The Times, They Are A-Changing!

Last summer Scotia wrote a 2-part article on asset acquisitions, which was published in the Oil & Gas Journal (October 29 and November 26, 2001). Since that time, Enron has collapsed, natural gas prices have sunk to levels no “expert” would have ever dreamed of 18 months ago and comments abound about another oil price collapse.

The Enron story has taught all of us how financial transactions can be distorted. Since this article discussed recent trends of high acquisition prices in our industry, it seemed appropriate to highlight the conclusions reached which in the authors’ views remain valid today. The following is an extract of some of the points covered in this article.

"They paid how much for that producing property?"
How often have you uttered those words on learning the price of a winning bid for an oil and gas producing property, especially one you have evaluated or even submitted a bid? The ongoing trend of “paying too much” sometimes known as winners curse is usually not the result of poor evaluation practices but a combination of factors and techniques designed to extract the maximum value for the buyer.

What are the going rates?
Figure 1, derived from Scotia’s US M&A Database (1), demonstrates recent trends in the marketplace. Table 1 shows average market discount rate data from a variety of different industry sources.

Table 1 – Average BTAX Market Discount Rates, %

<table>
<thead>
<tr>
<th>Average BTAX Market Discount Rates, %</th>
<th>Time Period</th>
<th>No. of Transactions Analyzed</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-12 1983-1987 40</td>
<td></td>
<td>F. J. Giglio &amp; A. David (1)</td>
<td></td>
</tr>
<tr>
<td>12.6 1999-1999 41</td>
<td></td>
<td>Harold W. Berghoff (2)</td>
<td></td>
</tr>
<tr>
<td>9.4  June 1999</td>
<td></td>
<td>Alexander, Lufkin, Jenrette (3)</td>
<td></td>
</tr>
<tr>
<td>3.7 (After TAX) April 2001</td>
<td></td>
<td>E. C. Anger (4)</td>
<td></td>
</tr>
<tr>
<td>10.15 June 2001</td>
<td></td>
<td>Credit Suisse First Boston (5)</td>
<td></td>
</tr>
<tr>
<td>13.6 June 1998 164 responses</td>
<td></td>
<td>SPEE Annual Survey (6)</td>
<td></td>
</tr>
<tr>
<td>13.95 (S.D. 4.28%) June 1999 146 responses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.3 (S.D. 6.8%) June 2000 141 responses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.0 (S.D. 4.9%) June 2001 143 responses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.3 1990-1996 91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.0 1985-1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.8 (S.D. 11%) 1986 7.330 Texas Comptroller Office</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.9 (S.D. 11.6%) 1999 0.027 Public Accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.1 (S.D. 10%) 2000 0.197 PTO (8)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) SPE 16841 - "The Perils of Market Value Averages"
(2) Report prepared for California Assessor’s Association
(3) "Winning Bidder Valuation Criteria" presented to Houston Producers’ Forum
(4) SPE 68595 - "Property Evaluation - A Return to First Principles”
(5) E&P Valuation Methodologies
(6) Annual survey
(7) Report prepared for Western States Petroleum Association
(8) Annual Property Value Studies
(9) S.D. is one standard deviation

Just how do successful bidders come up with such high numbers?
To understand the answer to this question, a number of topics need to be examined. Among these are the following:
• The role of commodity price hedging.
• The role of lower confidence reserves.
• The impact of technological advances.
• Valuing long life reserves and strategic considerations.

The role of commodity price hedging
Obviously one of the risks when valuing a producing property acquisition is what to use for commodity prices. Price hedging, a subject unto itself is one approach to limiting the downside (and sometimes the upside). Many acquirers have used this facility in the past and continue to do so today.

The role of lower confidence reserves
The role of lower confidence reserves is the
driving force behind the modern asset acquisition market. There is little doubt that purchasers are paying for probable and sometimes possible reserves. One of the reasons for this is the ability to identify bypassed reserves and untapped horizons with new technologies such as 3D seismic. In other words, operators seek out and exploit these opportunities much more aggressively than 20 years ago with the knowledge that technologies such as 3D seismic lower the failure rate significantly.

The impact of technological advances
New technologies continue to play a leading role in opportunity identification and risk and cost reduction. In a study completed by The Scotia Group, Inc. ("Future gas resource evaluation & technology impacts in the Gulf Coast Area, 1995-97" for the Gas Research Institute), 3D seismic together with other technologies had transformed mature depleting fields to production rates in some cases near or in excess of the original peak rates of 20 or 30 years ago.

With this type of performance improvement it is not so surprising that the Energy Information Administration (EIA) proved reserves data for the US indicates that, during the period from 1977 through 1995, 89% of additions to proved oil reserves and 74% of proved gas reserves have occurred in known fields.

Valuing long-life reserves and strategic considerations
A property that enjoys high rate wells but a steep decline such that most of its reserves are produced within five years of purchase will be relatively insensitive to the net present value used. In comparison, the value of a long life property where peak production may be years away, can literally be decimated by the use of NPV in the 20% range.

Table 2 illustrates this phenomenon for two hypothetical properties having the 15% NPV's in the same range. Which one would you rather own?

<table>
<thead>
<tr>
<th>Item</th>
<th>Property A, high rate short life</th>
<th>Property B, low rate long life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life</td>
<td>7 years</td>
<td>50 years plus</td>
</tr>
<tr>
<td>Reserves recovered</td>
<td>$1.06CF</td>
<td>$3.98CF</td>
</tr>
<tr>
<td>Investment</td>
<td>$2.75MM</td>
<td>$2.75MM</td>
</tr>
<tr>
<td>Return on investment</td>
<td>1.3</td>
<td>3.94</td>
</tr>
<tr>
<td>Internal rate of return</td>
<td>44%</td>
<td>20%</td>
</tr>
<tr>
<td>Undiscounted cash flow</td>
<td>$0.87MM</td>
<td>$8.1MM</td>
</tr>
<tr>
<td>10% NPV</td>
<td>$0.56MM</td>
<td>$1.50MM</td>
</tr>
<tr>
<td>15% NPV</td>
<td>$0.44MM</td>
<td>$0.57MM</td>
</tr>
<tr>
<td>20% NPV</td>
<td>$0.34MM</td>
<td>$0.01MM</td>
</tr>
</tbody>
</table>

Authors’ Conclusions
1. Technology has had a major impact on the asset acquisition prices paid by the purchaser of producing properties, especially those with significant "upside." The lower risks and costs have resulted in purchasers paying top dollar for proved reserves in order to have access to the upside potential offered by the larger properties. Valuations based on 10-12% NPV are not unusual, especially for high quality properties.
2. Finding and development costs have dropped significantly in the past 20 years as a result of technological advances. In short, the rules have changed and will continue to do so.
3. We at Scotia appreciate the value of databases, such as our own Mergers and Acquisitions Database (1), but all of us should accept that our industry is no longer "business as usual." To ignore recent industry trends in favor of 20-year averages is out-of-step with today's reality.

A complete copy of the Oil & Gas Journal article can be obtained by calling (281) 448-6188 or e-mailing our Houston office at slaws@scotia-group.com.

New Scotia Web Site
Scotia is pleased to announce the launching of its new web site, currently planned for release in mid-April. The site will have a new look and feel, improved usability, and more complete information. We will continue to offer free downloads from our site, including our M&A database, historical oil and gas prices, and acquisition price trends. We invite you to watch for our new web site at www.scotia-group.com and welcome your suggestions!
Scotia Executive Short-course Series

Scotia is pleased to announce course offerings for its Spring 2002 Executive Short-course Series. The short-course series is designed for the busy professional (geoscientist, engineer, landman, manager, etc.) who has limited time to devote to continuing education programs. Each course is designed to minimize the amount of time away from the office for attending professionals. Class size will be kept small (10 to 15) to facilitate classroom discussion and interaction. Course instructors are regarded as some of the top professionals in their respective fields. A course offering, listing of instructors with background information, and registration form is included as an insert in this Newsletter. Prospective attendees are invited to attend one or more of the courses shown. A ten percent discount is offered for attendance of more than one course. Course tuition includes all text material and a Continental breakfast beginning at 8:30 a.m. each morning. All courses will be presented at Scotia Group’s Houston office at 363 North Sam Houston Parkway East, Suite 790. Please contact Sandy Laws (slaws@scotia-group.com) at Scotia Group for more information.

News from South of the Border

PEMEX is seeking ways to boost development of onshore gas fields, particularly in the Burgos Basin of northern Mexico, in an effort to forestall a widening supply-demand gap which is expected to reach 7 Bcfpd in the coming decade. One proposal currently under consideration is application of Multiple Service Contracts (MSCs). Under this plan, international oil companies with demonstrated dry-gas field exploitation track records would align themselves with Mexican partners and other providers of services such as seismic acquisition and processing, drilling, logging, surface facilities, gas processing, etc. These consortia would then participate in an international public tender consisting of some 8 to 10 blocks in the Burgos basin.

Bids would be competitively evaluated by PEMEX on the basis of the proposed work program for the tendered block, Mexican national content, and technology transfer to Mexican companies. Compensation would take the form of reimbursement of "standard" operating costs, reimbursement of invested capital over time plus interest, and a profit margin competitively set. Timing for the MSC proposal currently being considered for 2002 includes an orientation conference sometime in the 1st quarter, publication of the first round of tenders during the 2nd quarter, bidding and awards in the 3rd quarter, and commencement of work by successful bidders in the 4th quarter.

Considerable work remains to be done to develop the concepts and terms of the proposed contracts. In addition, it is still unclear as to whether the MSC proposal will be politically acceptable to the Mexican Congress or to the public. PEMEX has established a website at www.msc.pemex.com for the purpose of providing information about the MSCs once it becomes available.

Scotia Group has been Subsurface Advisor to PEMEX in the Burgos Basin since 1998. Recently published information concerning rehabilitation of two Burgos Basin fields is contained in a technical paper authored by Mark Cocker, Scotia Senior Vice President of Geology, and Aurelio Mendoza Fuerte of PEMEX, and presented at the recent SPE International meeting in Villahermosa, Mexico (see "Recent Scotia Articles" section of this newsletter for details).

News of Employees

Scotia is pleased to announce that Andrew R. Fair, P.E., has been elected to the National Board of Directors of the Society of Petroleum Evaluation Engineers (SPEE) for a three-year term. SPEE is the pre-eminent professional organization which brings together petroleum evaluation engineering specialists and disseminates facts pertaining to petroleum evaluation engineering among its members and the public. Andrew is Vice President of Engineering in Scotia’s Houston office. He has over 25 years of industry experience in evaluating properties in all major producing areas of the U.S., as well as extensive international experience in countries including Canada, China, Central and South America, Yemen, Ukraine and Russia. Andrew was associated with Randall & Dewey, Inc. for ten years prior to joining Scotia. Prior to that, employers included Tex Hex Corp., Williamson Petroleum Consultants, Inc., Columbia Gas Development, and the Railroad Commission of Texas. In addition to other responsibilities, Andrew is a member of Scotia’s Burgos Basin Team.
Recent Scotia Articles

A two-part article, co-authored by Dave Heather, Scotia Co-founder, and Gene Wiggins, Scotia Senior Vice President of Engineering, was recently published in the Oil & Gas Journal (OGJ). “They paid how much for that producing property?” was published in the October 29, 2001 OGJ. “How to bid successfully in a changed marketplace” was presented in the November 5, 2001 OGJ. An abridged version of the two articles is presented in this newsletter.

“Integrated Study Workflows for Field Development and Rehabilitation in the Burgos Basin (SPE 74366)” by Mark Cocker, Scotia Senior Vice President of Geology, and Aurelio Mendoza Fuerte of PEMEX, was presented at the 2002 SPE International Petroleum Conference and Exhibition on February 11, 2001 in Villahermosa, Mexico.

2002 Calendar of Events

March 2002
AAPG Annual Meeting, 10-13, Houston
SEPM Research Conference, 24-27, Charleston

June 2002
SPWLA 43rd Annual Symposium, 2-6, Oslo, Japan
SPEE Annual Meeting, 9-11, Park City
AAPL Annual Meeting, 19-21, Dallas

September 2002
SPE Annual Technical Conference and Exhibition, Sept. 29-Oct. 2, San Antonio

April 2002

July 2002

October 2002
SEG International Exposition and Annual Meeting, 6-11, Salt Lake City
IPAA Annual Meeting, 24-26, Dallas
AAPG International Conference and Exhibition, 27-30, Cairo, Egypt

May 2002
SIPES Convention, 1-4, Lafayette
OTC, 6-9, Houston
IPAA Mid-year Meeting, 19-21, Tucson

August 2002

November 2002

Corporate Profile

Scotia is a full service oil and gas advisory firm founded in 1981, employing geologists, geophysicists, engineers, petrophysicists and computer specialists with extensive worldwide experience. Services provided include expert opinion reports, acquisition valuation, exploration analysis, reservoir studies and simulation, research and technology applications, strategic planning and risk analysis, and reserves analysis and property valuation. The firm’s clients include major and independent oil companies, financial institutions, government agencies, and the legal community. Scotia’s work for clients has been equally divided between the U.S. (all major producing basins) and international locations including South America, Southeast Asia, Africa, and Eastern and Western Europe. To learn more about our firm, we invite you to visit our website at www.scotia-group.com or contact Gene Wiggins in our Houston office or Dave Heather in our Dallas office.
# Scotia Group, Inc.

**Executive Short-course Series**

**Spring 2002**

## Course #1: Gulf Of Mexico - Source, Maturation & Migration
- Presents an overview of the sources, maturation and migration pathways of known and potential hydrocarbon plays in the offshore Gulf of Mexico (GOM). Topics include: *Identified sources for oils reservied in the Tertiary section of the offshore GOM. *Importance of geochemical compositions in understanding source rocks. *Correlation of major fields with actively migrating hydrocarbon systems. *Importance of understanding regional source distribution in order to develop new exploration methodologies and plays.

- **April 15th, 9-12**
- **Instructor:** Lynne Goodoff
- **Cost:** $125

## Course #2: Seismic Interpretation for Non-geophysicists

- **April 16th, 9-12**
- **Instructor:** Lynne Goodoff
- **Cost:** $125

## Course #3: Low Resistivity, Low Contrast (LRLC) Pay Evaluation
- Presents a proven methodology to identify and evaluate LRLC pays in modern wells or as potential bypassed pays in old wells. Topics include: *Geological causes of LRLC pay. *LRLC depositional systems. *Geological and petrophysical models developed in the Gulf of Mexico for the evaluation of LRLC pay and their application in other world-wide basins. *New technology for better identification of LRLC pay including application of nuclear magnetic resonance logging.

- **April 17th, 9-4**
- **Instructor:** John Kuhla
- **Cost:** $250

## Course #4: Integrated Workflows for Field Development & Rehabilitation
- Presents the methods that are used in the study and rehabilitation of mature fields. Practical examples are presented. Topics include: *Methods for interpreting and integrating seismic, geological, petrophysical and engineering data. *Generation of structure, facies, and volumetric maps. *Analysis and selection of well locations. *Identification of risks.

- **April 18th, 9-4**
- **Instructor:** Mark Cocker
- **Cost:** $250

## Course #5: Geological Characterization of Heterogeneous Siliclastic Reservoirs
- Provides petroleum geologists, geophysicists and engineers with a comprehensive coverage of both basic and sophisticated methods utilizing well-log and 3-D seismic data that are essential to unraveling and understanding the geological complexities of sandstone reservoirs. Topics include: *Determination of the geologic architecture of sandstone reservoirs. *Practical application of methods discussed to solving problems and identifying hydrocarbon reservoir growth opportunities. *Presentation of successful case studies in the U.S., Australia and Venezuela.

- **April 22nd, 9-4**
- **Instructor:** Dr. Doug Hamilton
- **Cost:** $250

## Course #6: Oil and Gas Property Evaluation for Non-engineers

- **April 23rd, 9-4**
- **Instructor:** Gene Wiggins, P.E.
- **Cost:** $250

## Course #7: Acquisition and Divestiture of Oil and Gas Properties
- Presents an overview of tactics, strategies and processes that are used by successful companies that acquire and divest producing properties. The decisions that are made from property selection until the closing of the transaction are discussed from both the buyer and the seller perspectives. Topics include: *Factors that motivate sellers and buyers to participate in the process. *The seller's evaluation and consideration of the marketing options. *Acquisitions success by either the proactive or reactive approach. *Risks relative to the placement of the targeted property in a field's life-cycle. *Estimated market value methodologies and determining the 'right' opening offer. *Closing the deal with successful negotiations during the closing process. *Lessons learned and an accountability process for continuous improvement. Those familiar with the course and text have stated that it is a complete treatment of the A&D process for the novice, as well as a thorough review that will refresh the experienced individual of all aspects of A&D activity.

- **April 24th, 9-4**
- **Instructor:** Jim Haag, P.E.
- **Cost:** $250

## Course #8: Understanding and Modeling Uncertainty
- Presents a practical overview of uncertainty modeling in oil and gas evaluation and a breakdown into contributing components. Topics include: *What is uncertainty, how is it visualized and modeled. *What are the components and how these can be expressed probabilistically. *How normal oilfield datasets and methods provide probabilistic input. *The dos and don'ts of uncertainty analysis and modeling. *Practical examples to illustrate common risk analysis problems.

- **April 25th, 9-12**
- **Instructor:** Dr. Rob Caldwell
- **Cost:** $125

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## Location, Schedules, and Accommodations

All courses will be presented at Scotia Group's Houston office at 363 North Sam Houston Parkway East, Suite 790. Class schedules will be as shown above. Continental breakfast and course check-in will be available starting at 8:30 a.m. each morning. Lunch will be provided for full-day courses. Out-of-town registrants are responsible for their own lodging and travel arrangements. Contact Sandy Laws at Scotia Group (281-448-6188) for information on available lodging in the area.

## Tuition, Fees, Cancellations & Substitutions

The full fee is payable in advance in U.S. dollars. The fee covers tuition, manual, and other meeting materials. Enrollment is limited and applications will be accepted in the order received. Registration deadline is Monday, April 8th. The sponsor reserves the right to cancel the course and return the registration fee if enrollment is insufficient. Registrations may be cancelled no later than 10 working days before the course; otherwise a $100 processing fee will be applied. No refunds will be made to registrants who fail to substitute or cancel prior to the start of the course.
Dr. Caldwell is a Co-founder of The Scotia Group, Inc. He has over 30 years of experience and has authored or co-authored over 20 technical publications. Dr. Caldwell is involved in the evaluation of domestic and international oil and gas properties and companies, reserves and reservoir studies, and generation of Scotia’s risk analysis and resource and reserves evaluation models. He heads Scotia’s research projects, particularly in unconventional resource and reserves evaluation and in the assessment of technology advances. He is active in the design of in-house software and proprietary computer models that support Scotia’s strategic studies service, and developing new analysis methods that address technology advances and the rapidly changing requirement of today’s oil and gas business. Dr. Caldwell received the SPE Economics and Evaluation Award for 2000 and is co-author of the recent SPE paper (68592) entitled “Characterizing Uncertainty in Oil and Gas Evaluations.”

Mr. Cocker is Senior Vice President of Geology for Scotia Group with over 27 years experience. Mr. Cocker was associated with Improved Petroleum Recovery Inc. and Core Laboratories prior to joining Scotia in 1992. He has extensive international experience in Mexico, South America, Europe, the Middle East, Southeast Asia, and the U.S. Responsibilities have included directing all phases of geological work relating to reservoir studies; EOR, exploration and development studies; petrophysical studies; prospect studies; and structural and stratigraphic studies. Mr. Cocker is co-author of a recent SPE paper (74366) entitled "Integrated Study Workflows for Field Development and Rehabilitation in the Burgos Basin.”

Ms. Goodoff is Principal Geophysicist with Scotia Group and has over 22 years experience. Ms. Goodoff was associated with Exxon as Exploration Geophysicist and with Pennzoil as Geophysical Advisor, prior to joining Scotia. Ms. Goodoff’s responsibilities have included 2-D/3-D interpretation, prospect mapping, new venture assessment and field development studies in South Texas and the Burgos Basin of Mexico. Internationally, she has worked in a variety of areas including subsalt mapping in the Gulf of Suez, venture analysis in Northern Africa, the Middle East, Far East and South America and regional play analysis in Australia, North Africa, Qatar and Indonesia. Responsibilities in the Gulf of Mexico have included lease sale evaluation, reprocessing, palinlaspic restorations, new venture analysis and basin analysis/modeling. Ms. Goodoff is co-author of the AAPG/AGOP article entitled "Northern Gulf of Mexico: An Integrated Approach to Source, Maturation, and Migration.”

Mr. Haag worked for Texaco for 26 years in the Gulf of Mexico and Gulf Coast areas. As Senior Evaluations Coordinator and Business Development Manager, he developed an effective portfolio management strategy while performing and directing reserves and economic analyses for property purchases, trades and sales. In leading data room teams in property acquisition efforts, he synthesized the efforts of the engineering, geological, geophysical, tax, comptrollers, land, operations and fiscal team representatives. He coordinated the marketing, negotiating and closing of hundreds of transactions. Mr. Haag also performed feasibility determinations for offshore wildcat discoveries, enhanced recovery and new pipeline projects, joint ventures and alternate funding opportunities. He has written texts for and instructed numerous in-house economics and risk analysis schools. He serves on the Board of Directors of the Society of Petroleum Evaluation Engineers (SPEE) and is a member of the Society of Petroleum Engineers (SPE). Mr. Haag is author of the textbook entitled "The Acquisition and Divestiture of Oil and Gas Property.”

Dr. Hamilton is a consulting geologist with 20 years international experience in the petroleum industry including over 10 years as a reservoir geologist conducting fully integrated geological and engineering reservoir characterization projects. Specialist disciplines include sedimentology, sequence stratigraphy, basin analysis, subsurface stratigraphic mapping, play analysis, facies analysis, and reservoir characterization from core and wireline log analysis. Dr. Hamilton worked at the Bureau of Economic Geology, Austin, Texas, for 10 years on fluvial, lacustrine, and shallow marine oil and gas reservoirs from the United States, Venezuela, Mexico, Argentina, Australia and Trinidad. Dr. Hamilton has authored more than 40 publications on depositional systems and reservoir characterization, and received several Best Paper awards for his research on reservoir characterization. Dr. Hamilton holds Bachelor’s (Hons) and Ph.D degrees in Geology from the University of Sydney, Australia.

Mr. Kuhla is an independent consultant with 29 years experience in petrophysical and petroleum engineering studies related to exploration, development, reserve determination and property acquisition. Within the petrophysics discipline, his specialties include multi-well exploration, evaluation and development studies in complex lithologies and shaly sands, dual-porosity systems, log-seismic interactions, and the integration of rock data, production performance and log interpretation. As a recognized authority in the identification and evaluation of low resistivity, low contrast (LRLC) pay zones, Mr. Kuhla has presented seminars worldwide to energy companies, professional societies and academy on LRLC pay evaluation as well as petrophysics and reservoir characterization. He has authored over a half dozen technical papers on topics related to LRLC pay evaluation.

Mr. Wiggins is Senior Vice President of Engineering for the Scotia Group. He has over 24 years experience in the upstream oil and gas business as a consultant and in business development capabilities for various companies. His primary focus has been on all phases of the evaluation of oil and gas properties with emphasis on reserves determination, production forecasts, well performance, economics and market valuation. Mr. Wiggins has presented numerous courses, seminars and speeches relating to oil and gas property evaluation issues for organizations including AAPG, GCAGS, SIEPS, NGS, SPE, and SPEE. He was the 1996 National President of the Society of Petroleum Evaluation Engineers and is author of “Oil and Gas Property Evaluation” which is Chapter 12 in AAPG’s volume entitled The Business of Petroleum Geology.

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**Registration Form**

- **Course #1:** Gulf of Mexico - Source, Maturation & Migration .......................... $125
- **Course #2:** Seismic Interpretation for Non-geophysicists ............................... $125
- **Course #3:** Low Resistivity, Low Contrast (LRLC) Pay Evaluation .................. $250
- **Course #4:** Integrated Workflows for Field Development and Rehabilitation .......... $250
- **Course #5:** Geological Characterization of Heterogeneous Silicilastic Reservoirs .... $250
- **Course #6:** Oil and Gas Property Evaluation for Non-engineers ........................ $250
- **Course #7:** Acquisition and Divestiture of Oil and Gas Properties .................. $250
- **Course #8:** Understanding and Modeling Uncertainty .................................. $125

**Total course fees (Sub-total):** $
10% discount for more than one course: $
**Total fees:** $

- [ ] Check enclosed payable to The Scotia Group, Inc.
- [ ] Visa
- [ ] Master Card

**Card No.:** Exp. Date: /

**Name on Card:**

**Signature:**

Mail, fax or e-mail all information to:
Sandy Laws, The Scotia Group, Inc.
363 North Sam Houston Parkway East, Suite 790
Houston, Texas 77060
Phone: 281-448-6188
Fax: 281-448-6189
E-mail: slaws@scotia-group.com