

**TARGETED TECHNOLOGY TRANSFER TO
US INDEPENDENTS-
FY06 TECHNICAL PROGRESS REPORT**

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EXECUTIVE SUMMARY

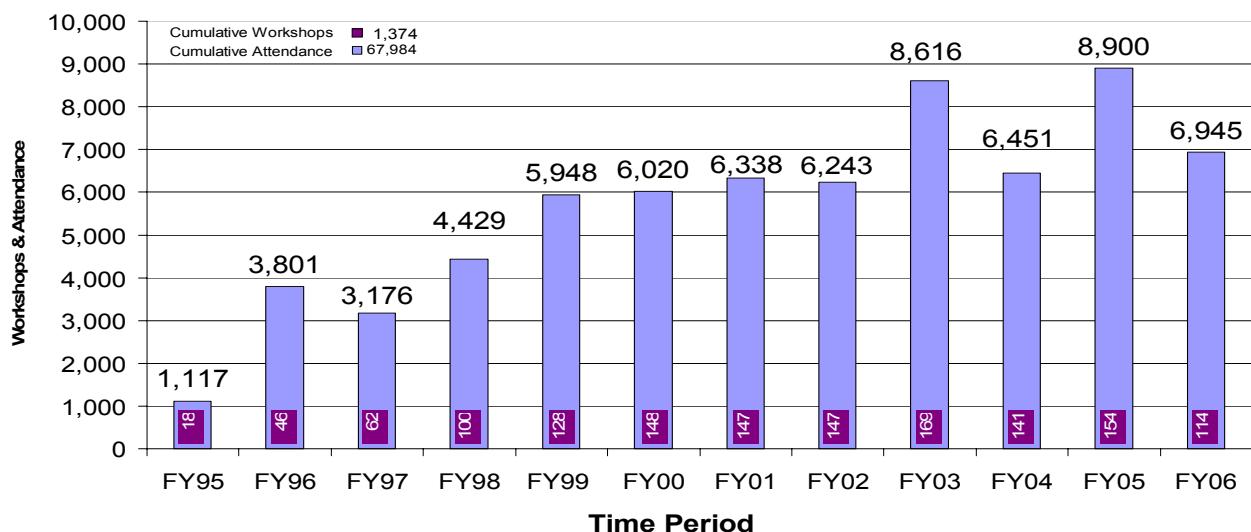
The Petroleum Technology Transfer Council (PTTC) is a unique non-profit network that connects domestic oil and natural gas producers, technology providers and innovators, academia, research and development (R&D) consortiums and governments. The PTTC network has a proven track record of leveraging critical technology, services and the technical workforce to add value for producers and benefit our domestic energy supply. Further, PTTC provides a public service by facilitating the expansion and efficient development of our domestic oil and natural gas resources specifically for the purposes of advancing our national energy security.

The management team consists of a Board of Directors that represents a cross section of the industry, active Board Committees, national staff, and people within 10 Regional Lead Organizations (RLOs) and Producer Advisory Groups (PAGs). The PTTC network efficiently (only 12% of funds go to administration) provides a variety of valuable resources and low-cost services to the domestic industry within its core services.

- Workshops, including many co-sponsored events
- Software training
- Pumpers' workshops (strong safety element)
- Technology and Information Websites
- Interactive Core Locator
- Case Studies
- Newsletters
- Email Tech Alerts
- Outreach and Inquiry Response
- COMET & Futures in Energy Student Internship Programs

PTTC helps producers:

- Improve Finding Rates
- Lower Finding & Lifting Costs
- Replace Reserves Faster
- Reduce Environmental Impact
- Understand Tech Trends In-depth
- Gain Access to Technical Workforce

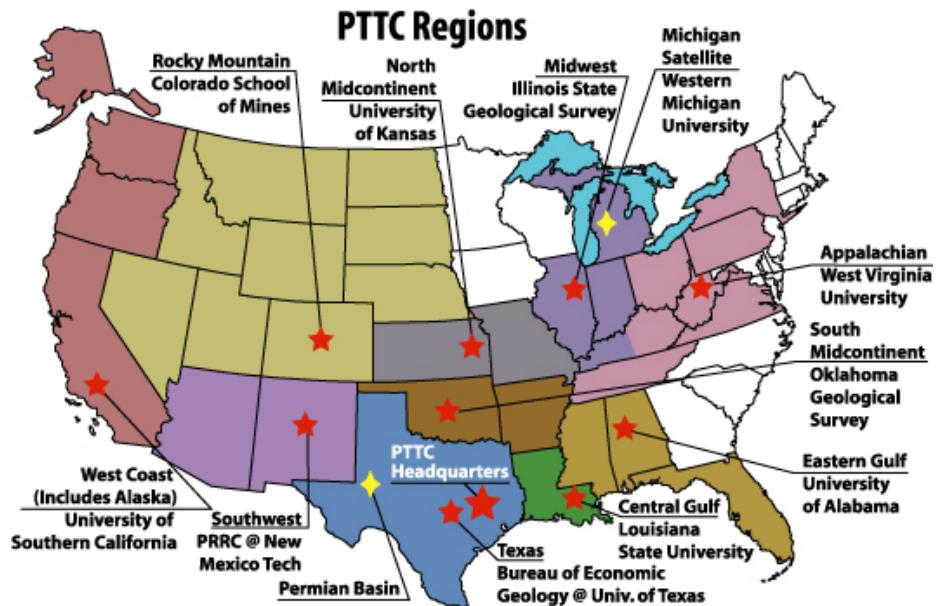


Above statistics include PTTC's support of DOE's Microhole Technology program, CO₂ Preproposal, and HPHT workshop. PTTC's audience continues to grow as a result of a comprehensive communications program, active exhibit schedule and customer satisfaction. Satisfaction is inferred from the relatively high 57% of repeat workshop attenders, yet 43% of first time attenders indicates a new audience is continually being drawn. More than 40% of those responding to a question on feedback forms about "applying technologies" indicate they have done so. Strategic planning in mid-summer, inspired by the strong likelihood of losing future federal funding, led PTTC to commit to becoming industry funded. Significant Board and staff effort since then has gone into developing a business and marketing plan, which is membership based, to become primarily industry funded.

I. INTRODUCTION

The Petroleum Technology Transfer Council (PTTC) was established by domestic crude oil and natural gas producers in 1994 as a national not-for-profit organization to address the increasingly urgent need to improve the technology-transfer process in the U.S. upstream petroleum industry. Coordinated from a Headquarters (HQ) office in Houston, PTTC maintains an active grassroots program executed by 10 Regional Lead Organizations (RLOs) and two satellite offices (**Figure 1**). Regional Directors interact with domestic oil and gas producers through technology workshops, resource centers, websites, newsletters, technical publications and cooperative outreach efforts. HQ facilitates inter-regional technology transfer and implements a comprehensive communications program. Active volunteers on the National Board and in Producer Advisory Groups (PAGs) in each of the 10 regions focus effort in areas that will create the most impact for domestic producers. Focused effort by dedicated individuals across the country has enabled PTTC to achieve the milestones outlined in **Appendix A**.

Figure 1—Regional Map



Tables 1 and 2 and Figure 2 summarize PTTC's activity history. Since 1999 attendance in workshops, which includes co-sponsored events, has exceeded 6,000.

Table 1—Activity History

| Time Period | Activities | | Attendance | | From E&P Industry | | Outreach Contacts | |
|--|------------|------------|--------------|---------------|---|-----------|-------------------|----------------|
| | Annual | Cumulative | Annual | Cumulative | Attendance | % | Annual | Cumulative |
| FY95 | 18 | 18 | 1,117 | 1,117 | | | | |
| FY96 | 46 | 64 | 3,801 | 4,918 | | 83 | | |
| FY97 | 62 | 126 | 3,176 | 8,094 | | 85 | 5,482 | 5,482 |
| FY98 | 100 | 226 | 4,429 | 12,523 | 3,235 | 73 | 10,241 | 15,723 |
| FY99 | 128 | 354 | 5,948 | 18,471 | 4,935 | 83 | 10,555 | 26,278 |
| FY00 | 148 | 502 | 6,020 | 24,491 | 4,923 | 82 | 12,980 | 39,258 |
| FY01 | 147 | 649 | 6,338 | 30,829 | 5,227 | 82 | 16,051 | 55,309 |
| FY02 | 147 | 796 | 6,243 | 37,072 | 5,177 | 83 | 18,377 | 73,686 |
| FY03 | 169 | 965 | 8,616 | 45,688 | 7,335 | 85 | 24,714 | 98,400 |
| FY04 | 141 | 1,106 | 6,451 | 52,139 | 5,486 | 85 | 25,205 | 123,605 |
| FY05 | 154 | 1,260 | 8,900 | 61,039 | 7,848 | 88 | 30,096 | 153,701 |
| FY06 | 114 | 1,374 | 6,945 | 67,984 | 4,414 | 64 | 32,884 | 186,585 |
| Averaging 61 attendees per activity | | | | | Exceeds 11 contacts per day/region | | | |

Figure 2 – Workshop Activity and Attendance History

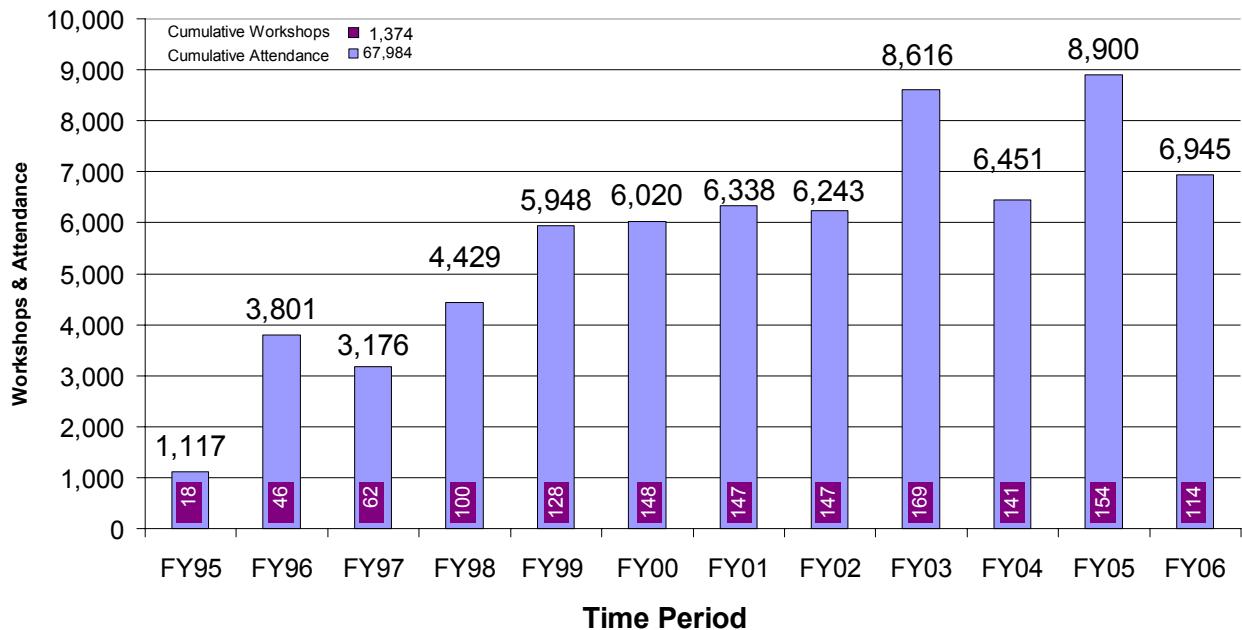


Table 2—FY06 Activity Summary

| Region | Activities | | | | | Contacts | Website User Sessions 1 st Qtr / 4 th Qtr | Newsletter |
|--------------------|-------------|---------------|--------------|-----------------|------------------|---------------|--|----------------------------------|
| | # of events | Total Attend. | Avg. Attend. | % from Industry | % Repeat Attend. | | | |
| Appalachian | 10 | 464 | 46 | 95 | 42 | 1,198 | 9,241 / 8,953 | On-line (3 times per year) |
| Central Gulf | 8 | 277 | 35 | 80 | 57 | 620 | 10,078 / 9,153 | Info/columns In Assoc. NL |
| Eastern Gulf | 8 | 721 | 90 | 82 | 59 | 962 | 4,916 / 4,582 | 784 (Semi) |
| Midwest | 7 | 566 | 81 | 71 | 76 | 12,506 | 17,205 / 18,424 | 3,200 (Semi) (not this year) |
| North Midcontinent | 13 | 659 | 51 | 88 | 56 | 3,180 | 23,208 / 46,197 | 5,167 (Semi) (once this year) |
| Rocky Mountain | 20 | 987 | 49 | 85 | 64 | 2,391 | 9,043 / 12,262 | 3,362 (Qtrly) |
| South Midcontinent | 5 | 922 | 184 | 90 | 65 | 1,194 | Not Available | 5,800 (Qtrly) |
| Southwest | 3 | 104 | 35 | 63 | 24 | 761 | 31,531 / 37,098 | 3,200 (Semi) |
| Texas | 22 | 1,367 | 62 | 99 | 21 | 5,945 | Not Available | 2,000 (one online issue), Assoc. |
| West Coast | 11 | 379 | 34 | 78 | 89 | 148 | 3,716 / 2,809 | Info. In CIPA weekly |
| Headquarters | 7 | 499 | 71 | 89 | | 2,877 | 34,668 / 34,609 | Quarterly |
| All Regions | 114 | 6,945 | 61 | 64 | 57 (avg.) | 32,884 | 143,606/177,057 | |

Section II of this report addresses National Activities. Section III reports FY06 Regional Activities.

II. NATIONAL ACTIVITIES

An active National Board with appropriate committees provides direct guidance to staff. Activities coordinated by PTTC nationally go well beyond governance and management into national and inter-regional technology transfer. Executive Director Don Duttlinger guides a small internal staff and cost effective consultants to achieve results. Customer response to workshops, which is PTTC's flagship product, confirms customer satisfaction and impact on technology application.

Governance and Management

- National Board Meetings—three times during FY06 (Appendix B for Board Roster)
- M&B Committee—conducts business between Board meetings via conference calls
- Restructuring Committees—created Intellectual Content, Structure and Marketing Committees as part of effort to transition to industry funding that was stimulated by strategic planning in July 2006.
- Formal Audit of Finances and Procedures—clean bill of health for FY05

Staffing

- Small PTTC Staff—Don Duttlinger, Kathy Chapman, Norma Gutierrez
- Consultant support—Lance Cole, Kristi Lovendahl, Dwight Rychel, Frank Valenzuela

HQ-Coordinated Workshop Activity

- DOE Microhole Technology (MHT) Integration Meetings—last of four contractor/public meetings in August 2006; plus presentations and three regional workshops
- DOE CO₂ Preproposal Meetings—prioritization of technology needs and solicitation information
- DOE HPHT Technology Integration Meetings—building on success with MHT Integration meetings
- Broadcast Committee—organize world-class workshops on high interest topics. Workshops are videotaped and subsequently provided as Distance Learning Modules. First product focused on Hydraulic Fracturing, Tight Gas Sands. Planning effort for a second event focused on “Oil and Gas Production from Shales” (canceled in 1st Qtr FY07).

Communications and Outreach

- Contacts—emails, phone calls, inquiries, personal visits
- Exhibit schedule—NAPE, major professional societies, regional events
- *PTTC Network News* – 16-page quarterly newsletter
- Email Tech Alert—Industry, DOE and PTTC Highlights plus calendar
- Tech Connections column in *The American Oil & Gas Reporter*
- *Petroleum Technology Digest* case studies in *World Oil*
- Workshop summaries placed online

Feedback from Workshop Participants

One standard question on the feedback form used at workshop asks respondents for a “Yes/No” answer to the question: Have you used any new technologies based on knowledge gained through PTTC? With data now available from 642 workshops, 41% of those who responded said, “Yes.” Percentage was 44% for FY06 workshops. Nearly 40% of those who responded “Yes” provided cryptic details of the technology applied. More follow-up, which PTTC resource limitations preclude, is required to develop full metrics.

Repeat Attendance

Since FY00 PTTC has been capturing and reporting the percentage of industry attendees at a workshop who are repeat attendees. Of 70 workshops in FY06 where repeat attendance was reported, it averaged 57%, which is consistent with the range experienced in recent years. This relatively high percentage indicates customer satisfaction in that people come back, yet there are still many “first attenders” being drawn to PTTC events.

Table 3—National FY06 Tech Transfer and Management Activity

Management Activities:

- Board meetings (Dec. 4-5, 2005 – Golden, CO; March 19-20, 2006 – Washington, DC; July 17-18, 2006 – Salt Lake City, UT)
- M&B Conference Calls (16 during FY06; meeting couple times per month since mid-2006 as PTTC developed its plan for industry funding)
- Broadcast Committee Conference Call (9 times during FY06): Organized Hydraulic Fracturing Tight Gas Sands Module (Feb 22, 2006) and early planning for a Shales workshop being considered in FY07
- Restructuring Committees (Intellectual Content, Structure, Marketing organized following July Board meeting; they interacted frequently through the end of FY06 as PTTC developed a new business plan)
- HQ staff participated in regional Producer Advisory Group meetings (in person or via phone)

National (HQ) Staff:

| | |
|------------------|--|
| Don Duttlinger | Executive Director, Houston |
| Kathy Chapman | Director of Business Affairs, Virginia |
| Lance Cole | National Project Manager (Consultant), Oklahoma |
| Norma Gutierrez | Office Manager, Houston |
| Kristi Lovendahl | Webmaster/Publications (Consultant), Oklahoma |
| Dwight Rychel | Technical Support (Consultant), Oklahoma |
| Frank Valenzuela | Computer/Audiovisual Support (Consultant), Houston |

Outreach:

Duttlinger networks extensively, particularly in Houston. Cole focuses more in the Texas/Midcontinent area. Both respond to HQ inquiries. Rychel assisted with DOE-related activities (primarily Microhole Technology Integration) intermittently throughout FY06. Valenzuela assisted with video/IT technology.

Workshops Coordinated by HQ:

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | |
|--|-------------|------------|------------|------------------|
| | | | Total | # (%) Industry |
| MHT Integration Meeting | Houston, TX | 11/16/06 | 65 | 61 (94%) |
| Hydraulic Fracturing – Tight Gas Sands (Distance Learning Module by Broadcast Committee) | Houston, TX | 2/21/06 | 145 | 142 (98%) |
| DOE CO2 EOR Preproposal Workshop | Houston, TX | 2/22/06 | 97 | 60 (62%) |
| MHT Integration Meeting | Houston, TX | 3/22/06 | 54 | 49 (91%) |
| MHT Presentations (Rychel) @ Southwest Petroleum SC | Lubbock, TX | 4/26-27/06 | 45 | 45 (100%) |
| DOE/PTTC HPHT Technology Integration Meeting | Houston, TX | 6/22/06 | 45 | 39 (87%) |
| MHT Integration Meeting (final one) | Houston, TX | 8/16/06 | 48 | 46 (96%) |
| FY06 Total for HQ Events | | | 499 | 442 (89%) |

National Outreach/Tech Transfer Measures:

| Measure of Outreach | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | FY06 |
|---|--------|--------|--------|-------------|-------|
| External Contacts | 760 | 1,271 | 1,163 | 785 | 3,979 |
| Contact database (# at end of Qtr) | 17,462 | 17,597 | 17,844 | 17,900 est. | |
| Newsletter circulation (at end of Qtr) | 17,272 | 17,272 | 17,584 | 17,638 | |
| Email list (Tech Alert) (# at end of Qtr) | 7,244 | 7,456 | 7,576 | 7,756 | |
| Email Tech Alerts | 4 | 3 | 4 | 3 | 14 |

| | | | | | |
|---|--------|--------|--------|--------|----|
| Website (average user sessions per month) | 34,668 | 43,699 | 42,421 | 34,609 | |
| Petr. Tech. Digest Case Studies in <i>World Oil</i> | 1 | 3 | 2 | 3 | 9 |
| Columns in <i>The American Oil & Gas Reporter</i> | 3 | 3 | 3 | 3 | 12 |
| Workshop Summaries Placed Online | 3 | 2 | 3 | 0 | 8 |
| Exhibits | 1 | 1 | 4 | 3 | 9 |

III. FY06 REGIONAL ACTIVITY

Appalachian Region

Central Gulf Region

Eastern Gulf Region

Midwest Region

North Midcontinent Region

Rocky Mountain Region

South Midcontinent Region

Southwest Region

Texas Region

West Coast Region

PTTC Appalachian Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|----------------|------------|------------|------------------------|-------------------|--|
| | | | Total | # (%) from Industry | | |
| Workshop History: FY03 Attendance (13 events) | | | 948 | 824(87%) | | |
| Workshop History: FY04 Attendance (10 events) | | | 658 | 503 (76%) | | |
| Workshop History: FY05 Attendance (9 events) | | | 469 | 366 (78%) | | |
| FY06 Events | | | | | | |
| Filling Your Pipeline and Storage Tanks (Southern Ohio Oil and Gas Association) | Marietta, OH | 10/13/05 | 50 | 50 (100%) | | |
| Geochemical Exploration for Oil and Gas Success; Strategies for Success (Tennessee O&G Assn.) | Knoxville, TN | 10/25/05 | 15 | 15 (100%) | 47% | |
| Well Control | Washington, PA | 5/16/06 | 27 | 26 (96%) | 27% | |
| Drilling and Completion Safety Seminar (Southern Ohio O&G Association) | Marietta, OH | 5/23/06 | 98 | 98 (100%) | 16% | |
| Drilling and Completion Technology Updates | Cambridge, OH | 5/31/06 | 41 | 40 (98%) | 51% | |
| Introduction to ArcGIS Software (KY Geol. Survey) | Lexington, KY | 7/27-28/06 | 24 | 17 (71%) | 17% | |
| Forecasting Waterfloods Using Reservoir Grail (Grail Quest) | Columbus, OH | 8/29/06 | 22 | 19 (86%) | 59% | |
| Stimulation Effectiveness/Imaging | Pittsburgh, PA | 9/13/06 | 139 | 131 (94%) | 60% | |
| Acquisition and Divestiture Analysis | Morgantown, WV | 9/20/06 | 35 | 31 (89%) | 63% | |
| Explosives Safety (Core Lab) | Morgantown, WV | 9/27/06 | 13 | 13 (100%) | 38% | |
| Workshop History: FY06 Attendance (10 events) | | | 464 | 440 (95%) | | |
| Reservoir Engineering for Geologists | Buffalo, NY | 10/8/06 | | | | |
| Hydrothermal Dolomite Reservoirs | Buffalo, NY | 10/11/06 | | | | |
| Public O&G Databases | Morgantown, WV | TBD | | | | |
| Shale! Shale! Shale! | Pittsburgh, PA | TBD | | | | |

FY06 Statistical Summary By Quarter

| | Workshops | | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
|---|-----------|--------|---------------------|----------------------|--------------------|---------------|------------|
| | # | Attend | Industry No. (%) | | User Sessions | Page Views | |
| 1st Qtr | 2 | 65 | 65 (100%) | 253 | 9,241 | 15,651 | |
| 2nd Qtr | 0 | 0 | 0 | 256 | 8,910 | 16,476 | |
| 3rd Qtr | 3 | 166 | 164 (99%) | 377 | 9,801 | 19,528 | |
| 4th Qtr | 5 | 233 | 211 (91%) | 312 | 8,953 | 15,810 | |
| FY06 YTD | 10 | 464 | 440 (95%) | 1,198 | | | |
| FY06 Avg. Attendance = 46 vs. 52 in FY05 vs. 66 in FY04 vs. 73 in FY03 | | | | | | | |

Website: The portion of the website that contains information on recent discoveries and current activity in the Trenton-Black River play ranks among the top requested pages on the website. Planned website projects (updating ArcIMS layers for horizontal wells, coalbed methane wells and Trenton-Black River wells and digitizing play descriptions in the *Atlas of Major Appalachian Gas Plays*) were dropped due to funding uncertainties. An agreement was made with a local consulting geologist to assemble data on the two Devonian shale plays in the basin. Internal and external reviews of the product have been completed. Information is being reorganized and will be placed online during FY07. Two AONGRC partners continue their scanning project (well logs and cores) in five tight gas sandstone plays in the Appalachian basin. When completed, intent is to place the information online and host a workshop. Eastern Section AAPG, whose website is hosted on the regional website, has been reassured that WVU will continue hosting their site regardless of PTTC's future status. During the year the WVGES reassigned webmaster John Bocan, but he has been able to continue providing services on a contract basis separate from WVGES.

Workshops/Events: Workshop topics for the year were determined during a January 2006 PAG meeting where PAG members prioritized suggested topics and assumed responsibility to be PAG champions. Delays were encountered for some topics, but most came to fruition although often later than planned. Some topics arose as Doug Patchen seized opportunities that presented themselves (for example, "Explosives Safety" and "Grailquest's Forecasting Waterfloods"). The region did work with HQ to incorporate Microhole Technology presentations within a regional workshop (May 31st in Cambridge). Attendance averaged 46, continuing a trend of slight declines. Highest attendance of 139 was at the "Stimulation Effectiveness/Imaging" workshop. PAG Champion Roger Willis did an outstanding job of drawing world-class speakers to this Pittsburgh event. Two workshops were also coordinated around the Eastern Section AAPG meeting that will occur early in FY07.

Newsletter/Outreach/Resource Center/Contacts: Extended online-only newsletter. Published in December 2005 and June and September of 2006. Newsletters capture technical insights from workshops and significant traffic to them when they are first placed online is experienced. During the year, AONGRC completed a 600-page report, a "Trenton-Black River Playbook," within a DOE-supported project. Although the report can be found (with difficulty) online on the DOE website, many experience problems downloading the large report. AONGRC will work with DOE to prepare CD/DVD copies that can be more readily distributed. Eventually, it may be modified and made available on the regional website.

Other Info: Annual PAG meeting in Morgantown, WV in January 2006. Being the RLO representative on PTTC's Board, Doug Patchen has been actively involved in the overall PTTC effort to transition to industry funding.

PTTC Central Gulf Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | | |
|--|-----------------|-------------|------------|-------------------|-------------------|--|--|
| | | | Total | # (%) Industry | | | |
| Workshop History: FY03 Attendance (7 events) | | | 620 | 558 (90%) | | | |
| Workshop History: FY04 Attendance (5 events, Plus 1 by Texas) | | | 256 | 195 (76%) | | | |
| Workshop History: FY05 Attendance (9 events, plus 2 w Texas) | | | 389 | 312 (80%) | | | |
| FY06 Events | | | | | | | |
| Energy Summit 2005: Louisiana's Integration With Global Energy Markets (Center for Energy Studies) | Baton Rouge, LA | 10/19-20/05 | 71 | 60 (85%) | | | |
| Work Production Performance for Independents | Lafayette, LA | 11/3/05 | 11 | 11 (100%) | 80% | | |
| Material Balance, Modeling and Simulation; Reservoir Engineering Tools Past, Present & Future | Lafayette, LA | 12/7/05 | 41 | 27 (66%) | 63% | | |
| Horizontal Well Technologies and CBM Applications (Texas) | Houston, TX | 2/8/06 | | Reported by Texas | | | |
| Work Production Performance Toolbox (SPE) | Shreveport, LA | 3/23/06 | 28 | 26 (93%) | 70% | | |
| DNR's SONRIS Fundamentals (Louisiana DNR) | Monroe, LA | 4/19/06 | 44 | 31 (70%) | 18% | | |
| Stimulation of Watered-out Inactive/Marginal Wells with Dual Completions (Update with Case Studies) | Shreveport, LA | 5/23/06 | 24 | 18 (75%) | 60% | | |
| Calculating a Wellhead Price | Baton Rouge, LA | 9/11/06 | 25 | 20 (80%) | | | |
| Gravity Stable EOR Forum | Shreveport, LA | 9/13/06 | 33 | 29 (88%) | 51% | | |
| Workshop History: FY06 Attendance (8 events, plus 1 w Texas) | | | 277 | 222 (80%) | | | |
| Mature Well Performance Prediction | Lafayette, LA | 10/26/06 | | | | | |
| Annual Reservoir Engineering Symposium; Reservoir Fluid Sampling, Deep Water Oil Quality and Unconventional Gas Reservoirs | Lafayette, LA | 12/7/06 | | | | | |
| Assessment of Deep Gas Resource; Mississippi Interior and North Louisiana Salt Basins (Eastern Gulf) | Shreveport, LA | 2/14/07 | | | | | |

| FY06 Statistical Summary By Quarter | | | | | | |
|---|-----------|--------|----------------------|--------------------|---------------|------------|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1st Qtr | 3 | 123 | 98 (80%) | 113 | 10,078 | 16,103 |
| 2nd Qtr | 1 | 28 | 26 (93%) | 181 | 11,978 | 22,655 |
| 3rd Qtr | 2 | 68 | 49 (72%) | 152 | 11,057 | 25,557 |
| 4th Qtr <i>Lunch and learn</i> | 1 | 33 | 29 (88%) | 174 | 9,153 | 24,393 |
| FY06 YTD | 7 | 252 | 202 (80%) | 620 | | |
| <i>Lunch and learn</i> | 1 | 25 | 20 (80%) | | | |
| All Events | 8 | 277 | 222 (80%) | | | |
| FY06 Avg. Attendance = 35 vs. 43 in FY05 vs. 51 in FY04 vs. 89 in FY03 | | | | | | |

Website: Routine maintenance was performed.

Workshops/Events: Workshop activity was on par with prior years with most events held in Lafayette or Shreveport. Average attendance continued its gradual decline. Several workshops evolved from other LSU groups, including the "Work Production Performance," "Stimulation of Watered-Out Inactive/Marginal Wells," and "Gravity Stable EOR Forums." There were cooperative efforts with Louisiana DNR on the SONRIS system, with the Texas Region on "Horizontal Well Technologies and CBM Applications" and with Core Labs on "Material Balance, Modeling and Simulation."

Newsletter/Outreach/Resource Center/Contacts: There is no regional newsletter, only announcements in LOGA's and Center for Energy Studies' newsletters as appropriate. Products developed included the Louisiana Parish Well Reference and a "Wellbore Schematics" product developed by Don Goddard. Product sales during

FY06 were relatively modest—less than \$1,000. Inquiries received are both regional and, because of Don Goddard's international connections and the Downhole Water Sink project, international. Don Goddard supported the PTTC booth at NAPE, AAPG and summer NAPE meetings.

Other Info: During its September 2006 PAG meeting, the PAG voted to solicit additional funds from Louisiana to fully fund PTTC as a regional program.

PTTC Eastern Gulf Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|------------------|-------------|------------|------------------------|-------------------|--|
| | | | Total | # (%) from Industry | | |
| Workshop History: FY03 Attendance (9 events) | | | 529 | 457 (86 %) | | |
| Workshop History: FY04 Attendance (8 events, plus 1 by C. Gulf) | | | 469 | 356 (76 %) | | |
| Workshop History: FY05 Attendance (8 events) | | | 545 | 457 (84%) | | |
| FY06 Events | | | | | | |
| US O&G Association Annual meeting/workshop | Jackson, MS | 10/12/05 | 125 | 108 (86%) | 56% | |
| PETRA Intermediate Mapping Techniques | Raymond, MS | 10/25-26/05 | 22 | 21 (95%) | 75% | |
| PETRA Data Loading | Raymond, MS | 11/8-9/05 | 17 | 16 (94%) | 85% | |
| O&G Seminar/Workshop (AL O&G Board, Black Warrior Landmen, O&G AL State Bar) | Tuscaloosa, AL | 11/18/05 | 114 | 102 (89%) | 65% | |
| Core Workshop—Upper Jurassic Smackover Thrombolite Facies and Reservoirs; Vocation, Appleton, and Little Cedar Creek Fields, AL | Tuscaloosa, AL | 3/8/06 | 46 | 25 (54%) | 54% | |
| Environmental Workshop (MSBRPG & AAPG DPA) | Jackson, MS | 5/11/06 | 55 | 32 (58%) | 65% | |
| International Coalbed Methane Symposium (University of Alabama & Others) | Tuscaloosa, AL | 5/22-26/06 | 240 | 189 (79%) | 70% | |
| CBM Association of Alabama (1 st effort w them) | Orange Beach, AL | 5/31 6/2 | 102 | 99 (97%) | 0% | |
| Workshop History: FY06 Attendance (8 events) | | | 721 | 592 (82%) | | |
| Red Hills Lignite Mine Workshop (Unconventional Energy) | Ackerman, MS | 10/7/06 | | | | |
| Fall workshop w US O&G Association | Jackson, MS | 10/11-12/06 | | | | |
| 2006 Alabama O&G Seminar & Workshop | Birmingham, AL | 10/27/06 | | | | |
| Assessment of Deep Gas Resource; Mississippi Interior and Northern Louisiana Salt Basins | Tuscaloosa, AL | 11/9/06 | | | | |
| Improved Oil Recovery from Smackover Carbonates; Womack Hill Field Case Study | Tuscaloosa, AL | 1/17/07 | | | | |
| Assessment of Deep Gas Resource; Mississippi Interior and North Louisiana Salt Basins (Central Gulf) | Shreveport, LA | 2/14/07 | | | | |
| Use of Transgressive-Regressive Sequences in Petroleum Exploration | Tuscaloosa, AL | 2/20/07 | | | | |
| Basin Analysis and Petroleum System Characterization, North Louisiana Salt Basin | Tuscaloosa, AL | 3/28/07 | | | | |

| FY06 Statistical Summary by Quarter | | | | | | |
|---|-----------|------------|----------------------|--------------------|---------------|------------|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1st Qtr | 4 | 278 | 247 (89%) | 353 | 4,916 | 9,919 |
| 2nd Qtr | 1 | 46 | 25 (54%) | 236 | 5,573 | 11,224 |
| 3rd Qtr | 3 | 397 | 320 (81%) | 167 | 5,276 | 13,582 |
| 4th Qtr | 0 | 0 | 0 | 206 | 4,582 | 7,906 |
| FY06 YTD | 8 | 721 | 592 (82%) | 962 | | |
| FY06 Avg. Attendance = 90 vs. 68 in FY05 vs. 59 in FY04 vs. 59 in FY03 | | | | | | |

Website: Website usage remained steady with somewhat higher usage experienced during the 2nd and 3rd quarters. Maintenance occurs every one to two weeks. Research reports from DOE-supported projects performed by the Univ. of Alabama are posted online as they become available. Several case studies have evolved from these projects.

Workshops/Events: A new attendance record, 721 during FY06, reflects the payoff of Bennett Bearden's focused effort to expand cooperative efforts. With some larger cooperative activities, average attendance increased significantly. Focus areas included coalbed methane, geology, and environmental. The region's "first ever" core workshop was very well attended. Even with funding uncertainties, the region is planning an active workshop schedule during the 1st half of FY07, although most workshops will be held in Tuscaloosa to control costs.

Newsletter/Outreach/Resource Center/Contacts: Semi-annual newsletter mailed in January and June 2006 with latest circulation approaching 800 people. Ernie Mancini and Bennett Bearden both leverage their positions within AAPG and other organizations for PTTC's benefit.

Other Info: The Eastern Gulf Region provided key connections in PTTC's information campaign to Washington during summer 2006.

PTTC Midwest Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|-------------------|------------|------------|------------------|-------------------|--|
| | | | Total | # (%) Industry | | |
| Workshop History: FY03 Attendance (8 events) | | | 456 | 337 (74%) | | |
| Workshop History: FY04 Attendance (7 events) | | | 542 | 440 (81%) | | |
| Workshop History: FY05 Attendance (10 events) | | | 704 | 604 (86%) | | |
| FY06 Events | | | | | | |
| U.S. Geological Survey Basin Assessment of Remaining O&G Reserves in Michigan Basin | Mt. Pleasant, MI | 10/20/05 | 159 | 116 (73%) | | |
| Illinois Basin CO2 Operational Workshop (Midwest Geological Sequestration Consortium) | Evansville, IN | 11/15/05 | 67 | 38 (57%) | 63% | |
| Internet Mapping Services and Available Digital Well Data (Illinois O&G Association) | Evansville, IN | 3/1/06 | 67 | 47 (70%) | 75% | |
| Basic Open-Hole Log Interpretation | Grayville, IL | 3/23-24/06 | 41 | 25 (61%) | 78% | |
| Michigan Field Experiences, Carbonate Reservoirs | Mt. Pleasant, MI | 3/23/06 | 164 | 131 (80%) | | |
| Wellbore Damage Removal (Downhole Fluidics) | Traverse City, MI | 5/18/06 | 32 | 22 (69%) | 75% | |
| Carbonate Reservoir Log Interpretation | Grayville, IL | 6/13-14/06 | 36 | 24 (67%) | 89% | |
| Workshop History: FY06 Attendance (7 events) | | | 566 | 403 (71%) | | |
| Casing Leak | Evansville, IN | 10/27/06 | | | | |
| Carbonate Reservoir Characterization | Kalamazoo, MI | 11/10/06 | | | | |

| FY06 Statistical Summary by Quarter | | | | | | |
|---|-----------|------------|----------------------|--------------------|---------------|---|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1 st Qtr | 2 | 226 | 154 (68%) | 2,635 | 17,205 | 114,859 |
| 2 nd Qtr | 3 | 272 | 203 (75%) | 3,447 | 19,081 | 132,364 |
| 3 rd Qtr | 2 | 68 | 46 (68%) | 3,352 | 21,100 | 129,994 |
| 4 th Qtr | 0 | 0 | 0 | 3,072 | 18,724 | 123,402 |
| FY06 YTD | 7 | 566 | 403 (71%) | 12,506 | | Semiannual newsletter – none this year Michigan web stats not in above |
| FY06 Avg. Attendance = 81 vs. 78 in FY05 vs. 77 in FY04 vs. 57 in FY03 | | | | | | |

Website: Usage of the ILOIL online data system continues to grow in Illinois, as does traffic to the Michigan website (not reflected in above statistics – down during the 4th Qtr due to Internet connection problems). Most content additions are driven by data projects within the resource centers.

Workshops/Events: Overall activity was on par with recent years with activities split relatively evenly between the Illinois basin and Michigan. Average attendance continues to edge upward, primarily because Michigan continues to achieve very strong attendance. There workshops combine geology and engineering with a strong case study focus. Illinois basin workshops are typically topic focused. Occasionally, software training is provided.

Newsletter/Outreach/Resource Center Contacts: Intent is for a semi-annual newsletter, but there were none published this year due to schedule disruptions with an RLO Director change (see below) and funding uncertainty. Staff exhibits at the Illinois and Kentucky O&G association meetings. The region has assumed responsibility for operating and expanding the ILOIL online data system. PTTC provides partial support for a massive data scanning project (some 61,000 well logs to date). At some point this data will be provided free online. Inquiries in Illinois focus on data, coalbed methane and shale gas. There is a similar strong demand for data in Michigan, for the new databases developed there, for core data and examination and for new development opportunities. Following years of effort, the new Michigan Core Facility is now a reality.

Other Info: During the year Steve Gustison replaced Dave Morse as RLO Director. The region derives from \$3,000 to \$5,000 per quarter from the sale of oil development base maps.

PTTC North Midcontinent Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|--|----------------|-------------|------------|--------------------------------|-------------------|--|
| | | | Total | # (%) from Industry | | |
| Workshop History: FY03 Attendance (13 events) | | | 608 | 470 (77 %) | | |
| Workshop History: FY04 Attendance (11 events) | | | 432 | 382 (88 %) | | |
| Workshop History: FY05 Attendance (16 events) | | | 802 | 698 (87%) | | |
| FY06 Events | | | | | | |
| The Crash Course in Log Analysis, An Excel Spreadsheet Workshop | Lawrence, KS | 10/6/05 | 11 | 8 (73%) | 45% | |
| Old Electric Logs, Interpretation and Analysis | Lawrence, KS | 10/7/05 | 8 | 5 (62%) | 38% | |
| Analyzing Mature Oil Reservoirs in Eastern Kansas for Additional Reserves | Iola, KS | 12/8/05 | 20 | 15 (75%) | 70% | |
| Crash Course on Log Analysis | Lawrence, KS | 3/2/06 | 7 | 7 (100%) | | |
| Old Electric Logs: Interpretation & Analysis | Lawrence, KS | 3/3/06 | 8 | 7 (88%) | | |
| <i>Horizontal Drilling w Case Studies in Pennsylvanian Sandstones (KU SPE Student Chapter, Grand Directions)</i> | Lawrence, KS | 3/29/06 | 27 | | | |
| PfEFFER Pro and Web Tools | Wichita, KS | 3/30/06 | 18 | 16 (89%) | | |
| Maintenance and Repair of Casing Integrity (SPE Wichita) | Wichita, KS | 4/11/06 | 61 | 40 (65%) | 60% | |
| Coiled Tubing Drilling & Reentry, Microhole Technology Development (KIOGA) | McPherson, KS | 4/12/06 | 41 | 41 est. (100%) | | |
| Independents' Day @ SPE/DOE IOR Symp. (S Mid) | Tulsa, OK | 4/25/06 | | Reported by South Midcontinent | | |
| <i>New Approaches and Economics of Gel Treatments to Increase Oil Production in Arbuckle Wells (presentation @ KIOGA annual meeting)</i> | Wichita, KS | 8/21/06 | 58 | 58 (100%) | | |
| Midcontinent O&G Expo and Prospect Fair | Great Bend, KS | 9/12/06 | 321 | 312 (97%) | | |
| Analyzing Mature Oil Reservoirs in Eastern Kansas for Additional Reserves | Chanute, KS | 9/14/06 | 26 | 19 (73%) | 65% | |
| <i>Updating CBM Production in SE Kansas (presentation at EKOOGA annual meeting)</i> | Chanute, KS | 9/15/06 | 53 | 53 (100%) | | |
| Workshop History: FY06 Attendance (13 events, plus 1 So. Midc.) | | | 659 | 581 (88%) | | |
| Midcontinent CBM Symposium (OIPA, Midcontinent CBM Forum) | Tulsa, OK | 10/22-24/06 | | | | |
| Crash Course in Log Analysis | Lawrence, KS | 11/16/06 | | | | |
| Log Analysis Using PfEFFER Software | Lawrence, KS | 11/17/06 | | | | |

| FY06 Statistical Summary by Quarter | | | | | | |
|---|---------------|-------------------|-------------------------------------|--------------------|---------------|------------|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1st Qtr | 3 | 39 | 28 (72%) | 634 | 23,208 | 62,813 |
| 2nd Qtr <i>Lunch & learn</i> | 3 1 | 33 27 | 30 (91%) 0 (0%) | 762 | 39,460 | 83,108 |
| 3rd Qtr | 2 | 102 | 81 (79%) | 833 | 44,809 | 86,466 |
| 4th Qtr <i>Lunch and learn</i> | 2 2 | 347 111 | 331 (95%) 111 (100%) | 951 | 46,197 | 82,970 |
| FY06 YTD <i>Lunch and learn</i> All Events | 10 3 13 | 521 138 659 | 470 (90%) 111 (80%) 581 (88%) | 3,180 | | |
| FY06 Avg. Attendance = 51 vs. 55 in FY05 vs. 39 in FY04 vs. 47 in FY03 | | | | | | |

Website: Usage of the PTTC/Energy Research server continues to grow steadily, reflecting the continued strong emphasis upon digital data by the Kansas Geological Survey. Access by commercial domains remains high, now being 65%. KGS staff continues to maintain existing features/databases and periodically add new features.

Workshops/Events: Overall activity and attendance was on par with recent years, averaging 51 people per workshop. The region worked with HQ to provide a half-day workshop on Microhole/CT drilling technology for KIOGA's mid-year meeting. Presentations were also coordinated for KIOGA and EKOOGA annual meetings. At SPE Wichita's request, the region repeated its "Casing Leak" workshop. Rodney Reynolds supported HQ in developing the content for "Independents' Day" at the SPE/DOE Improved Oil Recovery Symposium in Tulsa. On PTTC's behalf, Tim Carr of KGS assumed a lead role in developing the technical program for the "2nd Midcontinent CBM and Shales Symposium" scheduled early in FY07 in Tulsa. KGS conducted four logging-oriented workshops in Lawrence.

Newsletter/Outreach/Resource Center Contacts: Plans are for a semi-annual newsletter, but there was only one this year (July 2006) due to funding limitations. Circulation exceeds 5,000 readers. Growth of the email contact list is slow, now just over 500 (1/10th of the hardcopy mailing list). Hope is to eventually reduce workshop promotion costs by moving towards electronic notification/reminders as opposed to mailing flyers.

In a first for PTTC, the region organized and held an "Oil & Gas Expo and Prospect Fair," on September 12, 2006 in Great Bend. Purpose was two-fold: to provide a major event for service providers and operators to interact and to raise funds to support the regional program. All 72 exhibits were sold, plus there were three additional outdoor exhibits. TORP provided a reception for exhibitors the night before, and Buckeye Supply provided a complementary BBQ luncheon. More than 300 visitors (it was free) came. Most exhibitors were quite satisfied (actual business was developed), with several expressing a desire for this to become an annual event. Twenty people attended a presentation during the day by Sharon Elder with the Stripper Well Consortium (SWC) on its activities and opportunities. Total revenue exceeded \$32,000 and the net was greater than \$20,000, which provided sorely needed funds for the regional program.

Through TORP, staff remains involved in the DOE-supported Lansing-Kansas City CO₂ flooding demonstration project. Although long delayed, data are now pointing towards some CO₂ flood response. Staff also coordinated with industry, securing partners for a successful TORP proposal to the SWC to conduct gel treatments in the Mississippian formation. TORP also has an earlier SWC project with Vess Oil to perform "disproportionate permeability" gel treatments in the Arbuckle. The region provides tech transfer for all these projects. Support continues for the Arbuckle polymer gel database, a joint project of TORP/the region.

Relationships with KIOGA, EKOOGA and SPE Wichita continue to strengthen. The region regularly provides content to KIOGA/EKOOGA annual meetings, plus this year there was a half-day workshop with SPE Wichita.

Other Info: Rodney Reynolds provided strong support to PTTC in its move towards industry funding, attending the July 2006 strategic planning meeting and serving on an implementation committee.

PTTC Rocky Mountain Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|--------------------|-------------|--------------|------------------------|-------------------|--|
| | | | Total | # (%) from Industry | | |
| Workshop History: FY03 Attendance (42 events) | | | 2,116 | 1,852 (88 %) | | |
| Workshop History: FY04 Attendance (35 events plus 1 Futures) | | | 915 | 843 (92 %) | | |
| Workshop History: FY05 Attendance: (34 events plus 2 Futures) | | | 1,936 | 1,729 (89%) | | |
| FY06 Events | | | | | | |
| Coalbed Methane Conference (SDSM&T) | Rapid City, SD | 10/20-21/05 | 97 | 73 (75%) | 20% | |
| <i>Simulation Users Group: SMT SURE Simulator</i> | Denver, CO | 10/27/05 | 11 | 11 (100%) | 91% | |
| Source Rocks 101: What the Exploration Geologist, Geophysicist and Production Engineer Should Know | Golden, CO | 10/28/05 | 20 | 18 (90%) | 90% | |
| Successfully Awakening Mature Fields; A Process for Reversing Production Decline | Denver, CO | 11/4/05 | 14 | 14 (100%) | 93% | |
| Core workshop: Pore System Variations in Some Major Carbonate Reservoirs in the Rockies (USGS) | Denver, CO | 11/17/05 | 19 | 18 (95%) | 95% | |
| <i>Simulation Users Group: Roxar</i> | Denver, CO | 11/30/05 | 12 | 12 (100%) | 92% | |
| How To Use GIS/GPS to Map Oilfield Assets | Golden, CO | 2/2/06 | 21 | 10 (48%) | 48% | |
| GeoGraphix: Basic Training, Overview & Refresher | Golden, CO | 3/14/06 | 13 | 7 (54%) | 39% | |
| Basic Training for Beginning MICA Users | Golden, CO | 4/7/06 | 11 | 11 (100%) | | |
| <i>Low Cost GIS Data and Software (AAPG Short Course Presentation) AAPG EMD</i> | Houston, TX | 4/8/06 | 38 | 38 (100%) | | |
| Intermediate Training for MICA Users | Golden, CO | 4/14/06 | 13 | 13 (100%) | | |
| Material Balance and Modeling (Core Labs) | Denver, CO | 5/3/06 | 32 | 30 (94%) | 60% | |
| Microhole Drilling with Coiled Tubing (SPE Denver) | Denver, CO | 5/19/06 | 35 | 31 (89%) | 35% | |
| <i>Presentation, IOGCC about "Core Locator System"</i> | Billings, MT | 5/22/06 | 40 | 30 est. (75%) | | |
| Formation Damage and Underbalanced Drilling | Denver, CO | 6/2/06 | 27 | 27 (100%) | 25% | |
| Source Rocks 101: What The Exploration Geologist, And Production Engineer Should Know About Petroleum Source Rocks (RMAG, SEPM Rocky Mtn) | Billings, MT | 6/10/06 | 22 | 22 (100%) | | |
| <i>Futures in Energy</i> | Golden, CO | 6/26-30/06 | 46 | 0 (0%) | | |
| Informed Petroleum Professional; O&G Pricing, Consumption, Production Issues; (session @ RMAG 2006 Rocky Mountain Natural Gas Conference) | Denver, CO | 8/9/06 | 50 | 50 (100%) | | |
| GeoGraphix Overview & Refresher Training | Golden, CO | 9/22/06 | 16 | 16 (100%) | | |
| Shale Gas, Exploration to Production (RMAG) | Denver, CO | 9/25/06 | 450 | 405 (90% est.) | | |
| Workshop History: FY06 Attendance: (19 events plus 1 Futures) | | | 987 | 836 (85%) | | |
| <i>IOGCC Futures in Energy Presentation</i> | Austin, TX | 10/16/06 | | | | |
| Hydraulic Fracturing—Measurement, Characterization and Analysis | Golden, CO | 11/7/06 | | | | |
| Implementing Geotechnologies for Mining and Petroleum Industry (Mesa State College) | Grand Junction, CO | 1/16-18/07 | | | | |
| Sequence Stratigraphy: Principles and Application | Billings, MT | 2/22-23/07 | | | | |
| GIS and GPS for Earth Scientists | Golden, CO | 3/9/07 | | | | |
| Hydraulic Fracturing—Measurement, Characterization and Analysis | Billings, MT | 3/20/07 | | | | |

| FY06 Statistical Summary by Quarter | | | | | | | |
|---|--------------------|-------------------------|--|-------------------|--------------------|------------|---|
| | Workshops | | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | Industry No. (%) | | User Sessions | Page Views | |
| 1st Qtr <i>L&L</i> | 4 2 | 150 23 | 123 (82%) 23 (100%) | 498 | 9,043 | 17,566 | Quarterly newsletter (circ. 3,362); (September 2006) |
| 2nd Qtr | 2 | 34 | 17 (50%) | 357 | 13,029 | 24,218 | |
| 3rd Qtr <i>L&L</i> <i>Futures Energy</i> | 6 2 1 | 140 78 46 | 134 (96%) 68 (87%) 0 (0%) | 1,145 | 13,514 | 26,849 | |
| 4th Qtr | 3 | 516 | 471 (91%) | 391 | 12,262 | 20,743 | |
| FY06 YTD <i>L&L</i> <i>Futures Energy</i> All Events | 15 4 1 20 | 840 101 46 987 | 745 (89%) 91 (90%) 0 (0%) 836 (85%) | 2,391 | | | |
| FY06 Avg. Attendance (excluding Futures) = 50 vs. 56 in FY05 vs. 26 in FY04 vs. 50 in FY03 | | | | | | | |

Website: Website usage grew throughout FY06 (most recent quarter not notwithstanding) with a lot of the increase associated with traffic to the Core Locator system. Data within the Core Locator system expanded significantly during FY06—data from nearly 250,000 cores from eight repositories covering 30 states is now there. Populating and maintaining this database is ongoing. Case studies with a strong regional focus, exemplified by a recent “Wattenberg Field Area, A Near Miss & Lessons Learned After 35 Years of Development History” presentation are placed online, which also draws additional viewers.

Workshops/Events: Although less active than prior years, the region was still among the most active of PTTC regions with regards to the number of activities. Eighty percent of events were held in Colorado, but there were workshops in Montana and South Dakota. There were eight software/data-oriented workshops, including some for the first time on the Mica economics package. Two of the eight software-oriented events were Simulation Users Group meetings, which have been discontinued since Sandra Mark left. The region served as an active partner in events developed by AAPG, RMAG, and South Dakota School of Mines and Technology. The region worked with HQ to conduct a half-day workshop on Microhole/CT drilling technology.

Newsletter/Outreach/Resource Center Contacts: Four quarterly newsletters were issued, with the latest circulation being 3,362. Beyond workshop announcements, newsletters feature technical articles and a PAG member interview, which always provides interesting perspectives. Staff exhibits at selected regional events (Prospect Fair and Technofest, Williston Basin Petroleum Conference, RMAG Shale Gas Symposium). Staff worked with Amy Burnett, a 2005 Futures student, to videotape her presentation describing her Futures experience. This videotape was used for promotional experiences in Washington and for Futures 2006. Twenty two students and 24 teachers participated in “2006 Futures in Energy” student training/internship at the Colorado School of Mines on June 25-30. Original plans had been to host sessions in Golden and in Pinedale, WY. With limited enrollment in Pinedale, interested students and teachers from Wyoming were transported to Golden for one large session. Participants were treated to a field trip to the Cretaceous of the Denver Basin and a tour of working oil rig led by Ensign Drilling. Internships were arranged for 10 students. More than \$21,000 of industry funding was raised for the Futures program.

Other Info: Mary Carr replaced Sandra Mark as RLO Director during the middle of FY06.

PTTC South Midcontinent Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|-------------------|----------|--------------|--------------------|-------------------|--|
| | | | Total | # (%) from Ind | | |
| Workshop History: FY03 Attendance (40 + MWC Trade Fair) | | | 1,300 | 1,147 (88%) | | |
| Workshop History: FY04 Attendance (31 events, plus 1 by N. Mid.) | | | 1,419 | 1,286 (91%) | | |
| Workshop History: FY05 Attendance (25 events, plus 1 by N. Mid.) | | | 1,448 | 1,328 (92%) | | |
| FY06 Events | | | | | | |
| Booch Play (Okla. Geological Survey) | Norman, OK | 12/1/05 | 56 | 44 (79%) | 79% | |
| Coalbed Methane & Gas Shales (OGS) | Oklahoma City, OK | 3/21/06 | 392 | 356 (91%) | 58% | |
| Independents' Day @ SPE/DOE IOR Sym. (N Mid) | Tulsa, OK | 4/25/06 | 78 | 73 (94%) | | |
| Fayetteville Gas Shale Play (AR Geological Survey) | Ft. Smith, AR | 5/10/06 | 120 | 113 (94%) | 53% | |
| Caney Gas Shale Play (OGS) | Oklahoma City, OK | 8/3/06 | 276 | 247 (89%) | 70% est. | |
| Workshop History: FY06 Attendance (5 events) | | | 922 | 833 (90%) | | |
| 3-D Seismic (OGS) | Norman, OK | 11/01/06 | | | | |
| Produced Water Issues and Including Casing Leak Prevention and Repairs | El Dorado, AR | 2/7/07 | | | | |

| FY06 Statistical Summary By Quarter | | | | | | |
|-------------------------------------|-----------|------------|----------------------|--------------------|---------------|------------|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1st Qtr | 1 | 56 | 44 (79%) | 240 | 2,575 | Not Avail. |
| 2nd Qtr | 1 | 392 | 356 (91%) | 300 est. | 12,437 | Not Avail. |
| 3rd Qtr | 2 | 198 | 186 (94%) | 334 | 3,551 | Not Avail. |
| 4th Qtr | 1 | 276 | 247 (89%) | 320 est. | Not Avail. | Not Avail. |
| FY06 YTD | 5 | 922 | 833 (90%) | 1,194 | | |

FY06 Avg. Attendance = 184 vs. 58 in FY05 vs. 46 in FY04 vs. 33 in FY03
Average based on significantly fewer workshops, focus on large events.

Website: Website usage reflects the accrual number of hits on the regional website, not the user sessions as reported by other regions. WebTrends software can not be used on the OU server.

Workshops/Events: This year the region contracted its workshop program, focusing almost exclusively on major events developed by the Oklahoma Geological Survey. Although fewer in number, those workshops were highly successful events. There was a strong emphasis on feeding industry's demand for gas shale-oriented information with (1) OGS's Coalbed Methane & Gas Shales conference (392), (2) Caney Gas Shale (276) and (3) Fayetteville Shale (120). The region has also been involved in planning the 2nd Midcontinent Coalbed Methane and Shale Gas Symposium scheduled in Tulsa early in FY07. It also supported HQ in sponsoring the "Independents' Day" session at the SPE/DOE Improved Oil Recovery Symposium in Tulsa. There was one play-oriented workshop, which focused on the Booche formation.

Newsletter: Quarterly newsletter, latest issue late in FY06; circulation approaching 6000. Recent issues have focused on presenting insights shared during regional workshops. There are also regular mailings to alert industry to upcoming workshops.

Newsletter/Outreach/Resource Center/Contacts: PTTC material is incorporated in the OGS exhibits at geological-oriented events, the most relevant for PTTC being the AAPG annual meeting in Houston. The Oklahoma Geological Survey remains very active in youth-oriented outreach.

Other Info: None.

PTTC Southwest Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|-------------------------------|-------------|------------|--------------------------|-------------------|--|
| | | | Total | # (%) from Industry | | |
| Workshop History: FY03 Attendance (11 events, plus 1 by Texas) | | | 402 | 340 (85 %) | | |
| Workshop History: FY04 Attendance (9 events, plus 1 by Texas) | | | 322 | 273 (85%) | | |
| Workshop History: FY05 Attendance (5 events, plus 4 by Texas) | | | 157 | 146 (93%) | | |
| FY06 Events | | | | | | |
| H ₂ S Issues | Farmington, NM | 12/7/05 | 41 | 39 (95%) | 18% | |
| 11 th Annual CO ₂ conference (Texas & others) | Midland, TX | 12/8-9/05 | | Reported by Texas Region | | |
| Southwest Regional Partnership on Carbon Sequestration; Kickoff Meetings for Field Pilots | Socorro, NM | 12/15-16/05 | 43 | 8 (19%) | 5% | |
| San Juan Database Kickoff Meeting | Farmington, NM | 2/16/06 | 20 | 18 (90%) | 50% | |
| Hydraulic Fracturing (Texas) | Midland, TX | 3/30/06 | | Reported by Texas Region | | |
| Workshop History: FY06 Attendance (3 events, plus 2 w Texas) | | | 104 | 65 (63%) | | |
| 2006 CO ₂ Conference (Texas & Others) | Midland, TX | 12/7-8/06 | | | | |
| Environmental/Regulatory Issues | Artesia, NM Farmington, NM | TBD | | | | |

| FY06 Statistical Summary By Quarter | | | | | | |
|---|-----------|------------|----------------------|--------------------|---------------|------------|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1st Qtr | 2 | 84 | 47 (56%) | 181 | 31,531 | 131,321 |
| 2nd Qtr | 1 | 20 | 18 (90%) | 254 | 38,418 | 204,156 |
| 3rd Qtr | 0 | 0 | 0 | 178 | 43,087 | 294,472 |
| 4th Qtr | 0 | 0 | 0 | 148 | 37,098 | 160,686 |
| FY06 YTD | 3 | 104 | 65 (63%) | 761 | | |
| FY06 Avg. Attendance = 35 vs. 31 in FY05 vs. 36 in FY04 vs. 37 in FY03 | | | | | | |

Website: Usage rose steadily through the year. This year there has been a strong emphasis on updating and streamlining the entire GO-TECH system of websites, which had not been done for a number of years. There have been improvements in behind-the-scenes technical aspects, usability and appearance. As new databases/projects are completed, and there have been several during FY06, they are made accessible online.

Workshops/Events: Internal issues held back this year's activity level. The major workshop initiated by the region focused on "H₂S Issues" that are of increasing concern in the San Juan basin. A second Farmington workshop informed industry of the "San Juan Database Project" that DOE awarded New Mexico Tech. Once again, the region supported the Annual CO₂ conference in Midland, as well as working with the Texas Region to develop a "Hydraulic Fracturing" workshop.

Newsletter/Outreach/Resource Center/Contacts: PTTC section in semiannual PRRC newsletter; circulation approximately 3,000. There is a strong focus on developing online databases. Staff regularly interacts with the NM State Land Office and NM Oil Conservation Division, assisting them and filling database niches of interest to regional producers. A large set of digital images of NM historical production data has been acquired. A future goal is to make these image files available online. Staff attended the Four Corners Oil and Gas Show, which drew more than 1,200 people.

Other Info: Annual PAG meeting held in conjunction with IPAM meeting in Ruidoso in August 2006.

PTTC Texas Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|--------------------|-------------|--------------|--------------------|-------------------|--|
| | | | Total | # (%) Industry | | |
| Workshop History: FY04 Attendance (13 events, + 1 Southwest) | | | 794 | 749 (94 %) | | |
| Workshop History: FY05 Attendance (23 events, + 3 Southwest) | | | 1,387 | 1,320 (95%) | | |
| FY06 Events | | | | | | |
| New Technology Enabling New Plays (SIPES, N. Texas Energy Council) | Farmers Branch, TX | 10/18/05 | 70 | 70 (100%) | 13% | |
| Tech Session @ PBPA annual meeting | Midland, TX | 10/20/05 | 56 | 56 (100%) | | |
| Symposium on Improved Profits Through Emissions Reductions (Texas A&M Corpus Christi) | Corpus Christi, TX | 11/1/05 | 40 | 32 (80%) | 3% | |
| Barnett Shale Symp. (Midland College, SPE PB) | Midland, TX | 11/1/05 | 210 | 210 (100%) | | |
| Fundamentals of Seismic Interpretation (EMGI) | Farmers Branch | 11/1-2/05 | NA | NA | | |
| 11 th Annual CO2 Conference (Southwest, Others) | Midland, TX | 12/8-9/05 | 414 | 414 (100%) | | |
| Reserve-Growth Potential from CO2-Enhanced Oil Recovery Along the Gulf Coast (BEG) | Houston, TX | 12/13/05 | 35 | 32 (91%) | 38% | |
| Core workshop: Tight Gas Sands, Cotton Valley Formation of East Texas (Matador Resources) | Austin, TX | 12/14-15/05 | 17 | 17 (100%) | | |
| Deep Shelf Gas Play of Texas (BEG) | Houston, TX | 12/15/05 | 18 | 16 (89%) | 44% | |
| Core workshop: Tight Gas Sands, Cotton Valley Formation of East Texas (Matador Resources) | Austin, TX | 1/17-18/06 | 34 | 34 (100%) | 18% | |
| Horizontal Well Technologies & CBM (C Gulf) | Houston, TX | 2/8/06 | 43 | 40 (93%) | 27% | |
| Core workshop: Tight Gas Sands, Cotton Valley Formation of East Texas (Matador Resources) | Austin, TX | 3/7-8/06 | 28 | 28 (100%) | 7% | |
| Permian Basin Hydraulic Fracturing (Southwest) | Midland, TX | 3/30/06 | 80 | 78 (98%) | 29% | |
| Producer Technology Transfer Workshop (EPA Natural Gas STAR, Devon) | Fort Worth, TX | 6/6/06 | 17 | 17 (100%) | | |
| Producer Technology Transfer Workshop (EPA Natural Gas STAR, Oxy) | Midland, TX | 6/8/06 | 39 | 39 (100%) | | |
| Hydraulic Fracturing (Texas Alliance) | Fort Worth, TX | 7/11/06 | 35 | 35 (100%) | 18% | |
| Hydraulic Fracturing (Texas Alliance) | Tyler, TX | 7/12/06 | 67 | 66 (99%) | 23% | |
| Designing and Forecasting Waterfloods Using Reservoir Grail (Grail Quest) | Midland, TX | 8/01/06 | 25 | 25 (100%) | | |
| | | 8/02/06 | 7 | 7 (100%) | | |
| Explosives Safety (Core Labs) | Houston, TX | 8/17/06 | 13 | 13 (100%) | 15% | |
| Kiker Presentation @ Canadian CO2 Conference | Calgary, Canada | 9/13/06 | 67 | 67 (100%) | | |
| Tech Speaker @ Texas Alliance meeting | Abilene, TX | 9/26/06 | 52 | 52 (100%) | | |
| Workshop History: FY06 Attendance (22 events) | | | 1,367 | 1,348 (99%) | | |
| Tech Session @ PBPA Annual Meeting | Midland, TX | 10/11-12 | | | | |
| O&G Operations in Urban Areas (EMGTI, SIPES) | Farmers Branch | 10/17/06 | | | | |
| Barnett Shale (Texas BEG) | Midland, TX | 11/8/06 | | | | |
| Barnett Shale (Texas BEG) | Houston, TX | 11/14/06 | | | | |
| 2006 CO2 Conference & Carbon Management (Southwest, HQ and others) | Midland/ Houston | 12/4-8/06 | | | | |
| Hydraulic Fracturing Technology and Case Studies, Tight Gas Sands and Shales (Texas Alliance, South Texas Geological Society) | San Antonio, TX | 2/23/07 | | | | |

| FY06 Statistical Summary By Quarter | | | | | | | |
|---|-----------|--------|------------------|-------------------|--------------------|------------|---|
| | Workshops | | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | Industry No. (%) | | User Sessions | Page Views | |
| 1st Qtr | 9 | 860 | 847 (98%) | 2,482 | 9,702 | 27,076 | Online (mail postcard) (circ. 2,000) |
| 2nd Qtr | 4 | 185 | 180 (97%) | 1,619 | NA | NA | |
| 3rd Qtr | 2 | 56 | 56 (100%) | 1,183 | NA | NA | |
| 4th Qtr | 5 | 147 | 146 (99%) | 661 | NA | NA | |
| <i>Lunch and learn</i> | 2 | 119 | 119 (100%) | | | | |
| FY06 YTD | 20 | 1,248 | 1,229 (98%) | 5,945 | | | |
| <i>Lunch and learn</i> | 2 | 119 | 119 (100%) | | | | |
| All Events | 22 | 1,367 | 1,348 (99%) | | | | |
| FY06 Avg. Attendance = 62 vs. 73 in FY05 vs. 61 in FY04 vs. 88 in FY03 | | | | | | | |

Website: TIPRO stopped providing website and Internet outreach services early in 2006. RLO staff is now maintaining the regional website, but since content has not yet been switched from the TIPRO server, website statistics are not available. Workshop presentations are placed online when speakers give permission. Content is regularly added to the Barnett Shale section.

Workshops/Events: Overall activity, attendance and average attendance was within the range of recent years. Activities were a blend of PTTC-developed and co-sponsored activities, covering eight separate cities in Texas. Groups that the region cooperated with included oil and gas associations, professional societies, colleges/universities, federal agencies, private companies and other PTTC regions. A good portion of the workshop schedule was developed by seizing opportunities as they arose. Bob Kiker was also involved in some events in other regions. Even with funding limitations, the region plans an active schedule into 2007.

Newsletter/Outreach/Resource Center/Contacts: Only one newsletter was published this year, and that with postcard notification to look online, due to budget concerns and staff changes. Announcements are regularly published in PBPA and SPE Permian Basin newsletters. Columns/information from Bob Kiker is regularly published in Midland Reporter Telegram. Contact activity decreased through the year. The primary resource center activity is seeing that workshop presentations are posted online.

Other Info: TIPRO made the decision to withdraw from PTTC service early in 2006 when their priorities changed with executive-level staff changes.

PTTC West Coast Region

| Topic (main cosponsors in parentheses) | Location | Date | Attendance | | Repeat Attend. | |
|---|------------------------|-------------------|------------|------------------------|-------------------|--|
| | | | Total | # (%) from Industry | | |
| Workshop History: FY03 Attendance (14 events plus COMET) | | | 583 | 383 (66 %) | | |
| Workshop History: FY04 Attendance (12 events plus COMET) | | | 644 | 459 (71 %) | | |
| Workshop History: FY05 Attendance (11 events plus COMET) | | | 530 | 372 (70%) | | |
| Oilfield Safety and Recommended Practices | Valencia, CA | 10/27/05 | 49 | 40 (82%) | 78% | |
| Panel on Power Generation Using Waste and Stranded Gas | Valencia, CA | 11/22/05 | 41 | 35 (85%) | 80% | |
| Anniversary Forum: The Other 30% Recovery | Los Angeles, CA | 12/9/05 | 25 | 21 (84%) | 90% | |
| Transformation of Old Data Sets (Software training) | Valencia, CA | 2/23/06 | 32 | 25 (78%) | 80% | |
| Round Table Discussion on Power Reduction | Los Angeles, CA | 3/30/06 | 18 | 14 (78%) | 90% | |
| Well Production Testing | Valencia, CA | 4/27/06 | 43 | 36 (84%) | 98% | |
| Independents' Day Panel @ SPE Western Regional | Anchorage, AK | 5/10/06 | 25 | 21 (84%) | 85% | |
| Air Injection for California Mature Oilfields | Valencia, CA | 5/25/06 | 52 | 46 (88%) | 97% | |
| <i>COMET Student Training/Internship</i> | <i>Los Angeles, CA</i> | <i>6/26-30/06</i> | 25 | 0 (0%) | 0% | |
| Subsidence Mitigation | Valencia, CA | 7/27/06 | 32 | 27 (84%) | 98% | |
| Trouble Shooters Forum; Case Studies A-Z in Revamping Mature Fields | Valencia, CA | 9/21/06 | 37 | 30 (81%) | 96% | |
| Workshop History: FY06 Attendance (10 events plus COMET) | | | 379 | 295 (78%) | | |

| FY06 Statistical Summary By Quarter | | | | | | |
|---|-----------|-----------|----------------------|--------------------|---------------|---|
| | Workshops | | Industry Contacts | Website (mo. Avg.) | | Newsletter |
| | # | Attend | | User Sessions | Page Views | |
| 1st Qtr | 3 | 115 | 96 (83%) | 68 | 3,716 | 12,882 |
| 2nd Qtr | 2 | 50 | 39 (78%) | 36 | 3,312 | 13,207 |
| 3rd Qtr | 3 | 120 | 103 (86%) | 33 | 3,256 | 14,177 |
| <i>COMET</i> | <i>1</i> | <i>25</i> | <i>(0%)</i> | | | |
| 4th Qtr | 2 | 69 | 57 (83%) | 11 | 2,809 | 12,007 |
| FY06 YTD | 10 | 354 | 295 (83%) | 148 | | Announcements in CIPA newsletter; email alerts |
| <i>COMET</i> | <i>1</i> | <i>25</i> | <i>0%</i> | | | |
| Combined | 11 | 379 | 295 (78%) | | | |
| FY06 Avg. Attendance = 34 vs. 44 in FY05 vs. 54 in FY04 vs. 42 in FY03 | | | | | | |

Website: Staff continued to provide routine maintenance, primarily calendar and workshop announcements. The earlier practice of posting workshop presentations online has been stopped.

Workshops/Events: Activity level was on par with prior years, but attendance and average attendance continues to fall. Except for support of "Independents' Day" at SPE Western Regional meeting in Alaska, all events were in either Valencia or at USC. Workshops focused on engineering or operations topics ranged from very practical cost savings topics to enhanced oil recovery techniques.

Communications: There is not a regional newsletter. Email alerts and info in association newsletters.

Newsletter/Outreach/Resource Center/Contacts: COMET 2006, the student training/internship program, drew 23 high school students and two teachers. Beyond classroom training, participants also experienced a field trip that included a geology lesson and a visit to THUMS Island in Long Beach.

Other Info: The region consistently reports significant volunteer time from speakers and participating PAG members.

Appendix A

PTTC's National Organizational Milestones

1993

- November—PTTC incorporated as national, not-for-profit organization
- November—Founding Board of Directors meets (New Orleans, LA). Jim Russell voted Chair, Gene Ames, Jr. as Vice Chair, and Deborah Rowell as Executive Director
- December—Initial meetings of Producer Advisory Groups (PAGs)

1994

- January—Phase I funding from DOE/BDM begins.
- January—All ten PAGs formed, Chair and Vice Chair elected in each region
- February—First meeting of Permanent Board of Directors (Washington, DC). Same officers elected as by Founding Board.
- March—Headquarters staff make visits to potential Regional Lead Organizations (RLOs)
- March—Board adopts bylaws, elects Nominating Committee and members of Management and Budget (M&B) Committee. First M&B meeting held. (Dallas, TX)
- April—First meeting of RLO Directors (Tulsa, OK)
- May—First PTTC technical session at IPAA meeting (San Francisco, CA).
- May—Office space obtained for national PTTC Headquarters (HQ) – Separate from IPAA
- June—HQ staff hired
- July—HQ establishes accounting system and database separate from IPAA
- August—PTTC participates for first time in DOE oil program contractors review
- September—PTTC submits 5-year Master Plan to DOE as main Phase I deliverable
- September—PTTC's first national exhibit at conference - SPE annual meeting
- October—Tax-exempt status approved by IRS
- November—Board conducts first (annual) strategic planning session (Phoenix, AZ)
- November—Phase II funding from DOE/BDM begins

1995

- January—First annual audit of HQ financial systems
- February—First joint meeting of PTTC Board and RLO Directors (Norman, OK). Election of officers (Chris Hall voted Chair and Bob Nance as Vice Chair)
- March—Contract signed with first RLO (North Midcontinent)
- March—First issue of “PTTC Network News” published as national quarterly newsletter
- April—PTTC participates for first time in DOE natural gas contractors review
- May—PTTC Board meeting includes discussions with IPAA leaders about lack of industry support for DOE oil and gas technology programs
- June—National website went online
- July—One year funding begins from Gas Research Institute for HQ activities
- July—PTTC Chair Chris Hall leads Washington meeting with DOE officials to confirm industry support for oil and gas technology programs
- August—RLO staff meet to discuss coordinating PTTC websites (Albuquerque, NM)
- December—HQ ended consulting contract with ICF Resources for technical assistance related to establishing new organization.

1996

- January—PTTC presents preliminary problem identification results to DOE meeting with National Petroleum Council R&D Task Force members (Washington, DC)
- March—Election of officers (Bob Nance voted Chair and Leo Schrider as Vice Chair) (Tuscaloosa, AL)
- March—Problem Identification Report published based on series of workshops
- April—Executive Director begins monthly conference calls with M&B Committee
- May—PTTC Chair Bob Nance added as member of IPAA Program Committee
- June—Board meets in Washington and issues first long-run strategic plan. Conducts first group visits to Capitol Hill.
- July—Contract signed with tenth/final RLO (West Coast)
- July—RLO Directors and HQ staff meet with DOE officials in Morgantown, WV
- October—HQ expands technical coverage in “PTTC Network News” (from 8 to 16 pages)
- November—Board ratifies updated bylaws. Adds 3 representatives from professional societies
- November—DOE announces that its new outreach areas will be same as PTTC’s 10 regions
- December—Final regional resource center opened (West Coast)
- December—PTTC wins Honorable Mention award in contest for Organizational Excellence by American Society of Association Executives (ASAE)
- December—RLO Directors meet with DOE Outreach Team Leaders (Washington, DC)

1997

- January—PTTC signs cooperative agreement with AAPG to conduct joint workshops
- February—RLO staff meet to coordinate training on E&P software donated by industry (Golden, CO)
- April—PTTC Chair Bob Nance gives presentation on industry needs at meeting of President’s Committee of Advisors on Science and Technology (Dallas)
- May—PTTC releases “Best of PTTC Workshops” report
- May—PTTC wins R&D award from National Energy Resources Organization
- July—Board adopts new policies and procedures for HQ and regions
- August—RLO Directors meet and ask HQ staff to convey their concerns to the M&B Committee about new policies and procedures (Dallas, TX)
- September—PTTC hosts tour of Los Alamos National Lab for IPAA Governors
- November—Board adopts “Producer Advisory Group Guidelines”
- November—First national conference- ETEC ’97 with IPAA and Cambridge Energy Research Associates (Houston, TX)
- December—PTTC national website named by ASAE as one of the nation’s Top 10 Information Clearinghouse websites

1998

- January—HQ establishes RLO-NET to improve communication with RLOs via Internet
- February—First marketing brainstorming session with Board/RLO/HQ representatives (Golden, CO)
- May—DOE awards new grant to PTTC extending to April 2003 (replaces BDM contract)
- July—Board adopts new Business Plan with marketing focus
- August—RLO Directors and HQ staff visit Sandia National Labs
- September—HQ releases new logo and updated image for stationery, publications, etc.
- October—PTTC’s first webcast of a workshop (West Coast)
- November—PTTC holds second national conference ETEC ’98 with IPAA (New Orleans)
- November—HQ releases “E&P Software Sampler” on CD-ROM

- December—Board launches Industry Crisis Action Plan, ratifies new mission statement and adopts “Guidelines for Professional and Ethical Conduct”

1999

- January—PTTC signs agreement with *World Oil* to publish case study digest
- February—PTTC begins extending RLO subcontracts to April 2003
- March—Board adopts “Conflict of Interest Policy” and elects officers (Leo Schrider elected as Chair and Clark Southmayd as Vice Chair)
- June—PTTC Chair Leo Schrider speaks at first DOE Oil & Gas Conference (Dallas, TX)
- July—Board meets in Washington, DC. Votes to add one RLO representative to Board
- August—HQ releases “Solutions from the Field” report and starts adding workshop summaries to website.
- September—Inaugural issue of “Petroleum Technology Digest” released as supplement of *World Oil*
- November—Deborah Rowell, PTTC’s founding Executive Director, announces her intent to resign in June.
- December—Executive Search Committee, chaired by Bob Nance, begins search for new Executive Director.

2000

- January—PTTC signs agreement with Hart Publications to provide a state-of-the-art technology summary in each issue of *PTTC Network News*.
- February—PTTC Chair Leo Schrider and HQ staff meet with DOE in Washington to discuss funding.
- March—PTTC Board and RLO Directors meet jointly in Kansas City
- April—West Coast region holds first PTTC event in Alaska.
- May—Second issue of semi-annual publication, “Petroleum Technology Digest” released with *World Oil*
- June—Don Duttlinger selected as next PTTC Executive Director (effective July 1, 2000)
- November—Board approves strategic relocation of PTTC HQ to Houston after 7 years in Washington
- December – Move of HQ Office to Houston completed within weeks

2001

- January—PTTC begins monthly column “Tech Connections” with *The American Oil & Gas Reporter*
- February—Begin implementing website enhancements focused on consistency and user friendliness
- March—Clark Southmayd of Oneok Resources Company is elected new Chairman and Jim Bruning named Vice Chair of PTTC National Board during meeting in Washington
- Summer/Fall—PTTC co-sponsors Maurer Technology’s “Optimized Horizontal Drilling” workshop series
- October—DOE and PTTC begin an eight-workshop Traveling Workshop series with DOE
- December – Move of HQ Office to Houston completed within weeks

2002

- January—DOE white paper documenting impact and outlining long-term vision completed.
- February—lessons learned from DOE/PTTC Traveling Workshop documented.
- March—Time frame of joint Board/RLO meeting changed to increase impact of Hill visits
- April—PTTC initiates Technology Alert service via broadcast Email
- July—HQ expands mailing list and increases exhibit schedule
- September—activity levels set new records

2003

- March—Board elects new leadership: James Bruning, Bruning Resources, LLC, Arkansas as Chairman; Brook Phifer, Nico Resources, LLC, Colorado, Vice Chairman
- March—Board Members/RLO Directors conduct Hill visits during critical decision-making period
- April—PTTC receives contract extension through September 2003
- July—Board completes strategic planning survey and defines further planning needs
- September—PTTC completes current contract, exceeding prior records for activity by significant levels

2004

- March—Board elects new leadership: Brook Phifer, Nico Resources, LLC, Colorado as Chairman; Brian Sims, Independent, Mississippi as Vice Chairman
- March—Board Members/RLO Directors conduct Hill visits during critical decision-making period
- June—PTTC presents “Impact/Metrics” analysis to Office of Management & Budget and DOE HQ
- July—Chairman Brook Phifer presents testimony before House Subcommittee
- September—Chairman Brook Phifer, Executive Director Don Duttlinger and selected RLO Directors meet with Office of Management & Budget and DOE HQ in Washington

2005

- January—Webmasters meeting in Houston, Texas
- March—Board elects new leadership: Brian Sims, Independent, Mississippi as Chairman; Gene Ames II, The Nordan Trust, Texas as Vice Chairman
- March—Board Members/RLO Directors conduct Hill visits during critical decision-making period
- June—PTTC submits “Oilfield Training” proposal to Department of Labor
- July—Summer Board meeting in Nashville, Tennessee
- September—Regions/PAGs plan FY06 activities
- December—Fall/Winter Board meeting; plans approved & Broadcasting Initiative

2006

- February—Conduct Hydraulic Fracturing Workshop, develop Distance Learning Module
- March—Board elects new leadership: Gene Ames III, The Nordan Trust, Texas as Chairman; Robert McDougall, Westland Energy, Inc., Wyoming as Vice Chairman
- July—Board conducts strategic planning session for transitioning to industry funding
- August—Complete series of Microhole Technology Integration Meetings for DOE

Appendix B

Petroleum Technology Transfer Council

Board of Directors

OFFICERS:

| | | | |
|------------------------|------------------|----------------------|-----------------|
| Chair | Gene Ames III | The Nordan Trust | San Antonio, TX |
| Vice Chair | Robert McDougall | Westland Energy Inc. | Cody, WY |
| Immed. Past Chair | Brian Sims | Independent | Madison, MS |
| Exec. Director & | Don Duttlinger | PTTC | Houston, TX |
| Sec/Treas (non-voting) | | | |

(Note: Officers serve 1-yr. terms that extend through the next annual meeting of the Board)

DIRECTORS

REPRESENTING:

REGIONS:

| | | | |
|---------------------|------------------|------------------------------|-------------------|
| Appalachian | Rick Goings | Dominion E&P, Inc. | Jane Lew, WV |
| Central Gulf | Joe Jacobs | Gas Masters of America, Inc. | Monroe, LA |
| Eastern Gulf | Karl Kaufmann | Valioso Petroleum Co. | Flowood, MS |
| Midwest | Richard Straeter | Continental Resources of IL | Mount Vernon, IL |
| North Midcontinent | Gary Reed | Arkan Petroleum., Inc. | Wichita, KS |
| Rocky Mountain | Robert McDougall | Westland Energy Inc. | Cody, WY |
| South Midcontinent | Fletcher Lewis | Fletcher Lewis Eng. | Oklahoma City, OK |
| Southwest | T. Greg Merrion | Merrion Oil & Gas Corp. | Farmington, NM |
| Texas | Allen Gilmer | Vecta Exploration, Ltd. | Austin, TX |
| West Coast | Chris Hall | Drilling & Production Co.. | Torrance, CA |
| Regional Lead Orgs. | Doug Patchen | NRCCE – WVU | Morgantown, WV |

ORGANIZATIONS:

| | | | |
|------------------------------------|----------------|------------------------------|--------------------|
| Indep. Petrol. Assoc. Of America | Allen Frizzell | Enrich Oil Corporation | Abilene, TX |
| Interstate Oil & Gas Compact Comm. | John Baza | Utah Dept. of Nat. Resources | Salt Lake City, UT |
| American Assoc. of Pet. Geologists | Eddie David | David Petroleum Corp. | Roswell, NM |
| Society of Explor. Geophysicists | Hugh Rowlett | ConocoPhillips | Houston, TX |
| Society of Petroleum Engineers | Ken Oglesby | IMPACT Technologies, LLC | Tulsa, OK |

INDUSTRY SECTORS:

| | | | |
|----------------|--------------|-------------------------------|-------------|
| Service Cos. | Mo Cordes | Schlumberger Oil Field Srvcs. | Houston, TX |
| Large E&P Cos. | Robert Lestz | Chevron | Houston, TX |

Alternate Directors

Representing:

| | | | |
|---------------------|--------------------|-----------------------------|------------------|
| Appalachian | Bernie Miller | Miller Energy Techn. LLC | Lexington, KY |
| Central Gulf | Bob Meredith | Vada Energy LLC | Port Allen, LA |
| Eastern Gulf | Bob Schneeflock | Paramount Petroleum | Ridgeland, MS |
| Midwest | Matt Stone | Barger Engineering | Evansville, IN |
| North Midcontinent | Vacant | | |
| Rocky Mountain | Bob Lamarre | Lamarre Geol. Enterprises | Denver, CO |
| South Midcontinent | Vacant | | |
| Southwest | Vacant | | |
| Texas | Vacant | | |
| West Coast | Vacant | | |
| Regional Lead Orgs. | Iraj Ershaghi | Univ. of So. California | Los Angeles, CA |
| IOGCC | Freed Steece | SD Dept of Env./Nat Res | Rapid City, SD |
| SEG | Robert Graebner | The Information Store | Houston, TX |
| SPE | Michael Gatens III | MGV Energy, Inc. | Calgary, AB, CAN |
| Service Cos. | Jay Haskell | Schlumberger Oilfield Svces | Houston, TX |
| Large E&P Cos. | Vacant | | |

Management & Budget (M&B) Committee

Position:

| | | |
|---|------------------|-----------------|
| M&B Committee Chair, and | | |
| Board Vice Chair | Robert McDougall | Cody, WY |
| Current Board Chair | Gene Ames III | San Antonio, TX |
| Immediate Past Board Chair | Brian Sims | Madison, MS |
| M&B Committee Member | Joe Jacobs | Monroe, LA |
| Executive Director (ex-officio, non-voting) | Don Duttlinger | Houston, TX |

Notes from the by-laws:

- The terms served by Alternate Directors are the same as for the Directors they represent.
- Officers do not have Alternates. Officers may succeed themselves.
- Members of the Nominating Committee and the Management & Budget Committee who are Officers have terms on these committees that are linked to their terms as Officers. Other committee members have terms that are concurrent with their Board membership.

Appendix C

Roster—PTTC Regional Lead Organizations

| | |
|--|--|
| Appalachian Dr. Douglas Patchen Program Director Appalachian Oil & Natural Gas Research Consortium West Virginia University P.O. Box 6064 Morgantown, WV 26506-6064 | Rocky Mountain Dr. Mary Carr Colorado School of Mines 13 th and Maple St. Golden, CO 80401-1887 |
| Central Gulf Mr. Robert H. Baumann Special Assistant to the Provost/Energy Programs Center for Energy Studies Louisiana State University One East Fraternity Circle Baton Rouge, LA 70803 | South Midcontinent Dr. Charles Mankin Director Oklahoma Geological Survey 100 East Boyd St., Rm. N131 Norman, OK 73019 |
| Eastern Gulf Dr. Ernest Mancini Professor of Geology University of Alabama Box 870338, 202 Bevill Bldg. Tuscaloosa, Alabama 35487 | Southwest Dr. Robert Lee Director Petroleum Recovery Research Center New Mexico Institute of Mining and Technology 801 Leroy Place - Campus Station Socorro, NM 87801 |
| Midwest Steve Gustison Petroleum Geologist Oil and Gas Section Illinois State Geological Survey 615 East Peabody Drive Champaign, Illinois 61820 | Texas Dr. Scott Tinker Director Bureau of Economic Geology The University of Texas at Austin University Station, Box X Austin, TX 78713-8924 |
| North Midcontinent Mr. Rodney Reynolds EOR Liaison Engineer Kansas University Energy Research Center 1930 Constant Avenue Lawrence, KS 66047 | West Coast Dr. Iraj Ershaghi Director, Petroleum Engineering Program University of Southern California HEDCO-316 University Park Los Angeles, CA 90089-1211 |