziff Energy conference, call 1-800-853-6252 or visit our website at www.ziffenergyconferences.com.

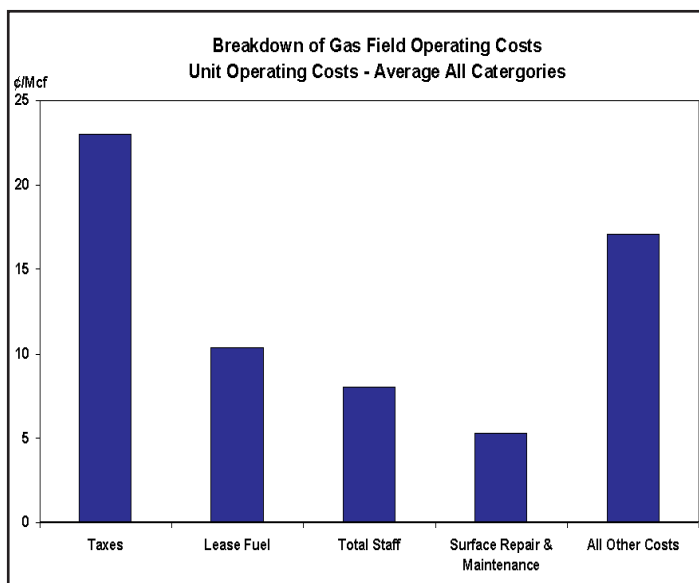
Gulf Coast Onshore Study focuses on Production Enhancement

Completed in December 2001, Ziff Energy's Gulf Coast Onshore Reducing Field Operating Costs/Best Practices (RFOC) study analyzed operating cost data for the calendar year 2000, a period of strong gas activity. The study included production in Texas Railroad Commission Districts 1, 2, 3 & 4, and land and shallow water coastal areas of South Louisiana and Southeastern Texas. In the past, Ziff Energy applied its RFOC study process to Gulf Coast Onshore operations with separate prior-year studies for South Louisiana and South Texas. By combining the two areas, a greater participation level was achieved with a greater sharing of operational ideas between the areas. Twelve operators provided data on their fields, including Burlington, Cabot, Chevron, Conoco, El Paso, Kerr-McGee, Phillips, Shell, Texaco, TotalFinaElf, and Unocal. The study contains data on 110 fields, with total production of 2.8 BcfE/d from 4,450+ active wells and total annual operating costs of \$500 million. Ziff Energy analyzed these fields within six gas and two oil asset groups, ensuring that fields were compared on a like-kind basis with those with similar characteristics. Many of these fields were also analyzed in the earlier studies, and Ziff Energy provided a trend analysis of costs and production volumes.

A full-day Operating Practices Workshop concluded the study in early December. At the workshop, 29 field

representatives from participating companies participated in presentations and discussion on innovative practices linked to lower operating costs. This study's Operating Practices analysis focused on enhancing production.

Interested companies may still participate in this study, by contacting Richard Tucker, VP Marketing at rtucker@ziffenergy.com or Randy Schultz, Project Manager at rschultz@ziffenergy.com.



Ziff Completes Deepwater Gulf of Mexico Study

Ziff Energy Group recently delivered the latest edition of the Deepwater Gulf of Mexico Reducing Field Operating Costs study. This was the fourth successive year for the study, in which participants could compare their fields with peer fields that were grouped by their development systems: jacket/compliant and complex fields, floater/TLP, and sub-sea satellite systems. The study utilized operating data from year 2000 activity, a year of strong commodity prices, in which most firms changed their traditional focus from cost reduction to production enhancement.

- *Labor costs* continue to *dominate* across all groups, comprising a quarter of total operating expense. Three other cost areas - well servicing, surface repair and maintenance and transportation each contribute about 10% to the total.

Of concern, the study also revealed a strong operating cost increase of 33% for fields repeating the study versus a modest 8% decline in production. Within the asset groups, operating costs for the jacket/compliant/complex and floating/TLP systems both rose about 30% over the previous year, while the sub-sea system field costs decreased 40%.

This year, a lower margin environment is stimulating a return to cost reduction strategies. To assist them in their planning, Gulf of Mexico Shelf operators will have the opportunity to join the Ziff Energy Group *5th Edition* of the Shelf *Reducing Field Operating Costs Study*. The study will be kicked off by a Client Advisory Group meeting scheduled for late February.

Goodisman Completes West Africa SPE Distinguished Lecturer Tour

As a Distinguished Lecturer for The Society of Petroleum Engineers (SPE) for the period 2001/02, Adrian Goodisman, Senior VP E&P Services, recently completed the first of 5 international speaking tours. The Distinguished Lecturer program provides SPE sections around the world with outstanding speakers who are experts in their field. Adrian's lecture, titled 'Ideas to help you Reduce Field Operating Costs' shares findings from a variety of Ziff Energy's Reducing Field Operating Costs (RFOC) studies. Ziff's Newsletter (NL) editor interviewed Adrian (AG) following his trip.

NL: Where did you go in West Africa?

AG: My first tour included Nigeria, Gabon, Congo, Angola and the Ivory Coast. In Nigeria I lectured in Lagos, Port Harcourt and Warri, and in Gabon I spoke in Port Gentil and Gamba. In the other countries, I visited the capital cities. I also visited many of the operators in each country, primarily to get a better understanding of their West African oil and gas operations, and to understand some of the challenges they face. The local SPE sections also very kindly treated me to some sightseeing, as well as the unique local culture and cuisine.

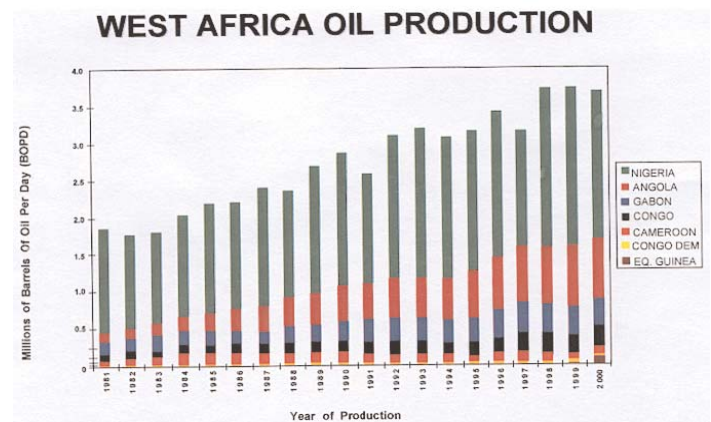
NL: Are West Africa E&P companies low-cost operators?

AG: To know if a company is a low-cost operator, you have to look at their mix of assets, and then compare the operating costs of their fields to similar fields of other operators. Two main parameters drive a company's operating costs: first, field productivity, particularly if you do the comparison on a \$/BOE basis; and second, operating practices, - the way a company manages its business. The majority of activity in West Africa is focused offshore, where field production rates are high, which does typically lead to a lower \$/BOE operating cost. That said, the challenge around operating practices is more complex than, say, the Gulf of Mexico, in a way that does lead to higher costs.

NL: What are some of the operating challenges or differences that West African operators face compared to the Gulf of Mexico?

AG: I am definitely not a West Africa expert, so my comments are first impressions. It's obvious that the West African region's lack of maturity is one of the biggest

differences. The Gulf of Mexico is the most mature offshore region in the world; numerous companies operate there, and the cross-learning among them has been very good, contributing to lower cost operations. Also, service companies and material providers that support Gulf of Mexico operations are numerous, resulting in a competitive environment that also lowers costs for all operators. Such is not the case in West Africa.



NL: Are there similarities between the two regions?

AG: Yes there are. The technology used offshore in West Africa is pretty much the same as in the Gulf of Mexico, if you exclude FPSO's, which are not yet used in the Gulf. One of the objectives of Ziff Energy's RFOC project is to help facilitate the transfer of leading technologies and practices from North America to other regions in the world. Clearly offshore operators around the world can learn a lot from the Gulf of Mexico.

NL: What is the state of the industry in West Africa?

AG: Based on my visits with the majority of the operators in the five countries I visited, I'd say West Africa is booming (see chart), but the intensity of the boom varies from country to country. Nigeria and Angola are likely to experience the most activity over the next few years. The activity level in the Congo is also very robust, which has led to a steady increase in production volumes there over the last decade. Gabon's production is actually on the decline; however, future deepwater operations will hopefully reverse that trend. The Ivory Coast is moderately active, although the Energy Ministry told me they are very keen to attract more foreign oil companies.

Cont. p.7

Senior Executives Join Ziff Energy Group



Kenneth Becker
Vice President Offshore

Ken will be responsible for marketing and expanding Ziff Energy's offshore benchmarking studies and services worldwide. His focus will be on two areas: the U.S. Gulf of Mexico, and the expansion of Ziff Energy's business in international offshore studies and consulting services. Becker previously was a senior manager with Texaco and held a variety of positions during his 30-year career which encompassed U.S. onshore and offshore exploration and production operations, as well as international E&P responsibilities in the Middle East and Asia. Becker holds a Bachelor of Science degree in Chemical Engineering from the University of Houston.



Sam Cohen
Senior Associate, Thailand

Sam joined Ziff Energy Group as a Senior Associate. He brings an extensive geological and consulting experience dating back to 1950, both in Alberta, and Thailand. During his career he has worked with companies such as Unocal (Canada) and AEC Thailand. Sam's focus will be developing offshore benchmarking studies and conducting business development in Thailand. He has a Bachelor of Science Degree (Geology), and also Graduate Studies (Geology), from the University of Oklahoma.



Obi Nwasike, M.Sc.
Senior Associate, Nigeria

Obi is a COREN (Council of Registered Engineers in Nigeria) registered Engineer with 23 years experience in oil and gas facilities development and human resource management, gained while working in West Africa and the UK sector of the North Sea. Obi is listed in

'Who is Who in Science and Engineering' (1998/99) for process design innovations in the UK sector of the North Sea and change management contributions in the West Africa oil and gas province.

Ziff Energy Group Supports Energy Industry Education

University of Calgary - Sang Hoon Andy Kim received ZEG's Jack A. Sandercock Bursary for a second-year student enrolled in the Faculty of Engineering. James Edward Udberg received the G. Gordon Clarke Bursary for students in the Faculty of Social Sciences with a major in Economics.

Mount Royal College - ZEG funds the Tom J. Clay Bursary for a student enrolled in the School for Business and Entrepreneurial Studies.

Mississippi State University - ZEG funds the Hank Kelly Scholarship in honor of our first Vice-President, Offshore.

ZEG also supports the Independent Petroleum Association of America's (IPAA) education program.

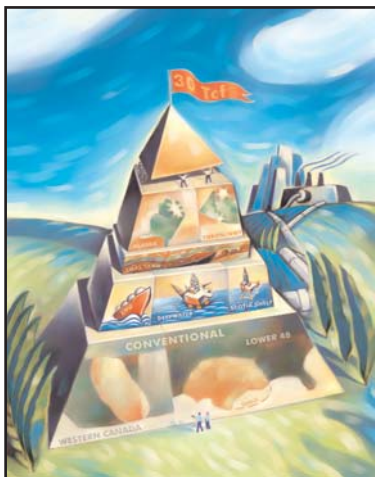
SPE Tour Continued

NL: What's next?

AG: In January, I visited Trinidad, Columbia and Venezuela. After, I am scheduled to give 20 more lectures around the world, in South America, North America, Asia, Europe and the Middle East. I'd like to acknowledge the SPE and the SPE Foundation for giving me the opportunity to participate in the Distinguished Lecturer program. It allows

me the opportunity to grow both professionally and personally. And I'm grateful to Ziff Energy Group for allowing me the time to participate in the program, and for the excellent assistance provided by my colleagues in compiling background information, planning logistics, and arranging meetings.

Plan ahead. Mark your calendar!



UPCOMING ZIFF ENERGY GROUP NORTH AMERICAN GAS STRATEGIES CONFERENCES

April 15 & 16, 2002 Houston, Texas
“North American Natural Gas:
Surviving Volatility”

October 28 & 29, 2002 Calgary, Alberta

To Register or for more information call our Conference Assistant at
1-800-853-6253 or fax (403) 237-8489

E-Mail: gasconference@ziffenergy.com or visit our website: <http://www.ziffenergyconferences.com>

Here's What Ziff Energy Group Can Do For You

Please call or write for details on:

All Studies and Services provided by Ziff Energy Group

E & P Benchmarking Studies and Services

U.S. Reducing Field Operating Costs/Best Practices

Offshore (Shelf and Deepwater)

Onshore (multiple basins/regions)

Gulf of Mexico Finding & Development

Canada Finding & Development

Reducing Field Operating Costs/Best Practices

Heavy Oil

People Productivity (Technical Staffing)

International Benchmarking Studies and Services

South America

Custom Consulting Services

Merger and Acquisition Advisory Services

Gas Services

Natural Gas Consulting Services

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Mailing List

Name: _____

Title: _____

Company _____

Street _____

City _____

State/Province _____ Zip/Postal Code _____

Direct Telephone _____ Fax _____

E-mail _____

Ziff Energy Group, Calgary
1117 Macleod Trail S.E.,
Calgary, Alberta, Canada T2G 2M8
Telephone: (403) 265-0600 Fax: (403) 261-4631
Toll free: 1-800-853-6252 E-mail: info@ziffenergy.com

Ziff Energy Group, Houston
5151 San Felipe, Suite 550
Houston, Texas, U.S.A., 77056
Telephone: (713) 627-8282 Fax: (713) 627-9034
Toll Free: 1-888-736-5780 E-mail: info@ziffenergy.com