CANADIAN SOCIETY OF PETROLEUM GEOLOGISTS
1986 REPORT OF ACTIVITIES

1986 Executive Committee
Donald G. Cook, President
Clayton Riddell, Vice President
Gordon Williams, Past President
Glynn Wright, Secretary
W. R. (Bill) May, Treasurer
Barry Robbins, Business Manager
B. J. (Bev) Pfeffer, Director
F. G. (Rick) Young, Director
James Dixon, Senior Editor (ex-officio)

INTRODUCTION
(Donald G. Cook)

The Canadian Society of Petroleum Geologists has had another very active and productive year. This dynamic society comprises an amazing infrastructure of about 95 active committees dealing with various business activities, publications, conferences, other scientific programs, awards, social events, public service, and technical divisions, and ranging in size from one-person committees to multi-person convention committees. In addition there are about 10 liaison functions related to activities of other societies and agencies. This impressive array of committees and liaisons involves greater than 475 volunteer functions. The number of volunteer individuals is smaller because many individuals serve in a number of functions, but that number does not include the additional volunteers that serve as field trip guides, session chairmen at conventions, speakers, and various support activities on larger committees. For example, Bob Creed estimates that in addition to the primary group for the Special Fund Raising Committee there are over 25 additional unnamed volunteers.

Most committees operate semi-independently, with the executive being involved only to approve award winners, budgets, chairmanship changes etc. We are involved in creating new committees to undertake some new initiative, or in approving any major change in direction proposed by an existing committee. All committee activities are reported in the main body of this report. My comments in this introduction will be restricted to major concerns, and significant actions and initiatives taken by the Executive Committee itself, including approval of changes proposed by existing committees. Some of these have been successfully taken over by active committees and are reported in the main report, and consequently some duplication of mention is inevitable. A major concern for the society is a declining membership, which is no doubt directly related to the current downturn in the petroleum industry and the decline in personal well-being of many members as a result of restricted employment opportunities. Figure 1 portrays historical membership enrollment and shows a decline from 4077 members in 1985 to 4051 in 1986. A greater decrease is anticipated in 1987. The membership committee is considering approaches to improve our membership enrollment, particularly that of corporate members. This will have to be an important concern of future executives.

The most important actions of this executive pertained to: (a) financial considerations and the reversal of expenditure/revenue trends, (b) restructuring the executive committee in order to provide more continuity from one year to the next, (c) improved accounting procedures, (d) lease renewal and book inventory storage, (e) a new sales agreement with AAPG, (f) establishing future convention plans, (g) arranging for a group life insurance offering, (h) restructuring the annual meeting, (i) steps to assist unemployed geologists.

(a) Financial Considerations

Financial considerations were a major preoccupation of the 1986 Executive Committee. Projections made by the 1985 executive indicated that the society would deplete its reserves by about $130,000 during 1986, and moreover, that if expenditure/revenue trends were not reversed, that reserves could be exhausted by the end of 1987. The 1986 committee considered that reversing the trend
was its greatest responsibility. The most significant steps taken are elaborated below. Some had immediate effect; others will not have a full impact till next year.

The Student Industry Field Trip, costing greater than $30,000 was funded, for the first time, from the 50th Anniversary Fund. This step was regrettable because the fund is still in a tax holiday position and ideally income from within the fund would have been left to accumulate as in previous years. Nonetheless the fund, created primarily to finance the Student Industry Field Trip, is healthy and it would have been inappropriate to deplete society reserves by this amount.

An increase in membership dues from $40 to $50 was ratified. 76.2 percent of the voting membership. As it happens this was a narrow margin of support because 75 percent is required to ratify special resolutions. This had some effect this year due to early payment by some members, but will have its greatest effect next year. The increase unfortunately will be counterbalanced by a loss in membership related to the current downturn in the oil industry. In recognition of that downturn, dues were held at $40 for unemployed members.

Our newsletter, The Reservoir, was targeted to become self-sufficient. Bill Haskett accepted appointment as chairman of an Advertising Committee. Recommendations from him and Editor, Hans Speelman, for changes in advertising and mailing policies were approved by the executive. These changes and Bill Haskett's aggressive sales and innovative advertising ideas are reported elsewhere. Suffice it to say here, that substantial improvements in cost reduction and revenue increase were accomplished in 1986, and Bill is confident that the objective of self-sufficiency for the Reservoir will be exceeded for 1987.

The CSPC Bulletin was limited to 100 pages per issue. The Bulletin is the flagship of the society and this decision was not made easily. It represents a 20 percent reduction and will inevitably result in publication delays for individual papers. Permitting the Bulletin to grow should be a high priority for future executives when the society gets back to a more solid financial footing.

Plans for a membership directory were cancelled. When one is produced in the future we recommend that it be produced for sale rather than free distribution.

The executive approved a major new initiative, recommended by John Hogg's Publication Sales Committee, for retailing AAPG publications. Their plans are reported in more detail elsewhere. Revenues from these sales will affect the balance sheets of future executives rather than of this one.

In addition to the major significant steps outlined above, we attempted to impress on all committee chairmen, and the membership at large, the need for restraint on the one hand and for profits on the other. Response to that request is best exemplified by Herb Sullivan's 1986 Convention Committee which achieved a profit of over $50,000 in very tough economic times. The degree to which the entire society met the fiscal challenge is largely reflected in the Treasurer's statements which are part of this report. At fiscal year-end the books show a loss of $616. This essentially break-even position is due in part to the fact that costs of two publications, (Memoir 11, Shelf Sands and Sandstones; and The Geology of the Calgary Area) had not been billed to the society and will be deferred to next year's books. Nonetheless this is an impressive accomplishment when one considers that we anticipated a $130,000 loss at the beginning of the term. A more detailed discussion of the society's finances is presented in Bill May's Treasurer's report elsewhere in this report.

The society owes a note of gratitude to the previous executive under Gordon Williams as president. Their 5-year forward projections identified the alarming cash-flow pattern and forewarned us to the danger of bankruptcy. We have followed with our own 5-year projection (see Fig. 2). The society is still facing some financial problems, and we are projecting losses for 1987 and 1988 but a positive balance for the following 3 years. That projected recovery includes an assumed membership increase after 1987.

(b) Organization Changes
Each year the Executive Committee deals with commitments made by previous executives and makes a set of new commitments for future executives. Moreover, the only continuity from one year to the next lay with the president who had one previous year and the past president who had 2 previous years of experience on the Executive Committee. All other positions were newly elected annually. It has long been recognized that more continuity from one year to the next was desirable, and in 1985 a task force to recommend changes to the society's management was established. It was a commitment of the 1985 executive to receive recommendations from the task force and to act on them. As a consequence, special resolutions were presented to the membership and were approved by greater than 95 percent of voters. The two positions of Director have been changed to those of Director/Assistant-Treasurer and Director/Assistant-Business-Manager. These will share the work load of the Treasurer and Business Manager, and normally will be sole nominees for those positions in the following year thus assuring
continuity. A more detailed description of the task force and its results appears elsewhere in this report.

(c) Accounting Improvement

Major changes in accounting and computer recording were accomplished by Treasurer Bill May. These will permit the society to track the profit or loss on individual items to a far greater degree than in the past. These changes are discussed in more detail in Bill's Treasurer's report.

(d) Lease Renewal

Business Manager Barry Robbins, after some hard bargaining, has established a 5 year renewal of the office lease at lower rates than we were previously paying. More importantly, he has negotiated storage space in the basement of the same building, adequate to store our entire book inventory plus an inventory of AAPG books. The lease terms are better than for our previous storage, and office staff will have direct control over inventory and will have far more convenient access. The storage lease is for 5 years and renewable for an additional 5 years.

(e) Sale of AAPG Publications

The executive approved a proposal from the Publication Sales Committee, under John Hogg, that CSPG carry a full inventory of AAPG books. This move will assure prompt delivery to our members and others, and will provide significant revenue to the society. Details appear elsewhere under Publication Sales Committee.

(f) Future Conventions

Our 1988 annual convention will be held jointly with GAC and MAC in St. John's, Newfoundland. We recognized that this convention may not serve the needs of the bulk of our membership in Calgary, and accordingly we are planning an extended core conference for the fall of 1988 which will integrate core displays, oral presentations, and field trips. Chairmen David James and Dale Leckie are already well advanced in their planning (see report elsewhere).

Our annual convention for 1989 will be held jointly with CSEG, and will be co-chaired by Doug Gardiner (CSPG) and Cec Keeping (CSEG).

(g) Group Life Insurance

We were presented with an opportunity to have insurance sold to our members through a group offering. The proposal was examined by an ad hoc committee chaired by Director Bev Pfeffer. It appears that rates to be offered will be very competitive, particularly for non-smokers. The Executive Committee endorses the offer but any participating member must accept responsibility for making his/her own comparisons, and for any decision to purchase.

(h) Restructuring the Annual Meeting

The Annual Meeting has had a declining attendance in recent years, probably because it was too long and drawn out. This year it will be split into 2 separate functions, an Awards Dinner and Dance, and a Business Meeting. Details appear elsewhere under the heading Annual Meeting in the section Business Committees.

(i) Our Unemployed Members and Decreasing Membership

A concern for the plight of members caught in layoffs in the oil industry has been expressed through the provision of reduced fees in some areas. The principal of reduced fees was first applied by Herb Sullivan's convention committee. Their lead has been followed by the Continuing Education Committee, and the Executive Committee in its annual fees structures. A register of resumes provided by unemployed members is maintained at the CSPG office. Prospective employers may peruse the file at the office, but for copies of resumes must contact individuals in whom they are interested.

Summary

In summary, it has been a busy and a challenging year. Our society is very much alive and well, in spite of some cash flow problems, which are still with us but which appear to be under control. The strength of the society still rests with its keen and active membership. Many activities are conceived by interested members and are carried out by them. Others originate with the executive, and for those, volunteers are usually readily found. Some, involving very large time-commitments require employer's approval and are more difficult to fill. With that reservation, I can state that in spite of the economic buffeting that petroleum geologists have taken in the past year, I see no diminishing of the enthusiastic volunteer response to fill vacancies in the amazing array of committees that constitute the total activity of this society.

Fig 1 ASPG/CSPG membership growth from 1927 to 1986 and projected for 1987. No data for years without bars
TREASURER'S REPORT
(W.R. (Bill) May)

This report covers the financial year ending November 30, 1986 and includes the society's audited financial statements as prepared by Deloitte, Haskins and Sells, dated January 9, 1987.

1986 will be remembered as a year when financial concerns were paramount in the minds of all members of the oil patch, including the CSPG executive. This was a pivotal year in determining the long-term viability of this society.

The CSPG is first and foremost a technical society. Technically we are strong. Financially we are in trouble. In the fiscal year 1985 the CSPG lost $132,628. The auditors last year stated: "This resulted in a year-end cash balance of $235,039. If this trend were to continue, it would leave the society with no excess funds by 1987". When this executive took office in February 1986 the future looked bleak. The outgoing executive had just completed a five year forecast which showed that the society would lose about $130,000 in 1986 and that the CSPG could be bankrupt by the summer of 1987. The challenge for the incoming executive was to bring financial responsibility into the operations of the society. This was not a pleasant task, nor was it the job we anticipated when we ran for office.

In 1986 we came a long way to solving the financial problems of the society. This was accomplished by a systematic point-by-point financial review of every aspect of the CSPG's operations. The result was that we lost only $616 on revenues of $461,822 and expenses of $462,438. However, next year will probably see a larger deficit. A number of publications are to be published next year at a total expected cost of $113,200. To compound the problem, 1987 membership revenues probably will be down substantially.

In 1986 revenues from two of our three principal sources were down compared to 1985; memberships by $27,000 and CSPG publication sales by $33,000. Revenues from our third principal source, conferences and conventions, were up by $25,000 thanks to the tremendous efforts of Herb Sullivan's convention committee. Advertising revenues increased in 1986 thanks to the very successful efforts of Bill Haskett's new Advertising Committee. Revenues from technical programs appear to have increased by $35,400 in 1986, but this figure includes $30,000 transferred from the 50th Anniversary Trust Fund to cover the expenses of the Student Industry Field Trip. If $30,000 is deducted from the total revenues for 1986 then total revenues only increased by $10,312 over 1985. That in itself is quite an accomplishment, considering the substantial loss in revenues the CSPG suffered this year in its membership and its sales of CSPG publications categories.

In 1986 our disbursements decreased by $91,700 to $462,438. This reduction is principally a result of an $81,702 reduction in costs of CSPG publications, and a $16,115 reduction in costs of publishing the bulletin. The $81,702 reduction in CSPG publications is the result of the combination of:

- a reduction in the size of the print run from 2000 to 1000. This should reduce the shelf life of an average publication to less than 5 years.
- technical delays in printing Memoir no 11 and Special Publication "The Geology of the Calgary Area" which will result in those bills being paid in the 1987 fiscal year.

The $16,115 reduction in bulletin costs results from:

- renegotiating the printing contract.
- putting a page limit on the size of each volume.

There were many changes in both Technical Programs and Meetings that produced numerous small reductions.

A major increase in office expenses of $12,840 resulted from certain one-time items, such as:

- $6300 to upgrade the computer, in order to bring the society's membership files in-house. This should result in a $5000-$6000 savings annually.
- a $1500 increase in the cost of the 1985 audit over 1984.
- an increase in the demand by committees for CSPG office services and supplies, probably as a result of the downturn in the industry.

Increases in other expenses that will be ongoing are:
a dramatic increase in liability insurance
premiums.

- minor increases in staff salaries.

Overall we have made some solid gains in bringing the financial affairs of the society under
control, but some words of caution are necessary.
The society's publishing schedule was not fulfilled in
1986, so expenditures on publications will increase
respectively in 1987. Also, membership
renewals seem to be lagging badly, and an
appreciable loss in revenue is anticipated.

Finally, some major changes were initiated this
year in order to better track and record our financial
affairs. This is a long-term project, necessitated by
the fact that we could not relate the revenues of a
specific project to its expenses in order to determine
its resultant profit or loss. Data were grouped and
totalled and the individual information was lost.

Also, items were grouped differently on the revenue
side of the ledger than they were on the expense side,
making comparisons impossible. The desire to track
items individually necessitated the computerization
of our publications, membership, and accounting
procedures. The next step is to implement a new
chart of accounts with only an "R" or an "E" to
differentiate a revenue item from an expense item.
Once this is accomplished the executive should be
able to more effectively manage the society's
financial matters.

This year has been highly illuminating. It has
been an honour for me to serve with so many
members whose unselfish efforts, co-operation, and
time, dedicated to make this society such a success,
have been an inspiration to me. Thank you to all
who have helped so much and a special thanks to the
office staff.

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CANADIAN SOCIETY OF PETROLEUM GEOLOGISTS

GENERAL FUND

STATEMENT OF RECEIPTS AND DISBURSEMENTS

YEAR ENDED NOVEMBER 30, 1986

<table>
<thead>
<tr>
<th>RECEIPTS</th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership fees</td>
<td>$167,130</td>
<td>$194,206</td>
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<tr>
<td>Publications - Schedule 1</td>
<td>136,190</td>
<td>132,876</td>
</tr>
<tr>
<td>Technical programs - Schedule 2</td>
<td>82,500</td>
<td>47,063</td>
</tr>
<tr>
<td>Conferences and conventions - Schedule 3</td>
<td>54,600</td>
<td>29,160</td>
</tr>
<tr>
<td>Interest income</td>
<td>20,491</td>
<td>18,205</td>
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<tr>
<td>Donations</td>
<td>611</td>
<td>-</td>
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<tr>
<td>Divisions</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td><strong>461,822</strong></td>
<td><strong>421,510</strong></td>
</tr>
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<table>
<thead>
<tr>
<th>DISBURSEMENTS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing and publications - Schedule 1</td>
<td>240,270</td>
<td>334,395</td>
</tr>
<tr>
<td>Technical programs - Schedule 2</td>
<td>57,944</td>
<td>66,279</td>
</tr>
<tr>
<td>Conferences and conventions - Schedule 3</td>
<td>15,200</td>
<td>14,066</td>
</tr>
<tr>
<td>Office and administration - Schedule 4</td>
<td>124,650</td>
<td>111,810</td>
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<tr>
<td>Meetings - Schedule 5</td>
<td>15,353</td>
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<tr>
<td>Awards</td>
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<tr>
<td>Donations</td>
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<td>2,500</td>
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<tr>
<td></td>
<td><strong>462,438</strong></td>
<td><strong>554,138</strong></td>
</tr>
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</table>

EXCESS OF DISBURSEMENTS OVER RECEIPTS

616 132,628

Funds on Hand, Beginning of Year

235,039 367,667

Funds on Hand, End of Year (Note 2)

$234,423 $235,039
1. SIGNIFICANT ACCOUNTING POLICIES

The statement of receipts and disbursements has been prepared in accordance with the following policies:

**Basis of accounting**

The Society uses the cash basis of accounting.

**Equipment**

Equipment purchases are charged to disbursements in the year of acquisition.

**Inventory**

Publication inventory purchases are charged to disbursements in the year of acquisition.

The inventory of publications on hand as at November 30, 1986, valued at the lower of cost and net realizable value, amounted to $289,815 (1985 - $259,276).

2. FUNDS ON HAND

Funds on hand consist of the following:

<table>
<thead>
<tr>
<th></th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$101,199</td>
<td>$59,369</td>
</tr>
<tr>
<td>Term deposits</td>
<td>133,224</td>
<td>175,670</td>
</tr>
</tbody>
</table>

$234,423 $235,039

3. LEASE COMMITMENTS

The minimum lease payments under the operating lease for the Society's administrative office, which expires March 31, 1992, are $14,417 for 1987 and $8,375 annually thereafter.

4. COMPARATIVE FIGURES

Certain of the prior year's comparative figures have been reclassified to conform to the current year's presentation.
## CANADIAN SOCIETY OF PETROLEUM GEOLOGISTS

### GENERAL FUND

#### YEAR ENDED NOVEMBER 30, 1986

### SCHEDULE 1

#### SCHEDULE OF PUBLICATIONS RECEIPTS AND DISBURSEMENTS

<table>
<thead>
<tr>
<th></th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECEIPTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publications (memoirs, calendars, etc.)</td>
<td>$75,080</td>
<td>$108,729</td>
</tr>
<tr>
<td>Bulletin publication</td>
<td>32,880</td>
<td>12,975</td>
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<tr>
<td>Reservoir newsletter</td>
<td>26,218</td>
<td>11,172</td>
</tr>
<tr>
<td>Merchandise</td>
<td>2,012</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$136,190</td>
<td>$132,876</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>DISBURSEMENTS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Publications (memoirs, calendars, etc.)</td>
<td>$78,960</td>
<td>$160,662</td>
</tr>
<tr>
<td>Bulletin publication</td>
<td>108,423</td>
<td>124,538</td>
</tr>
<tr>
<td>Reservoir newsletter</td>
<td>48,842</td>
<td>44,391</td>
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<tr>
<td>Merchandise</td>
<td>4,045</td>
<td>4,804</td>
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<tr>
<td><strong>Total</strong></td>
<td>$240,270</td>
<td>$334,395</td>
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### SCHEDULE 2

#### SCHEDULE OF TECHNICAL PROGRAMS RECEIPTS AND DISBURSEMENTS

<table>
<thead>
<tr>
<th></th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECEIPTS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical luncheons</td>
<td>$20,388</td>
<td>$20,000</td>
</tr>
<tr>
<td>Sedimentological display</td>
<td>6,000</td>
<td>11,950</td>
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<tr>
<td>Honorary address</td>
<td>2,112</td>
<td>9,889</td>
</tr>
<tr>
<td>50th Anniversary Fund</td>
<td>30,000</td>
<td>-</td>
</tr>
<tr>
<td>Student industry field trip</td>
<td>-</td>
<td>5,224</td>
</tr>
<tr>
<td>Continuing education</td>
<td>22,000</td>
<td>-</td>
</tr>
<tr>
<td>Special fund raising - art auction</td>
<td>2,000</td>
<td>-</td>
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<tr>
<td><strong>Total</strong></td>
<td>$82,500</td>
<td>$47,063</td>
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<table>
<thead>
<tr>
<th>DISBURSEMENTS</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Student industry field trips</td>
<td>$32,169</td>
<td>$30,506</td>
</tr>
<tr>
<td>Sedimentological display</td>
<td>18,190</td>
<td>14,674</td>
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<tr>
<td>Honorary address</td>
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<td>6,987</td>
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<tr>
<td>Technical luncheons</td>
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<td>Speakers' bureau</td>
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<td>3,091</td>
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<tr>
<td>Society affiliations</td>
<td>1,803</td>
<td>6,653</td>
</tr>
<tr>
<td>50th anniversary trust fund</td>
<td>32</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$57,944</td>
<td>$66,279</td>
</tr>
</tbody>
</table>
# Schedule 3

## Schedule of Conferences and Conventions Receipts and Disbursements

<table>
<thead>
<tr>
<th></th>
<th>1986</th>
<th>1985</th>
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</thead>
<tbody>
<tr>
<td><strong>Receipts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSPG symposia and conferences</td>
<td>$ -</td>
<td>$13,990</td>
</tr>
<tr>
<td>CSPG annual conventions</td>
<td>53,930</td>
<td>15,056</td>
</tr>
<tr>
<td>Annual core conference</td>
<td>290</td>
<td>114</td>
</tr>
<tr>
<td>Geomath symposia</td>
<td>380</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$54,600</td>
<td>$29,160</td>
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<table>
<thead>
<tr>
<th></th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disbursements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Devonian Symposium - 1987</td>
<td>$5,000</td>
<td>$7,750</td>
</tr>
<tr>
<td>Canadian Reef Inventory Project - 1986</td>
<td>-</td>
<td>3,000</td>
</tr>
<tr>
<td>Atlantic Geological Society - Basins of Eastern Canada Conference 1986</td>
<td>7,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Annual geomath</td>
<td>1,200</td>
<td>316</td>
</tr>
<tr>
<td>Annual core conference</td>
<td>2,000</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$15,200</td>
<td>$14,066</td>
</tr>
</tbody>
</table>
# Schedule 4

## Schedule of Office and Administration Disbursements

<table>
<thead>
<tr>
<th>Disbursements</th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office services</td>
<td>$96,964</td>
<td>$80,905</td>
</tr>
<tr>
<td>Printing, stationery and postage</td>
<td>15,588</td>
<td>23,256</td>
</tr>
<tr>
<td>Professional fees</td>
<td>7,121</td>
<td>5,726</td>
</tr>
<tr>
<td>Other</td>
<td>4,977</td>
<td>1,923</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$124,650</strong></td>
<td><strong>$111,810</strong></td>
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</table>

## Schedule 5

## Schedule of Meetings Disbursements

<table>
<thead>
<tr>
<th>Disbursements</th>
<th>1986</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Liaison Committee</td>
<td>$5,949</td>
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<tr>
<td>Annual meeting</td>
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<td>4,799</td>
</tr>
<tr>
<td>Executive expenses</td>
<td>1,570</td>
<td>1,507</td>
</tr>
<tr>
<td>Past president's dinner</td>
<td>856</td>
<td>931</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$15,353</strong></td>
<td><strong>$16,179</strong></td>
</tr>
</tbody>
</table>
To the Members of
Canadian Society of Petroleum Geologists:

We have examined the General Fund statement of receipts and disbursements of the Canadian Society of Petroleum Geologists for the year ended November 30, 1986. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances, except as explained in the following paragraph.

In common with many not-for-profit organizations, the General Fund of the Society derives part of its revenue from memberships and other activities and programs which are not susceptible to complete audit verification. Accordingly, our verification of revenue was limited to accounting for the amounts recorded in the records of the Society.

In our opinion, except for the effect of adjustments, if any, which we might have determined to be necessary had we been able to extend our examination of revenue from memberships and other activities and programs as described in the preceding paragraph, this financial statement presents fairly the receipts and disbursements of the General Fund of the Society for the year ended November 30, 1986 in accordance with the accounting principles described in Note 1 on a basis consistent with that of the preceding year.

January 9, 1987
AWARDS

HONORARY MEMBERSHIP (Peter E. Putnam, Chairman; N.J. McMillan)

Honorary membership in the CSGP is awarded for long-standing service to the society and/or outstanding scientific contributions to sedimentary and petroleum geology. Two nominees were approved for 1986. They are Michael E. Hriskeyevich and Arne R. Nielsen.

Dr. Michael Hriskeyevich was selected for honorary membership for his significant long-time volunteer contributions to the society and for his activities as spokesman for the CSGP at national and international levels. He served as President (1969) and Past-President (1970). He has chaired several committees, including the one dealing with honorary membership (1980-83), and has been an active spokesman for the society in national (Canadian Geoscience Council, 1985), and international forums (World Petroleum Congress, CSGP Representative, 1977 to present). Dr. Hriskeyevich has authored several scientific works, including some of the earliest material which dealt with the prolific discovery at Rainbow.

Dr. Hriskeyevich recently (September 1983) retired from Canterra Energy Ltd., but maintains a very active commitment to the CSGP. He currently represents the society on the Canadian National Committee of the World Petroleum Congress, and has recently accepted the responsibility of General Manager of the Second International Devonian Symposium Committee.

Mr. Arne Nielsen was chosen for honorary membership in recognition of his career as an oil finder, author, executive, society benefactor and volunteer, and spokesman for the Canadian oil industry. He is one of Canada’s most distinguished petroleum geologists. He is currently Chairman and Chief Executive Officer of Mobil Oil Canada Ltd. He was the first Canadian to become President of Mobil Oil Canada. He was a two-time Chairman of the Canadian Petroleum Association and is currently serving on the Executive Committee and Board of Governors of the CPA. He is a director of several prominent Canadian firms, and he has been involved with many educational and charitable organizations. As a geologist, Mr. Nielsen is known primarily as being the discoverer of the Pembina Oil Field, which is Canada’s largest. His early publications on the field helped set up the framework which explorers used in subsequent Cardium discoveries.

Arne Nielsen has held significant roles in some of the society’s most important committees. He has served as a Trustee for the 50th Anniversary Fund Committee, and was instrumental in raising funds to support both the 1982 joint CSGP-AAPG Convention, and the 1983 CSGP Convention on the “Mesozoic of Middle North America”. In the Memoir that was the outgrowth of the latter conference, he co-authored, with Jack Porter, an article which dealt with the significance of the Pembina Field in retrospect.

R.J.W. DOUGLAS MEDAL (D.L. Barss, Chairman; Hugh Gabrielse, Hank Williams)

The R.J.W. Douglas Medal is awarded annually for outstanding contributions to the understanding of sedimentary geology in Canada, especially in the fields of regional tectonics, petroleum geology and structural geology. Hans P. Trettin, was selected as the 1986 recipient of the Douglas Medal.

Hans Trettin has spent most of his career with the Geological Survey of Canada. His achievements in geology are very wide-ranging both geographically and geologically. He has worked in British Columbia, the Yukon and the Canadian Arctic Islands and his studies include regional mapping, stratigraphy, clastic and carbonate sedimentology, petroleum evaluation, structural analysis, and igneous and metamorphic petrology. All of these diverse subjects have been combined into imaginative, regional syntheses.

Hans’ main contributions to the geology of Canada have been related to the Lower Paleozoic geology of the Canadian Arctic Islands. Hans is responsible for the recognition and documentation of two major tectonic provinces in the Franklinian Geosyncline: an exotic terrane, named Pearya, in the far north, and a deep water trough, to the south. Hans has worked on the adjacent carbonate margin and the broad shelf on the cratonic margin of North America. Overall Hans’ work has produced a stratigraphic-structural framework and geological history, for one of the three Phanerozoic geosynclines in Canada, that integrates deposition with deformation, metamorphism, and plutonism, an outstanding achievement rarely equaled in Canadian geology.

Besides his monumental work on the Lower Paleozoic of the Arctic Islands, Hans has also done a definitive study of the Marie Bay Tar Sands of Melville Island, and has contributed to an understanding of structures involved in the Fraser River Fault Zone in British Columbia.

MEDAL OF MERIT (Margot McMeekan, Chairman; Jim Dietrich, John Hopkins, Judy Lnten, Dave Milner)

The Medal of Merit is awarded annually for the best paper published on a subject related to the petroleum geology of Canada. Following the new terms of reference for the committee all Canadian
journals, and AAPG, federal, and provincial government publications were searched for eligible papers to obtain a short list of 13 papers which were then reviewed in detail.

The winning paper was “Paleogeography of the Lower Cretaceous Mannville Group of Western Canada” by Paul C. Jackson, published in AAPG Memoir 38, p. 49-78. Peter D. Flach received an honourable mention for Alberta Research Council Bulletin No. 46 “Oil Sands Geology - Athabasca Deposit North”.

PRESIDENT’S AWARD (Don Cook, Chairman)

Since 1978, the Executive has conferred between one and three Special Service Awards each year, to individuals or organizations for outstanding contributions to the society. This award was renamed the President’s Award last year, to better reflect its position as the highest service award of the society. For 1986 Herbert Sullivan was selected to receive the President’s Award for his activities as General Chairman of the 1986 annual convention “Canada’s Hydrocarbon Reserves for the 21st Century”. He organized a technically and financially successful convention, which took place in a year of recession and layoffs in the oil industry. This chairmanship involved activities spread over 2 years. Details of the convention organization and activities are described elsewhere in this report.

LINK AWARD (Ted Watchuk, Chairman: Geoff Burrowes, Jon Dudley, Fred Gallagher, Bruce Thornhill, Ian Halladay, Ralph Melin, Greg Jones, Murray Durham, Bart Scott, Dave Taylor, Alan Slater, Nigel Watts, Pat Morris, Gerald Wendland)

The Link Award is given for the best talk given by a member of the society at a CSPG Technical Luncheon. Talks are judged on the basis of quality of presentation as well as technical content. Twelve luncheon talks qualified during 1986, and each was evaluated, on average, by 10 members of the selection committee. The committee members are to be congratulated for their conscientious work.

Frank Stoakes and Steve Creaney were selected as the 1986 Link Award winners for their June 9th talk entitled, "Duvernay Source Rock Deposition: Exploration Implications of Maturation and Migration to Leduc Reservoirs of Alberta".

Ted Watchuk is stepping down as chairman and will be replaced by Ian Halladay.

TRACKS AWARDS (Gordon Williams, Chairman, Bev Pfeffer, Rick Young)

Tracks awards are presented to members or friends of the CSPG who have made outstanding contributions to the society through committee or other work. They “have made tracks” and set examples for others to follow.

The following people were given Tracks Awards in 1986:

Brad Barrie - for initiating the concept of a travelling sedimentology display, and chairing the committee that produced the first display, "The Cretaceous Oil Sands of Canada" Bob Creed - for initiating and organizing the first CSPG Art Event, and chairing the Special Fund-Raising Committee, 1985-86 George Eynon - for his work as Vice-Chairman and Technical Program Director of the 1986 Annual Convention, "Reserves Canada 21" Peter Haines - for his work as Chairman of the Special Education Advisory Committee, 1984-85 Brad Hayes - for his work as Chairman of the Technical Luncheon Committee 1984-86 John Maher - for initiating the idea of a memorial plaque commemorating John A. Allan at Nakiska on Mount Allan, and for carrying the project through to completion Graham Williams - for his work as Editor of Lexicons of Canadian Stratigraphy - Volume 6, Atlantic Canada, and for service as Chairman and member of the National Liaison Committee from 1982-86.

SERVICE AWARDS (Gordon Williams, Chairman, Bev Pfeffer, Rick Young)

Service Awards are given to members or friends of the CSPG who have contributed to the welfare of the society through committee or other volunteer work. Service Awards were made to the following people in 1986:

Nelly Koziel - secretarial work, Lexicons of Canadian Stratigraphy - Volume 6, Atlantic Canada
George McAuley - Chairman, Medal of Merit Committee, 1985
Mike Marchand - Chairman, Geochauauqua, 1986
Nick Meijer Drees - Chairman, 1986 Core Conference
Michael Morrison - Chairman, Structural Division, 1985
Pete Savage - Chairman, 1986 Art Auction
Ed Schultz - Chairman, Stratigraphic Nomenclature Committee, 1978-86
Clint Tippett - Chairman, Calendar Committee, 1986
Ouida Touche - Consultant, Special Fund Raising Committee Art Event, 1985-86
Ted Watchuk - Chairman, Link Award Committee, 1985.

GRADUATE STUDENT THESIS AWARDS
(Stephen Greer, Chairman; Murray Coppold, Mike Morrison, Paul Gunther, Gordon Tebbutt, Les Eidiuk, Bryan Ireland, Maureen Gallagher, Steve Halabara, Lisa Griffith, David James, Fed Krause, Dave Russell, Jeff Reid)

This committee annually evaluates submitted M.Sc. and Ph.D. theses, and determines which have made the most significant contribution to Canadian sedimentary geology in each degree category. The award consists of $300 worth of CSPG publications and a framed certificate.

In 1986, nine Ph.D. and twenty-seven M.Sc. theses were evaluated by the committee.

The winner of the Ph.D. Thesis Award was Nancy Chow (Memorial University) for her thesis "Sedimentology and Diagenesis of Middle and Upper Cambrian Platform Carbonates and Silicilastics, Port au Port Peninsula, Western Newfoundland".

The winner of the M.Sc. Thesis Award was Frances Haidl (University of Regina) for her thesis, "Geology and Fluid Distribution in the Lower Cretaceous Mannville Group, Celtic-Westhazel Area, Saskatchewan". Don Keith (McMaster University) received an honorable mention for his thesis "Sedimentology of the Cardium Formation (Upper Cretaceous) Willesden Green Field, Alberta".

The Thesis Award Committee operates between September and December of each year. Participation provides the members with an opportunity to keep up to date with current university research and to have the pleasure of reading theses of considerable academic excellence that are a contribution to geological science.

New members are always welcome; anyone interested should contact the chairman for further details.

REGIONAL GRADUATE SCHOLARSHIPS
(R.O. Potter, Chairman, K.M. Fiess)

The CSPG awards three scholarships annually to promote graduate study and research in fields of geology having application to the petroleum industry. A scholarship of $1000 is awarded in each of the three regions of Canada (Atlantic Provinces, Ontario/Quebec, and western Canada).

The winners for 1986 are:
Atlantic Provinces - No applicants
Ontario/Quebec - Daniel Lebel (McGill University)
Western Canada - Catherine A. Connolly (University of Alberta)

Bob Potter is stepping down as chairman of this committee and will be replaced by Kathy Fiess in 1987.

MARINE GEOSCIENCE GRADUATE SCHOLARSHIP (L. Iluch, Chairman; R. Johnson)

The CSPG awards one scholarship annually to promote advanced education and research in the field of marine geoscience. The scholarship, which was first awarded in 1984, has a value of $1000. It was established by the Society to recognize the potential of marine geoscience as an important and distinct field in petroleum exploration and exploitation. Preference is given to research topics in the areas of coastal and shelf sedimentation, marine geotechnology, marine geochemistry, and offshore basin tectonics and sedimentology.

No applications were received for 1986. The scholarship will be offered again in 1987 and submissions from any Canadian university can be made through the Departments of Geology, Oceanography and Graduate Studies.

JOHN B. WEBB MEMORIAL TROPHY AND CSPG TROPHY (Keith Bottriell, Chairman)

The John B. Webb Memorial trophy is awarded annually for the best student paper presented at the Western Inter-University Geological Conference. The 1986 conference was hosted by the University of Saskatchewan, Saskatoon, in January.

The CSPG trophy is awarded annually for the best student paper presented at the Atlantic Inter-University Geological Conference, which, in 1986 was hosted by Memorial University, St. John's, Newfoundland, in October.

Each winner receives $100 in CSPG publications and a miniature trophy, and has his or her name engraved on the large trophy that resides for one year at the university hosting the conference. The
STANLEY E. SLIPPER UNDERGRADUATE STUDENT AWARDS COMMITTEE (Valerie Edwards, Chairman)

The CSPG undergraduate student award, known as the Stanley E. Slipper Award, is intended to encourage excellence in petroleum geology or closely related fields. The award is presented to one undergraduate student from each Canadian university who, in the opinion of his/her professors, has demonstrated outstanding competence in petroleum geology or the related courses of stratigraphy, sedimentology, paleontology, or structural geology. Each student receives a framed, engraved certificate and a one-year membership in the society.

The 1985-86 Stanley E. Slipper Awards went to the following students:

Acadia: Gareth Howells
Alberta: Janine Marie MacDonald
Brandon: Clark Logan
Brock: Ken Cook
Calgary: Charly Du Toit
Carleton: Paul MacRobbie
Concordia: Laurence Gaborit
Dalhousie: Michael David Powell
Guelph: Bruce Kjarsgaard
Manitoba: Douglas Bell
McGill: Gabriela Klein
McMaster: Steven Van Sickke
Memorial: Catherine Gale Troke
Mt. Allison: Catharine Goddard
New Brunswick, Fredericton: Stephen Marston
New Brunswick, St. John: Mary T. Larsen
Ottawa: Paul Fejer
Quebec: Hortense Cote
Queen's: Susan L. Riddell
Regina: Gregg Lindsay Perris
Saskatchewan, Kent Windsor
St. Francis Xavier: William Alexander Sear
St. Mary's: John Victor Milne
Toronto: Stephen Pacitti
Western Ontario: Keith G. Lesarge
Windsor: K. Marentette

NATIONAL YOUTH SCIENCE FAIR AWARDS (K. Scales, Chairman)

The National Youth Science Foundation held its 25th Annual Canada Wide Science Fair in Calgary in May 1986. The society supported the fair by providing two prizes.

A $300 prize for the Gold Medal for Physical Sciences (Intermediate Level) was presented by President Don Cook. The gold medal was won by Curtis Keith of Dartmouth for his project "Horn Corals - What Can They Tell Us?"

The society provided a $200 prize for Honourable Mention (for Physical Sciences) on an Energy-Related Project. This prize was won by Doyle Burkholder for "The Movement of High Voltage Dielectrics".

Judges were recruited from the CSPG membership for both the Canada-wide Science Fair, and the Calgary Science Fair.

This committee will be merged with the Education Committee and Petroleum Resources Communication Foundation Liaison as the Public Affairs Committee under the chairmanship of Kathy Scales.

PUBLICATIONS COMMITTEE (James Dixon, Chairman)

Jim Dixon as Senior Editor for the society is an ex-officio member of the Executive Committee. He co-ordinates all publication activities, providing advice and guidance to editors of CSPG publications, obtaining price estimates for planned publications, and makes recommendations to the executive regarding publication matters including pricing.

He serves as CSPG executive liaison to the GAC/CSPG Paleontological Monograph Committee.


1986 continued the trend set in 1985 of a great increase in the number of manuscripts submitted and accepted for publication. This increase in manuscripts accepted has had two effects: the 1986 Bulletin volume is 50 pages longer than the 1985 volume, and the delay in publication of accepted manuscripts has increased from a few months to
eight or nine months. In part, the publication delay has also increased with the need for a page per issue limitation instituted due to falling society revenues and increasing publication costs. Continuing efforts are directed at reducing publication and distribution costs of the bulletin, with the expectation that further publication delays will be reduced.

In 1986, a total of 24 geological papers, three geological notes, and 29 detailed and annotated book reviews were published. This record publication could not have been achieved without the voluntary assistance of many associate editors, reviewers and translators. Our sincere thanks and appreciation is extended to all who assisted in the publication efforts of the 1986 volume.

RESERVOIR (Haas Speelman, Editor; D.A.W. Lehto, Assistant Editor; William J. Haskett, Advertising Chairman)

The year started with a change in the editorial staff of RESERVOIR. After six years of involvement Rory Hankel stepped down as Editor. Hans Speelman, Assistant Editor since September 1984, and Doug Lehto took control. The newly created Advertising Sales Committee, headed by William Haskett, became involved with RESERVOIR advertising during the course of the year.

The format and content of RESERVOIR from previous years was largely maintained. Abstracts for the Technical Luncheon Program received prominent coverage. Biographies of the Luncheon speakers were added, starting with the September issue. Members of the CSPG Executive provided a monthly column of commentary on the direction of the society and on new initiatives. A gratifying number of "Letters to the Editors" were received, especially in the latter part of the year. Topics discussed included accreditation, British Columbia core storage, the role of technologists and technicians in the CSPG, and payment for prospect generation.

Announcements and reports from divisions and committees formed the core for the remainder of RESERVOIR. These related to short courses, field trips, the June convention and manpower developments, among other topics. The Publication Sales Committee faithfully contributed a column on CSPG publications. CSPG news was complemented by announcements from sister societies and of general industry or scientific interest. A Calendar of Events had been started half-way through the previous year and was maintained through 1986.

As with previous volumes, Volume 13 of RESERVOIR was published monthly with the exception of a combined July-August issue for the slow summer period. The average size increased to 17.5 pages, excluding advertising inserts, up from 13.8 pages for the 1985 volume. In the first seven issues 40 pages of advertising inserts were included. A change of policy took effect in September giving advertisers the option to mail loose inserts or brochures with RESERVOIR, an initiative of the Advertising Sales Committee. Three such inserts were included. In addition RESERVOIR agreed to accommodate smaller advertisers by allowing color-screened single and half-page ads within the regular pages. Nine such pages were included.

A final major change that was implemented concerned the mailing system. Third Class Bulk mailing within Alberta was started in September. As was pointed out in editorials in the January and July-August issues, mailing costs formed a disproportionately large part of the cost of producing RESERVOIR (about 50 percent). Third class mailing could reduce this cost by half. Slower mail delivery could be accommodated by moving the submission deadline up one week. It was decided to try this for six months. The experience so far has been very positive. The mailing class change also allowed us to return to a heavier paper type.

In the coming year we hope to consolidate the changes we implemented this year. A few problems arose with the mailing of the inserts and more time is needed for the advertising changes to catch on. No major new initiatives are planned, therefore, for 1987.

Production of RESERVOIR requires the cooperation of many. We thank especially the committees and divisions for adhering to the new submission deadline, the CSPG office staff for their patient assistance with the many small problems that arose while implementing the changes in mailing and advertising and the Advertising Sales Committee for good cooperation in our overlapping responsibilities.

GEOLOGICAL CALENDAR COMMITTEE
(R. Holyoke, Chairman)

The geological calendar for 1987 has a Devonian theme in recognition of the Second International Symposium on the Devonian System, August 17-20, 1987. Two thousand calendars were printed. By January 1, 1987, about half had been sold through the efforts of office staff, the Publication Sales Committee, and a number of individuals in different companies and organizations.

SHELF SANDS AND SANDSTONES - MEMOIR 11
(R. John Knight and J. Ross McLean, Editors; Linda Reynolds, Copy Editor)

This memoir contains 21 papers and the abstracts from the research symposium on Shelf Sands and Sandstones sponsored by the society in 1984. Editing was completed during 1986 and the

BASINS OF EASTERN CANADA AND WORLDWIDE ANALOGUES - MEMOIR 12
(Chris Beaumont and Tony Tankard, Editors)

This memoir will comprise manuscripts presented at a symposium on Basins of Eastern Canada and Worldwide Analogues, in Halifax, August 13-15, 1986. The symposium was organized by the Atlantic Geoscience Society and co-sponsored with the CSGP and the Inter-Union Commission on the Lithosphere. About 40 manuscripts were submitted for publication following the symposium. The review process is nearly complete, and about half of the manuscripts are back with the authors for revisions. The memoir should be available for purchase during the summer of 1987.

REEF CASE HISTORIES - MEMOIR (Noel P. James, Helmut H.J. Geldsetzer and Gordon Tebbutt, Editors)

This memoir will be an inventory of reefs within Canada and adjacent areas. The memoir will include an editorial chapter on reef concepts and problems. Case histories will be grouped according to geological systems, and each grouping is preceded by an introductory chapter summarizing all relevant reef data.

Some 135 persons intend to submit case histories which suggests that this venue of publication and the case history format are attractive to prospective authors. Manuscripts are due on February 1, 1987, just after the Reef Research Symposium, where a large number of case histories will be presented. Publication of the memoir is anticipated in early 1988.

THE DEVONIAN SYSTEM - MEMOIR
(N.J. McMillan, A.F. Embry, D.J Glass, Editors)

The publication will contain the proceedings of the Second International Symposium on the Devonian System to be held in Calgary, August 17-20, 1987. It is anticipated the volume will contain 75 to 100 papers and will be available in the latter half of 1988. Papers will include regional syntheses for many areas of the world as well as more detailed studies on selected topics such as reefs, biostratigraphy, hydrocarbon occurrences, event stratigraphy and tectonics.

GEOLOGICAL ATLAS OF THE WESTERN CANADA SEDIMENTARY BASIN (Grant D. Mossop, Chairman)

Activities during 1986 have been devoted to technical and strategic planning and design (Phase I) for the preparation of a new geological atlas of western Canada. Actual compilation of the atlas (Phase II - 1987-1991) is predicated on a fundamental "go/no go" decision in December 1986, by the project sponsors - the Canadian Society of Petroleum Geologists, Alberta Energy, and the Alberta Research Council.

Activities during 1986 were highlighted by: (1) securing agreement among the sponsors for core funding of the project - $1,200,000; (2) obtaining access to digital subsurface information, from governmental and commercial sources throughout western Canada; (3) publicizing the project in the geological community and securing commitments from forty to fifty volunteer contributors; (4) conducting a prototype study of part of the Cretaceous succession in Saskatchewan and Alberta, to assess technical feasibility parameters and costs; (5) preparing a detailed submission to serve as the basis for the "go/no go" decision.

The project has been approved by all three sponsors and Phase II compilation will proceed. The coming year will be devoted to concerted technical effort on the part of all parties concerned with the project. Steering, editorial and liaison committees also will be structured.

WESTERN CANADA SEDIMENTARY BASIN
(Brian Ricketts, Editor; Jim Monger, Margot McMechan, Peter Moore, Dave Gibson, Terry Poulton, Tom Jerzykiewicz, Kirk Osadetz, Grant Smith, Contributors)

Publication of a university undergraduate-level text on the evolution of western Canada basin, is being undertaken jointly by CSGP and the Open University (England). John Aldi, who was originally given the task of editor, is unable to continue and this role has been assumed by Brian Ricketts. The book will be approximately 200 pages long, published in soft cover, and should sell for $15 to $20. The deadline for submission of manuscripts is January 1988, with publication planned for early 1989. A survey of Canadian university geology departments suggests an annual market exists for 200-300 copies of such a publication for use as a supplementary text in third-year and fourth-year geology courses, in addition to the Open University market.

GEOPHYSICAL RESERVOIR ATLAS OF WESTERN CANADA (N. Anderson (CSEG), J. Dixon (CSPG), E. Greenwood (CSGP/CSEG), L. Hills (CSPG), B. Ulaszonek (CSEG), Steering Committee: K. Angus, L. Brack, J. Brown, D. Cederwall, R. Ferry, R. Hawthorne, R. Hinds, D. Reimer, B. Reanie, P. Viney, Chapter Coordinators)
It is the intention of the CSGP and the CSEG to publish jointly a collection of seismic lines which clearly show the seismic signatures of many significant western Canadian hydrocarbon reservoirs. These sections will be presented in chronological order (with respect to the age of the principal reservoir) and will be accompanied by appropriate geological cross-sections, as well as concise descriptions of relevant stratigraphy, geological history and reservoir characteristics.

This publication is logically divisible into eleven separately co-authored chapters, nine of which are restricted to specific geological formations or groups. The other two are dedicated to the analyses of 3-D and VSP data, respectively. The chapter coordinators and the steering committee are responsible for ensuring that this publication is available for distribution prior to the 1989 joint CSGP/CSEG convention.

Our appreciation is extended to the Data Brokers Association for their assistance with data solicitation, to those firms which have contributed proprietary seismic lines to the project and to those processing houses that have so generously offered to reprocess our data base. Their continued collective support will ensure that our December 1988 publication deadline is met.

GEOLOGY OF THE CALGARY AREA (Michael C. Wilson and Lionel E. Jackson Jr., Editors)

Activities during 1988 centered upon final formatting of papers and editorial checks of illustrations. Editorial work was completed and the manuscripts were sent to the printer. The book includes introductory chapters by Jackson and Wilson and ten papers dealing with subjects pertaining to the greater Calgary area. The Calgary area has been liberally defined to include localities within a comfortable day's drive of the city, and the volume also includes discussion of the subsurface features associated with resource development. The book will be published in early 1987.

PALEONTOLOGICAL MONOGRAPHS COMMITTEE (Robert J. Elias, Chairman; David H. McNeil, Secretary; Ross A. McLean and Tim R. Marchant, Business Managers; Rolf Ludvigsen, Palaeontographica Canadiana Editor, Godfrey S. Nowlan, GAC Editor, James Dixon, CSGP Editor)

The CSGP and the Geological Association of Canada are sponsoring societies to a paleontological monograph series which is dominantly systematic in content and pertinent to Canada. Most of the responsibility for publication of these monographs has been delegated to a Joint Committee on Paleontological Monographs, responsible to the two societies. The name of the monograph series is Palaeontographica Canadiana. Publications during 1986 were:

Publications planned for 1987 are:
A Palaeontographica Canadiana monograph on Ordovician graptolites.

HISTORY OF THE CSGP (François Gauthier, Editor)

A mock-up of a 40-page review of the first fifty years of the ASPG/CSGP has been prepared and historical photos which were obtained from the Provincial Archives. The publication will emphasize the contributions of our twenty founding members and the relationships among national and world events, the growth of the petroleum industry in Canada, and the growth and development of our society. Virtually all the information necessary has been collected, and it is hoped that the publication can be produced in 1987.

Volunteers are urgently needed to work on completing the publication.

LEXICONS OF CANADIAN STRATIGRAPHY - VOLUME 3, WESTERN CORDILLERA OF BRITISH COLUMBIA AND S.W. YUKON (W.R. Danner and T. Hoy, Editors)

Editing and typing have been completed for Pleistocene formations of southwestern B.C., submitted by J.E. Armstrong. Most of the formation descriptions for Vancouver Island and some for the mainland have been completed. It is hoped that the completed lexicon can be printed during 1987.

LEXICONS OF CANADIAN STRATIGRAPHY - VOLUME 4, WESTERN CANADA (J. Grassby, Editor; C. Buck, R. Hawes)

Progress on the western Canada lexicon has suffered due to a turnover in the committee chairmanship, which resulted when John Grassby returned to university. The new chairman is Christian Buck. The lexicon will include about 1300 entries. Of these about 100 are complete, about 900 have been submitted in first draft and have yet to be
reviewed, about 200 have been assigned to experts, but no first draft has been received, and about 100 have yet to be assigned.

The committee faces a formidable task in finding writers and reviewers, but is optimistic that they will be found. A target date of June 1988 has been set for completion of this very important lexicon.

LEXICONS OF CANADIAN STRATIGRAPHY - VOLUME 5A, CENTRAL CANADA - HUDSON BAY LOWLANDS (T.E. Bolton, P.G. Telford, Editors)

Of an estimated 400 stratigraphic names spanning the Cambrian to Cretaceous Systems, approximately half have been prepared for the lexicon, and work on the remainder is continuing. Little progress has been made during 1986. Revised plans are to complete the first draft of the manuscript by the end of 1987, or in early 1988, for publication in late 1988 or early 1989.

LEXICONS OF CANADIAN STRATIGRAPHY - VOLUME 5B, ST. LAWRENCE LOWLANDS (Y. Globensky, Editor; T.E. Bolton)

The first draft of the manuscript containing entries for more than 300 stratigraphic terms is complete and most have been reviewed prior to publication. A small number of terms are still being reviewed, and it is now anticipated that the publication will be available in late 1987. Tentative arrangements call for a joint publication by CSPG and the Quebec Ministère de l'Énergie et des Ressources in the standard CSPG Lexicon format, and entirely in French.

LEXICONS OF CANADIAN STRATIGRAPHY - VOLUME 6, ATLANTIC CANADA (Graham Williams, Editor; Judith Watt, Technical Editor; Julie Bryant, Monon Daneau, Bill MacMillan, Kevin Reardon, Diane Weber, Assistant Editors)

The lexicon on Atlantic Canada was published in March 1986. Atlantic Canada is taken to include New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island, and the east coast offshore. The lexicon includes information on all named lithostratigraphic units designated as members, formations, groups and supergroups, and all named lithodemic units. It includes over 900 formal units and about 610 informal units.

The society would like to thank the various provincial and federal agencies which have provided support throughout the project. Particular thanks are extended to the New Brunswick Department of Natural Resources, the Newfoundland Department of Mines and Energy, the Nova Scotia Department of Mines and Energy, the Prince Edward Island Energy and Minerals Branch, and the Geological Survey of Canada.

LEXICONS OF CANADIAN STRATIGRAPHY - VOLUME 7, PRECAMBRIAN (M.J. Fraey, Editor)

This compilation is finally under way with the recent acceptance of the editorship by M.J. Fraey, Ottawa. The volume will comprise stratigraphic units from the Canadian Shield, probably including duplication of Precambrian units in the District of Mackenzie, previously published in Volume 2. The editor has assembled a list of prospective contributors, has compiled information available in the files of the Geological Survey of Canada, and has initiated contacts with the Ontario Geological Survey to enlist their participation.

OIL AND GAS POOLS OF CANADA (Roy Benteau, Chairman; Jim Dixon, General Editor; Bev Pfeffer, Rick Sebastian)

During 1986 the committee co-ordinated the final editing and drafting of 30 submissions, and initiated work on the introductory sections. Early in 1987 the committee anticipates producing final copy of current submissions, and at that time will make recommendations to the executive for future work. Volunteers are needed to work on this project. Interested members are encouraged to call Roy Benteau at 267-9724 or 249-9728.

INDEX OF CSPG PUBLICATIONS (Bruce G. McIntyre, Chairman; C.R. Dixon, G.T. Stabb)

The committee continues to index all papers in current CSPG bulletins, memoirs, field trip guidebooks and special publications, by selecting keywords and reference terms under which those papers might be found. All 1986 Bulletin papers, sorted by subject, author and NTS area were printed in the December 1986 Bulletin.

The CSPG indexed data continues to be input to GEOSCAN, the Canada-wide index to geologic data and to GEODIAL, Alberta’s index to geologic data. Access to either GEOSCAN or GEODIAL may be obtained through the libraries of most major oil companies or through the Gallagher Library at the University of Calgary.

During 1986 Peter Hay stepped down as Chairman and was replaced by Bruce McIntyre.

MEMBERSHIP DIRECTORY (Peter W. Hay, Chairman; Carol Laws)

Plans were underway to produce a photo-directory of CSPG members financed in part by selling advertisements to be printed in the directory. The Executive Committee decided that the society could not afford to publish a photo directory and furthermore, decided not to proceed with any
directory at this time. The committee has been disbanded until the executive decides to proceed with a new directory. The executive is currently assessing the needs and desires of the membership for a directory. When one is produced, it will probably be an item for sale rather than for free distribution.

M.Sc. and Ph.D. THESES COMMITTEE (L. V. Hills, Chairman)

The titles of Canadian M.Sc. and Ph.D. theses in geology are published (usually annually) in the Bulletin. This has been delayed for the past couple of years, but a complete list for 1983, 1984 and 1985 has been compiled and submitted to the Bulletin.

CONFERENCES, CONVENTIONS AND SYMPOSIA

1986 CSPG CONVENTION - CANADA'S HYDROCARBON RESERVES FOR THE 21ST CENTURY, JUNE 1-4, 1986, CALGARY, ALBERTA (H.J. Sullivan, General Chairman; G. Eynon, Vice-Chairman and Technical Program Director; M.G. Weber, Field Trip; T.R. Marchant, Abstract Editor; A.P. Hamblin, Short Courses; P.G. Strong, Poster Session; P. Lee, M.S. Durham, Convention Theatre; B.A. Garey, Commercial Exhibits; G.E. McMaster, Entertainment; N.J. Corbett, Publicity; P.A. Harrington, Liaison; L.E. Kokoski, H.C. Guenter, University of Calgary, Conference Office)

The convention was held at a time when plummeting oil prices caused oil companies to slash budgets and implement staff reduction programs. For the first time in our society's history a special registration fee for unemployed geologists was offered. Despite the gloomy economic circumstances, 1319 geologists registered, which is probably close to a record attendance for a CSPG Convention.

The Technical Program began with a plenary session at which three invited speakers gave one-hour state-of-the-art lectures. They were: A.W. Bally: "Folded Belts - Where Do We Go From Here?"; C.D. Curtis: "Interactions Between the Organic and Inorganic Constituents of Clastic Sediments and Mineral/Porewater Reactions During Burial Diagenesis"; and R.G.C. Bathurst: "The Evolution of Porosity in Carbonate Rock; the Many-Pronged Attack". A total of 81 oral presentations were given in nine technical sessions. Thirty-eight papers were on the Frontiers, 14 on western Canada, 12 on Fluid Migration, 11 on Heavy Oil and 6 on Reserve Prediction Techniques. The Poster Session contained 39 displays which were of a uniformly high standard, and attracted a great deal of attention throughout the three days of the convention. The Film Theatre also drew large audiences. The program featured specialized films on a variety of geological topics, and several films on more general subjects such as Halley's Comet and Mt. St. Helen.

In consultation with the CSPG Executive, the Organizing Committee decided that all activities associated with the convention should be self-financing. This decision had a significant impact on the Short Course and Field Trip Programs. Just two of the planned six short courses were held: the first was a one-day seminar on Carbonate Diagenesis by B. Jones, and the second a two-day lecture and laboratory course on Trace Fossils by S.G. Pemberton. Of the six field trips which had been proposed, minimum participation levels were exceeded in only three. As it was, one of these, the Inuvik/Richardson Mountains field trip had to be cancelled because of ice conditions on the Mackenzie River. Two field trips were run: the Devonian of Manitoba led by H.R. McCabe and A. D. Baillie, and the Regional Paleogeography and Reservoir Quality of the Blairmore - Mannville Groups led by D.P. James.

The Sunday evening Icebreaker was the only social event of the convention. The Garden Terrace of the Calgary Convention Centre was festooned with balloons and decorated with colourful murals to impart a carnival spirit for the Caribbean theme. Participants sampled exotic foods and listened to the music of a steel band. The evening was a great success and was enjoyed by all who attended.

The intent of the Organizing Committee was to provide a first-rate technical program at a moderate cost to members. We felt that this objective was achieved as evidenced by the high quality of papers, and the fact that the registration fee barely covered the basic expenses of the convention when calculated on a per capita basis. A profit of over $50,000 was the result of the income derived from commercial exhibits, and the generous donation of funds and materials by major oil corporations and service companies.


The Canadian Society of Petroleum Geologists and the Inter-Union Commission on the Lithosphere jointly sponsored this symposium which was organized and run by the Atlantic Geoscience Society. The CSPG made a monetary contribution in part toward speaker's expenses and in part
towards operating expenses (some or all of which will be returned from conference revenues). The very successful symposium was held in Halifax, August 13-15, 1986. It featured sessions on drifting mechanisms and passive margins, passive margins with salt, complex passive margins, foredeep and foreland basins, and intracratonic basins. The symposium included poster sessions and a maritimes field trip. Many of the papers presented will be published in a CSGP Memoir to be published jointly with the Atlantic Geoscience Society (discussed elsewhere in this report).

1986 CORE CONFERENCE (Nick Meijer Drees, Chairman; Jon Dudley, Albert Wegelin, Peter Aukes, Henk Halbertsma, Scott Ferguson, Karen McInnes)

The conference was organized through a joint effort of the Sedimentology and Petrology divisions at the Core Research Centre on October 16 and 17, 1986. The Alberta Energy Conservation Board offered the facilities free of charge and also organized the lay-out of the core tables. Refreshments were supplied by the staff of Core Laboratories Canada Ltd. There were eleven core and three poster displays. About 550 people attended the conference. Conference guides were published and copies are available at the CSGP office.

Several excellent core displays described the relationship between sedimentology, diagenesis, and reservoir characteristics. Other successful core exhibits used sedimentological and regional geological information to suggest various interpretations of the environment of deposition. Examples of caliche, paleosol horizons and regoliths were shown.

GEOCHAUTAQUA 1986 (Michael Marchand, General Chairman; Gordon Williams, Program Chairman; P.J. Lee, Heinz Ambach, Paul Wang, Rene Rajewicz)

The 15th Annual Geochautaququa took place at the Palliser Hotel over the weekend of October 2nd to 4th. The meeting was co-sponsored with the International Association for Mathematical Geology and the CSGP was represented by the Geomathematics and Computer Applications Division. This conference is the primary annual meeting for the International Association for Mathematical Geology. The theme for the meeting was "Computers in the Petroleum Industry: Integrated Approaches".

There were originally 24 papers accepted for presentation but two were cancelled at the last minute; a reflection of the extreme turmoil and down-sizing taking place in the oil industry at the time. Registration numbered 86 of which 3 were from overseas, 10 from the U.S.A. and 6 from outside Alberta. A small exhibition area contained 5 commercial exhibitors of computer hardware, software, and services.

The meeting was a financial success, returning to the CSGP an estimated $2200 profit. The success of this meeting shows the continuing interest in the role of computers in oil exploration, even during the current severe industry downturn.

CSGP SPONSORED SESSIONS AT GAC/MAC ANNUAL MEETING, 1987 (D.M. Kent, J.A. Lorsong, R.W. Macqueen, R.A. Olson, L.W. Vigrass)

The joint annual meeting of the Geological Association of Canada and the Mineralogical Association of Canada, May 25-27, 1987, at Saskatoon, will include two sessions sponsored jointly by the GAC and CSGP. One is a session on Reservoir Geology organized by D.M. Kent, J.A. Lorsong, and L.W. Vigrass. The other is on Metallic Mineral Potential, Western Interior Platform and Underlying Precambrian, organized by R.A. Olson and R.W. Macqueen. These sessions are an expression of the intent to foster greater cooperation and scientific communication between the two societies.

CANADIAN REEF INVENTORY PROJECT (Jeffrey J. Packard, Chairman; Nigel Watts and John Kaldi, Technical Co-Chairmen; Bill May, Finance Chairman; Christian Viau, Publicity Chairman; Noel P. James, Helmut Geldsetzer, Gordon Téebutt, Memoir Editors; John Hopkins, Short Course Convenor; Les Eliuk, Mesozoic System; Graham Davies, Permian System; Barry Richards, Carboniferous System; Peter Moore, Devonian System; Pierre-André Bourque, Silurian System; Mike Cecile, Ordovician System; Jim Aitken, Cambrian System; John Grotzinger, Precambrian Systems; Margaret-Anne Stroh, Conference Co-ordinator; Paul Cooper, Owen Dixon, Jim Dolph, Norman Fischbuch, Ian McCreath, Digty McLaren, Eric Mountjoy, Robert Workum, Advisory Council)

CRIP has undertaken 3 major reef-related endeavours that are to be realized in 1987, staging a Research Symposium (January 27-30), running a reefal carbonate short course (January 26-27), and producing a CSGP Memoir on reef case histories (anticipated publication date - late 1987 or early 1988).

In the spring of 1986 CRIP issued a third information circular, that also contained our first call for papers and registration forms. Response has been most gratifying. In terms of papers, the
symposium will be the largest geological conference on reefs ever held. A total of 97 papers have been submitted to the organizing committee of which the majority were accepted for presentation. Apart from a strong Canadian contingent, speakers will be arriving from Britain, continental Europe, Australia and the U.S.A. As of December 3, 1986 early registration had surpassed the break-even mark of 125 participants. The associated short course currently has registration in excess of 80 (break-even is approximately 70 participants). With almost 2 months to go prior to the events themselves, these numbers are most encouraging.

Fund raising efforts resulted in $6500 being donated to CRIP for the symposium and/or memoir. Fund raising in 1987 will focus on raising sufficient monies to substantially underwrite the initial publication costs of the memoir.

1987 CSPG SECOND INTERNATIONAL SYMPOSIUM ON THE DEVONIAN SYSTEM (D.J. McLaren, Chairman; M.E. Hriskoевич, General Manager; Ian A. McIlroath, Convention Advisor; Ashton F. Emby, Technical Program; N.J. McMillan, Publication Editor; O. Geoff Burrowes, Field Trips; Federico Krause, Scientific Exhibits; J.D. Speelman, Publicity; N. Gale Koch, Finance; Robert O. Potter, Accommodation; Tim R. Marchant, Abstract Editor; J. David Hughes, Registration, Brian L. Miller, Technical Services; Donald J. Glass, Printing; Ed H. Schultz, Grants; Lisa-Henri Kirkland, Transportation; M. Dawson, Entertainment)

During 1986 a number of meetings of the organizing committee took place in preparation for the symposium which will occur in Calgary during August 17-20, 1987.

The technical program committee under the leadership of Ashton Emby has compiled an impressive list of papers which will be presented. A broad world-wide participation in this symposium is assured. Papers of a more local nature (i.e. Western Canada Sedimentary Basin) will also be presented, and will deal with the occurrence of hydrocarbons in Devonian sediments in the basin. These papers will be of specific interest to CSPG members. The proceedings of the symposium will be published by the CSPG shortly after the symposium has taken place. Don Glass and Jack McMillan are the memoir editors.


Plans are now well advanced for holding our 1988 convention jointly with the Geological Association of Canada and the Mineralogical Association of Canada in St. John's, Newfoundland, May 22-25, 1988. Several planning meetings have been held to plan convention facilities, technical program and budget. The central theme of the technical program will be "Extensional tectonics and stratigraphy of the North Atlantic Margin". It is hoped that support from the International Union of Geological Sciences (IUGS) will be forthcoming, and that the conference can serve as a spring-board for a circum-Atlantic project.

Financing of this convention is shared between GAC, CSPG, and MAC, on a 3:3:1 basis.

1988 SEQUENCES, STRATIGRAPHY, SEDIMENTOLOGY: SURFACE AND SUBSURFACE (David James and Dale Leckie, Chairmen; Guy Plint, Ray Rahmani, George Pemberton, Doug Cant, Mac Jervey, Mark Thomas and Fed Krause, Technical Committee; Scott Ferguson, Field Trip Chairman; David Taylor, Core Display Chairman; Gordon Stewart, Poster Display Chairman)

The main purpose of this extended core conference will be to integrate siliciclastic subsurface and outcrop studies. To achieve this aim, a three-day core conference will be held on September 14th, 15th and 16th, 1988. Concurrent core displays, poster sessions and a single session of papers will be held at the Energy Resources Conservation Board, Core Research Centre. Themes will include surface-subsurface regional studies, sequence stratigraphy, field anatomy and controls on reservoir quality, trace fossils and stratigraphic concepts, tidal deposits in North America, and shelf deposits. It is our hope that we will have a series of keynote speakers to address each of these themes.

1989 CSPG/CSEG JOINT CONVENTION (Doug Gardiner (CSPG) and Cee Keeping (CSEG), Co-Chairmen)

The Canadian Society of Petroleum Geologists and the Canadian Society of Exploration Geophysicists will hold their annual conventions jointly in Calgary, Alberta, June 10-15, 1989. Co-chairmen, one from each society, have been appointed and they are in preliminary stages of formulating a program and identifying committee members.

OTHER SCIENTIFIC PROGRAMS

TECHNICAL PROGRAM COMMITTEE (Christopher LeGallais and Brad Hayes, Chairmen; John Kaldi, Christie Wiltshire, Barry McNamara, Howard Klettl, Kathy Scales, Pamela Waters)
CSPG Luncheon Meetings, organized by the Technical Program Committee, enjoyed another successful year in 1986. Twenty meetings featured speakers from companies, universities and government institutions in Canada and the United States. A variety of topics in sedimentary and petroleum geology were included, as well as some related topics such as tectonics, hydrogeology, economics and geophysics. Notable events included the excellent talks by AAPG Distinguished Lecturers early in the year, RMAG Visiting Speakers late in the year, and a talk on world oil prices in November. A ticket price increase to $12 in September was made necessary by increased catering costs. The average attendance in 1986 was 878, down from an average of 903 in 1985. There can be no doubt at the present time that ticket sales have declined along with the general state of the petroleum industry in Calgary. Every effort must be made in 1987 to maintain a high standard of speakers in order to encourage sales.

In September 1986, Chris LeGallais took over as chairman of the Technical Program Committee from Brad Hayes. John Kaldi continued as assistant to the chairman and also took over the job of arranging thankers. Christie Wiltshire co-ordinated ticket sales, Pamela Waters took over the projectionist duties from Kathy Scales who continued to arrange mementos for the speakers.

The Technical Program Committee is indebted to the many volunteers who act as ticket sellers, corporations in Calgary who support their employees' time and attendance at the luncheons, and in particular Paramount Resources Ltd. and Chevron Canada Resources Ltd. who provide essential logistical support.

Meeting dates have been scheduled at the Westin Hotel through 1987, and some excellent speakers have been confirmed for the January to June session. Suggestions from CSPG members regarding speakers or other aspects of the luncheon program are welcomed by the chairman.

The following is a list of 1986 speakers and topics:

Jan. 14 Donald G. Smith, University of Calgary, "Meandering River Lithofacies Model: Modern and Ancient Examples Compared" (Attendance 1000)

Jan. 29 Rand Harrison, Alberta Research Council, Edmonton, "Stratigraphy, Sedimentology, and Bitumen Potential of the Upper Devonian Grosmont Formation, Northern Alberta" (Attendance 1000)

Feb. 12 Frederico F. Krause and S.G. Sayegh, R.P.I., Calgary, "Rock-Carbonated

Brine Interactions in Cardium Formation and Beaverhill Lake Group Core Floods" (Attendance 811)

Feb. 24 James M. Rine, N.L. Industries, Houston, Texas, "Effects of Rising Sea Level on Facies Distribution within the Cardium Formation of West Central Alberta (Muskeg River Area)" (Attendance 1000)

Mar. 12 Peter A. Ziegler, Shell Internationale Petroleum, The Hague, Netherlands, "Evolution of the Arctic North Atlantic Rift System" (Attendance 875)

Mar. 26 Jozsef Toth, University of Alberta, Edmonton, "Petroleum Hydrogeology - a Proposed Approach to Exploration and Basin Analysis" (Attendance 896)

Apr. 09 William E. Mero, Chevron U.S.A., San Francisco, "Point Arguello Field, History and Geology of a Giant Oil Discovery" (Attendance 888)

Apr. 23 Charles E. Chapin, New Mexico Bureau of Mines and Mineral Resources, "Two-Stage Laramide Orogeny in Southwestern United States: Tectonics and Sedimentation" (Attendance 841)

May 05 Gary P. Smith, Chevron Canada Resources, Calgary, "Depositional Environments and Reef Evolution of the Lower Devonian Carbonate Sequence, Southwest Ellesmere Island, Arctic Canada" (Attendance 851)

May 28 Ray A. Rahmani, Canadian Hunter Exploration Ltd., Calgary, "Mesozoic Mud-Filled Channels: Abandoned Fluvial Channels or Active River Estuaries?" (Attendance 990)

Jun. 09 Frank Stoakes and Steve Creaney, Esso Resources Canada Ltd., Calgary, "Duvernay Source Rock Deposition: Exploration Implications of Maturity and Migration to Leduc Reservoirs of Alberta" (Attendance 931)


Sep. 08 Quentin H. Goodbody, ISPIL, Calgary, "A Spectrum of Shelf and Deltaic Environments: The Devonian Clastic Wedge, Canadian Arctic Archipelago" (Attendance 689)

Sep. 25 Lorna A. Porter and Fred S. Reid (co-author), Denver, Colorado, "Exploration Applications of a Transgressive Tidal Flats and
Restricted Shelf Model to Mississippian Midale Carbonates, Eastern Williston Basin Saskatchewan and Dakotas (Attendance 860)

Oct. 15 Thomas A. Ryer, R.P.I., Colorado, "Ancient Meander Belts as Stratigraphic Traps, Rocky Mountain Region - U.S.A. and Canada" (Attendance 947)

Oct. 29 Guy C. Grierson, and William E. Davitt and Ian Richie (co-authors), Chevron Canada Resources, Calgary, "The Petroleum Geology of the Canadian Maritime Provinces including the southern Gulf of St. Lawrence and the Bay of Fundy" (Attendance 775)

Nov. 17 S. Robert Bereskin, Salt Lake City, "Middle and Upper Devonian Stratigraphy of Certain Portions of the Great Basin Southern and Central Nevada. Implications for Exploratiensists" (Attendance 651)

Nov. 26 Gordon M. Engbloom, Confer Consulting, Calgary, "Oil Prices: Back to the Future" (Attendance 783)

Dec. 9 Anthony J. Tankard and Herman J. Welsink (co-author), Petro-Canada Resources Ltd., Calgary, "Extensional Tectonics and Stratigraphy of the Hibernia Oilfield, Grand Banks" (Attendance 751)

Dec. 17 Peter Bower, Altana Exploration, Calgary, and Sudhir Jain, Commonwealth Geophysical Development Ltd., Calgary, "Regional Precambrian Surface Structure in Northern Alberta from Aeromagnetic Maps" (Attendance 835).

TECHNICAL PROGRAM TICKET SALES (Christie Wiltshire, Chairman: Howie Klettl)

Technical Luncheon ticket sales in 1986 totalled 17,810, indicating continued corporate and individual support of the society's technical program, in spite of the downturn in the oil and gas industry. One result of the downturn was the ongoing redistribution of ticket allocations as company needs changed. Also, several companies were added to our ticket sales distribution list.

The society sincerely appreciates the efforts of the following company sales representatives and thanks them for their conscientious work during 1986:

Terry Shawchuk, AGAT Laboratories
Rosalie Donald, Amoco Canada Ltd.
Maura Duncan, Amoco Canada Ltd.
Kathy Box, Bow Valley Industries Ltd.
Gail Pasiaud, Canterra Energy Ltd.
Ardis Chen-See, Bluesky Oil and Gas Ltd.
Dave Beal, West Star Petroleum Ltd.
Jeff MacLean, West Star Petroleum Ltd.
Pat Duke, BP Oil and Gas Ltd.
Bill Osborne, Canada Northwest Energy Ltd.
Phil Letkeman, Chevron Canada Resources Limited
Pam Francis, Canadian Occidental Petroleum Ltd.
Suzanne Kelly, Dome Petroleum Ltd.
Bert Hattiga, Energy Resources Conservation Board
Maureen Cook, Esso Resources Canada Ltd.
Murna Bray, Forest Oil Corporation
Beth MacLeod, Forest Oil Corporation
Janice Yeo, Gulf Canada Ltd.
Carmelle Beaudin, Home Oil Company Ltd.
Diane LeMesurier, Husky Oil Ltd.
Jan Brown, Husky Oil Ltd.
Suelyn Chan, Coles Nikiforuk Pannell Ltd.
Ruth Wiltse, Aberford Resources Ltd.
Verna Bohnet, Aberford Resources Ltd.
John Lake, Mobil Oil Canada Ltd.
Elaine Seeger, Mobil Oil Canada Ltd.
Paul Benson, Mobil Oil Canada Ltd.
Jocelyn Hunt, Murphy Oil Co. Ltd.
Barbara Thomas, Norcen Energy Ltd.
Jim Hamilton, Panarctic Oils Ltd.
Bill Russell, PanCanadian Petroleum Ltd.
Marilyn McFarlane, Petro-Canada Ltd.
Elsie Perreault, Petro-Canada Ltd.
Jeanette Halasa, Robertson Research Ltd.
Sandy Anderson, Shell Canada Resources Ltd.
Sandy Lansdown, Shell Canada Resources Ltd.
Helen Schopp, Shell Canada Resources Ltd.
Jim Minions, Sunoco Inc.
Hyacinth Richards, TransCanada Pipelines
Angela Petig, Texaco Canada Ltd.
Greg Mayer, Unocal Canada Ltd.
Ronald Gault, Unocal Canada Ltd.
Bob McDonald, Ocelot Industries Ltd.
Lynne Carter, Voyager Petroleum Ltd.
Sheila Dylke, Canadian Society of Petroleum Geologists
Christine Helm, Canadian Society of Petroleum Geologists

Thanks must go also to Jeff Reid (BP Canada Ltd.) for Annual Dinner ticket sales and to Brad Hayes (Canadian Hunter) for Honorary Address ticket sales.

On January 1, 1987, after one year of service, Christie Wiltshire retired as Ticket Sales Coordinator; the new co-ordinator is Rob Thomson (Chevron Canada Resources Limited).
CONTINUING EDUCATION COMMITTEE
(A. Zolnai, Chairman; D. Greggs, Treasurer; R. Hankel, P. Harrington, M. Hyer, C. Lamb, R. Peach, D. Work)

The committee maintained an active program of courses during 1986. Due to overall financial considerations in the society, it was decided that each course offered would have to at least break even or not be offered, and consequently low response related to the current economic climate resulted in some courses being curtailed. In recognition of tough economic times, related to layoffs in a depressed oil industry, reduced course rates were offered to unemployed members.

The following courses were offered during 1985-86:

Dec. 9-10 Hydraulic Theory of Petroleum Migration: J Toth, University of Alberta

Feb. 06 Cordilleran Geology: D. Templeman-Kluit and R. Thompson, Geological Survey of Canada, Vancouver

Apr. Deep Seismic Reflection: F. Cook, University of Calgary (postponed)

Sep. 24 Carbonate Sedimentology (seminar, field trip and core workshop): R. Harrison, Alberta Research Council (core workshop and field trip cancelled)


Six courses are scheduled for 1987, including a carbonate course to be run as part of the Canadian Reef Inventory Project in January.

STUDENT INDUSTRY FIELD TRIP (Peter Audretsch, Chairman; Gary Hicks, Sheila Cameron, John Mawdsley, Martin Hewitt, Marjorie Sutherland, Bill Styan, Clint Tippett, Ray Rahmani)

The 13-day 1986 SIFT program, May 4th to May 16th, included the following activities: (a) five days of field trips throughout the Western Canadian Sedimentary Basin and the Southern Rocky Mountains; (b) an Exploration Seminar or game which allowed the students to apply exploration techniques in a competitive atmosphere searching for hydrocarbons in a carbonate depositional setting; (c) several half-day presentations by various companies within the oil patch designed to give students exposure to the different aspects of oil and gas exploration; (d) an overview of the Southern Rocky Mountains illustrating the principal geologic structures.

In 1987, the Student Industry Field Trip will once again be offered as a 13-day trip from May 3-15, 1986. One student will be selected from each of the 32 universities across Canada offering degree programs in geology. The format of the trip will remain essentially unchanged.

The committee wishes to thank all of the individuals and companies involved in making the 1986 SIFT the success that it was. It looks forward to continued support for 1987.

FIELD TRIPS (ONE DAY) (Katrine Foellmer, Chairman; Kathy Box, Robin Dixon, Pam Linckens)

The 1986 field trip season went well. Response to the first trip was low, probably because it was held soon after the CSPG convention and because it had been run last year. Two later trips were sold out.

Field trips this year included one to visit Upper Devonian carbonates, and two to show different aspects of Cretaceous siliciclastics in Alberta. The trip to view the Southesk-Cairn Formations, near Canmore, was repeated this year due to many requests, but unfortunately, this generally popular trip was not filled, even though it had been restructured to allow time for more questions and better views of the outcrop. The other two trips were new and very successful. The two-day trip to view Cretaceous outcrops in southern Alberta was enjoyed by all participants, and an excellent guidebook was published by the committee and is available for purchase from the society. The one-day trip, to Late Cretaceous outcrops near Drumheller, emphasized the use of trace fossils to identify environmental and ecologic relationships in shallow marine siliciclastics.

Next year we plan to hold new field trips as well as some from previous years. An effort will be made not to overlap any of those held in conjunction with the Devonian symposium being held in Calgary during the summer. The committee welcomes any suggestions for trips to be run in the future, be they to examine new outcrops or previously run trips.

The 1986 trips were:

- Southesk-Cairn Formations, Canmore - June 21st, led by Ian Hunter (Dept. of Geology, University of Alberta), Graeme Bloy (Thomson Jensen Energy), and Sid Leggett (Home Oil), organized by Pam Linckens
- Cretaceous outcrops, southern Alberta - August 8th to 10th, led by Dale Leckie (ISPG) and Lorne Rosenthal (University of Manitoba), organized by Kathy Box (Bowl Valley) and Katrine Foellmer (RPI)
- Late Cretaceous, Drumheller - August 23rd, led by George Pegiberton (University of Alberta) and Tom Saunders (University of Alberta), organized by Robin Dixon (RPI).
The committee would like to thank those people who put in much time and effort into leading, organizing, and generally supporting the field trips held this year.

**NATIONAL CONFERENCE ON EARTH SCIENCE** (Peter E. Greteiner, Chairman; Pat Larlham, University of Alberta Extension; Clay Riddell, CSPG Liaison; Jack Century, Dale Dolphin, Leslie Eliuk, Jill Kierk, Fed Krause, Mike Morrison, Margot McMechan, Frederic Monnier, Rand Harrison, Frank Stoakes, Fred Trollope)

The "Banff Conference" is organized and managed by the Faculty of Continuing Education of the University of Alberta in Edmonton. The University of Alberta, mainly through the efforts of Pat Larlham, handles all advertising, registration, correspondence, and logistics. CSPG's input is through the Advisory Committee which chooses the conference topic and selects world-recognized speakers to present the course. A unique feature of the conference is the residential atmosphere at the Banff Centre, which promotes continuing discussion among the participants and lecturers at meals and over drinks in the evening. The "Banff Conference" continues to be the best buy in continuing education available.

The 1986 conference was held at the Banff Centre for Continuing Education from September 15th to 19th on the subject of "Geology and Reservoir Management". The main lecturers were Bill Fisher, Bob Sneider and Joe Richardson, Norm Wardlaw, Fed Krause, Ross McLean and Mark Thomas, Jack Wendte, and Peter Greteiner. Sixty-one registrants participated in and benefited from the excellent technical content and stimulating lectures.

The 1987 conference will be on "Clastic Shorelines - Process to Preservation" with lecturers, Bob Weimer, Derek Ager, Ed Clifton, Miles Hayes, and John Horne.

**VISITING LECTURER COMMITTEE** (R.E. Deere and R. Barss, Co-Chairmen; M.H. Chambers, Member; R. Yole, M. Meding, Graham Williams, Area Advisors)

Dr. Dale Leekie's presentation entitled "The Gates Formation (Falher Member), Northeast British Columbia; A Wave Dominated Strandplain System: Outcrop and Subsurface" was given at the following universities in March 1986: Manitoba, Lakehead, McMaster, Toronto and Concordia. The tour was sponsored by the CSPG.

Dr. Jack Wendte toured during February and March 1986 with his lecture entitled "Controls on the Evolution of Devonian Oil-Bearing Reefs of Western Canada". Eight universities were visited: McGill, Montreal, Windsor, Waterloo, Toronto, U.B.C., Regina and Saskatchewan. This tour was sponsored by Esso Resources.

Dr. Brian Jones, the 1984 Link Award recipient presented his lecture entitled "Ancient and Modern Carbonate Environments: Grand Cayman Island" to the following universities in March 1986: Ottawa, Queen's, Western Ontario, New Brunswick and Memorial.

Dr. David James, the 1985 Link Award winner, toured the following universities in October 1986: Toronto, Brock, Waterloo, Western Ontario and Windsor where he gave his lecture entitled "Sedimentology, Paleogeography and Reservoir Quality of the Mannville Group, Southwestern Alberta: Implications for Exploration".

Dr. David James will be making a second lecture tour of five universities in late February 1987 and Dr. Frank Stoakes, 1986 Link Award winner, has also agreed to tour and lecture at at least five universities in late February - early March 1987.

1986 HONORARY ADDRESS (Brad Hayes, Chairman; Dave Robinson, Howard MacKay, Barry McNamara, Matt Woofter, Ken Baxter)

Beginning in early 1986, the Honorary Address Committee considered a number of topics and potential speakers for the 1986 Honorary Address. We decided that dinosaurs were topical and interesting to geologists and the general public, because of recent media coverage and the great success of the Tyrrell Museum during its first year of operation. Although we had originally planned to concentrate on the extinction of the dinosaurs, we found that two world-renowned dinosaur researchers, Philip Currie of the Tyrrell Museum and Dale Russell of the National Museum, were willing to speak on their globe-spanning research for the Canada-China Dinosaur Project. On November 19th, 1839 people came to the Jubilee Auditorium to view their 1-1/2 hour slide presentation entitled "Giants of the Past - Unravelling the Dinosaur Mysteries".

Following up on the excellent work by last year's committee, a concerted effort was made to promote the address to the membership and the general public. Our success in advertising was largely the result of close co-operation with the staff of the Tyrrell Museum. A reproduction of the Tyrrell's mural of an Albertosaurus standing over a freshly-killed ceratopsian dinosaur provided a dramatic centrepiece for the popular poster promoting the talk. The Tyrrell also supplied a cast of an Albertosaurus skull which was displayed at various companies and at the university at lunch hours. We must thank more than 50 volunteer ticket sellers, including the regular CSPG ticket representatives.
On the evening of the talk, Drs. Currie and Russell were welcomed by the Executive and Honorary Address Committee at a dinner at the Riverside Club. Afterward, they were presented with certificates of appreciation and original watercolour paintings by Calgary artist June Montgomery.

The Honorary Address Committee will meet within the next few months to plan the 1987 Address. We would welcome from the membership any suggestions of potential topics and speakers.

SEDIMENTOLOGY DISPLAY (Brad W. Barrie, Chairman; Andrew F. Bau, Allan J. Baxter, John R.J. Letson, J. Kevin Stromquist, Kees Visser, Jim A. Podruski)

The CSPG sedimentology display entitled "The Cretaceous Oil Sands of Canada" was completed in January 1986. This travelling exhibit gives a concise overview of our vast Canadian oil sands resources including topics such as reserves, general geology, and recovery techniques, as well as detailed presentations of each of the main oil sands areas. The display is designed to serve as a teaching aid, and is targeted at senior undergraduate level university students. This exhibit was professionally designed and drafted and presents the information in an attractive, colourful, and easy-to-follow layout.

After several open-house viewings in Calgary, the display embarked on its tour of Canadian universities in February. It was returned in the summer for minor repairs and adjustments. It returned to the road in the fall and should cover approximately six universities per term.

In 1987 the schedule will be much the same. During the summer we plan to make the display available to the many financial contributors for use in their lobbies or other viewing areas. Early in 1987 the sedimentology display committee will begin planning for the construction of another display on a different topic.

STRATIGRAPHIC NOMENCLATURE (Ed Wright, Chairman; Don Kent, Tim Marchant, A. McGugan, A. Embry, E. Niewinski)

Over the past year one paper was submitted for review. Recommendations were made and the paper returned for amendments to the authors.


E. Shultz stepped down after serving over 12 years on the committee. His efforts as committee chairman over the past 9 years were greatly appreciated. R. McWhae (10 years), U. Wissner (+ 12 years), and R. de Caen (6 years) also retired from the committee. The process of replacing the four industry representatives has begun.

ARCHIVES AND HISTORY (J.W. Porter, Chairman; W.P.S. McLellan)

The Archives and History Committee assumed the task of obtaining, for the Glenbow Archives, a copy of every available publication produced by the CSPG or its forerunner the ASPG. A total of 235 past publications including journals, field guide manuals, bulletins, newsletters, memoirs, special publications, maps, cross-sections etc. were selected from CSPG headquarters, and delivered to the Glenbow Archives to augment the material previously submitted by the committee. This has resulted in the Glenbow library having an almost complete set of CSPG publications. Out of print material that should surface in the future and not included in the Glenbow's collection, will be forwarded by the committee to complete their geological library.

Both members of the Archives and History Committee have been active this year in the formation of "The Petroleum History Society". Bill McLellan is the President and Jack Porter, a Director. Aubrey Kerr, another CSPG member, is also a Director. The purpose of The Petroleum History Society will be to collect, conserve and disseminate information relevant to the history of the petroleum industry in Canada and to act in an advisory role to others interested in the petroleum industry. Eventually a Centre for Petroleum Industry History will, it is hoped, materialize, which will serve as a repository for historic records and memorabilia, with attendant research facilities. The Canadian Petroleum Association has kindly offered temporary office space at no cost, including copying, typing, and postage privileges.

PUBLIC SERVICE

MANPOWER COMMITTEE (Bill R. May, Chairman; Graeme Bloy, Paddy Chesterman, Vincent Fera, Kathy Fiess, Tim Green, Phil Hayes, Brian McBroom, Ed Navickas, Chris Stendler, Kim Wallace)

The committee was very active this year, conducting a total of 3 manpower surveys. The first survey was for the executive and addressed such topics as year of graduation, degree and sex. This information is currently being computerized, and the statistical summaries will be made available to the membership.

The second survey was a survey of the society's unemployed members that was conducted in July-
August. The response to this was poor with just over 200 respondents. The survey showed that three quarters of the unemployed members were originally employees and that most had between 5 and 9 years experience. When asked what the society could do for its unemployed the overwhelming response was that the society should become political.

The final survey that the committee conducted was its annual survey of industry’s demand for geologists. This survey was conducted in September-October of 1986 and a questionnaire was sent out to over 400 companies. To date over 40 percent of the companies have responded, employing over 2000 geologists. The results indicate that from August 1985 to August 1986 the overall size of the geological work force has been reduced by over 12 percent and that further reductions were planned for after August 1986. The survey did indicate that some companies, especially smaller companies, anticipated hiring in the spring and summer of 1987. The prospects for recent university graduates is bleak with only a few companies hiring. The committee’s plans for 1987 are to publish the results of the 3 surveys conducted in 1986 and to once again conduct our annual survey of industry.

EDUCATION COMMITTEE (Eleanor Halton, Chairman; Cheryl Levitin-de-Leeuw, Sherman Hirowatari)

The recruitment of resource personnel to fill requests from schools and from the School Board is the major activity of this committee. Requests for assistance received at the CSPG office from educational institutions are forwarded to the committee for action. Assistance provided varied from supplying career pamphlets and resource material for a student’s project, to giving advice on the curriculum in a new community college.

Speakers for seminars, resource people for career days, and guides for field trips have been recruited, and have assisted in planning and assembling resource material for the event. Often, if the activity is repeated, the organization will make their request directly to the geologist who has previously assisted them.

The committee is assembling a set of slides which are available and have been used by volunteers at schools and community organizations. We need more slides. Please give us your extra slides of outcrops, cores, thin sections, generalized maps, cross-sections and diagrams illustrating geological processes, drilling, and production. Slides may be left at the CSPG office.

The committee will be merged in 1987 with Youth Science Foundation and Petroleum Resources Communication Foundation Liaison as the Public Affairs Committee, chaired by Kathy Scales.

JOHN A ALLAN PLAQUE (John Maher, Chairman; Gordon Williams, Al Fischer)

On December 5, 1986 the Honourable Norm A. Weiss, Minister of Alberta Recreation and Parks, on behalf of the Premier of Alberta, along with Dr. Don Cook, President of our society, unveiled a bronze bust of John A. Allan at the official opening of the Mount Allan olympic ski area.

The plaque was presented to the provincial Nakiska Centre at the foot of Mount Allan by our society. The bronze was created by Alberta sculptor Robert Stowell and cast by the Studio West Foundry in Cochrane. A bronze memorium to John Allan, which will be installed with the bust at the Niskika Lodge, reads as follows:

This plaque is dedicated to the memory of John A. Allan after whom Mount Allan was named. John Allan was born at Aubrey, Quebec, in 1884, and was educated at McGill University and the Massachusetts Institute of Technology. In 1912, he was appointed to the University of Alberta and given the task of founding a Geology Department. In 1925, John Allan published the first geological map of Alberta. Throughout his lifetime, John Allan made many contributions to the scientific community, through the Canadian Institute of Mining and Metallurgy, the Royal Society of Canada, and the Canadian Society of Petroleum Geologists.

The last of these he helped establish in 1927. A man of exceptional talents, he gave unstintingly of his time and strength in promoting science in Canada.

Commissioned by the Canadian Society of Petroleum Geologists
Dedicated by the Honourable Don Getty, Premier of Alberta, December 5, 1986
Presentation of this plaque marked the successful completion of the activities of this committee.

TECHNICAL DIVISIONS

COAL GEOLOGY DIVISION (Mike Dawson, Chairman; Keith McCandlish, Secretary/Treasurer; John Dunn, Tim Godfrey, Tom Demchuk)

In 1986 the Coal Division in 1986 held 3 noon-hour talks, and a field trip, and assisted in the organization of the 1986 Western Canada Coal Geoscience Forum, hosted by the Geological Survey of Canada, The Alberta Geological Survey, and the British Columbia Ministry of Energy, Mines and Petroleum Resources. Talks and field trip are listed below:
Jan.  J.R. Nurkowski: Coal Quality and Rank Variation within Upper Cretaceous and Tertiary Sediments, Alberta Plains Region

Mar.  Ian Piwek: Geology of the Coal Mountain Mine

Apr.  Hans U. Bielenstein: Consequences of Borehole Sealing, Techniques for Effective Mine Planning

Sep.  Field Trip: the Coalspur Beds: Exploration and Development of the Upper Cretaceous-Tertiary (Paleocene) Coal Resources of the Central Alberta Foithills

Oct.  Slide Show: Exhibition of Members' slides.

In 1987 the division is planning monthly talks, possibly two field trips, one to Montana/Colorado, and one to Grande Cache, and hope to develop an award for the best M.Sc. thesis relating to coal geology in Canada.

GEOCHEMISTRY DIVISION (Franz J. Altebaumer, Chairman)

The Geochemistry Division meets on an irregular basis when speakers become available. No activities were held in 1986.

GEOMATHEMATICS AND GEOLOGICAL COMPUTER APPLICATIONS DIVISION (Hussan Sherazi, Chairman; Tom Feuchtwanger, Michael Marchand, Bim Waters)

During the 1986 calendar year, lunch-time meetings were the prime focus of this group's activities. The following talks were presented:

Jan. 21  Panel Discussion - Role of Computers in Exploration. The panel comprised W.W. Taylor, V.P. Exploration, Canterra Energy; A.P. Holder, General Manager, Exploration, Home Oil; B. Loney, Division Manager, Geol. Research, Gulf Canada; J. Rivette, Director, Exploration Service, Petro Canada

Feb. 18 Mike Black (Exploration Data Systems, Petro-Canada), "Managing a Multi-source Well Information System"

Mar. 18 R.M. Procter and P.J. Lee (Geological Survey of Canada), "Estimating Canada's Undiscovered Petroleum Resources"

Apr. 29 R.Crain (D&S Petroleum Consulting Group Ltd.), "Artificial Intelligence Systems in the Exploration for Oil and Gas"

May 20 Joe Harris (Geologic Systems Ltd.), "Geologic Independence with a Microcomputer Well Data Management System"

Jun. 17 Joanne Nozick (Gulf Canada Corp.), "Legal Aspects of Data Processing"

The Division co-sponsored the successful 15th Annual Geochautauqua with the International Association for Mathematical Geology. This conference was the primary annual meeting for the International Association for Mathematical Geology. The meeting is described elsewhere in this report.

The turmoil in the oil patch affected the Division for the remainder of 1986 in that the executive resigned, due to departure from the country, or very pressing business. No sessions were held after the October conference but plans were underway to regroup and restart the talks early in the new year.

INTERNATIONAL DIVISION (F.G. Young, Chairman: Don Holmes, Mike Cecile)

Division activities consisted solely of hosting noon-hour technical talks on subjects dealing with international energy or petroleum exploration. In 1986, 8 meetings were held, with attendance varying between 20 and 75. Approximately 60 people are registered with the division for notices of meetings. All meetings were held in the Home Oil Auditorium, on the 29th Floor of the Home Oil Tower in Calgary.

Don Holmes has agreed to take on the job of chairing the division and looking for speakers, starting in January 1987.

Topics covered in the 1986 meetings included Columbia, Central Australia, Niger, S.E. Asia including Papua - New Guinea, southern England, southern China, and Wrangel Island, U.S.S.R. They were as follows:

Feb. 13 Bob Mummery (Teknica Resources), "Use of Inversion Techniques, S.E. Asia Examples"

Mar. 20 Mike Scrutton (Robertson Research), "Hydrocarbon Potential of Colombia"

Apr. 17 David Grybowski (ex Santos), "Overview of HC Exploration Effort in the Cooper and Eromanga Basins, Central Australia"

May 15 Grant Smith (Geological Survey of Canada), "Possible Solutions to Energy Crisis of French West Africa's Republic of Niger: a CIDC Project"

Jun. 19 Geoff Thomas (Consultant), "Rhetic and Liassic Transgressive Shorelines, Southern United Kingdom"

Aug. 20 John Gustavson (Consultant), "Exploration Opportunities, Onshore South China"

Nov. 20  Mike Cecile (Geological Survey of Canada), “Geology of Wrangel Island, USSR - Some Comparisons with Arctic Canada”.

PALEONTOLOGY DIVISION (Tim Marchant, Chairman; Alan Higgins, Secretary; Bert van Helden, Committee Member)

The division continued its program of lunch-time technical meetings during the year. We thank Chevron Canada Resources for providing meeting rooms and Dorothy Stickle of Chevron for organizing our audio-visual needs. Thirty-five members proved their physical fitness by making the three-hour climb up to the Walcott Quarry in the Burgess Shale. The site is currently closed to the public because of fossil theft, and we thank the Yoho National Park authorities and Sue Haid (Park Naturalist) for believing that our group could visit this palaeontological mecca and return with empty pockets.

Our activities in 1986 were as follows:

Jan. 23  E.H. Davies (Bujak Davies), “Palynological Zonation of the Late Jurassic - Early Cretaceous of the Hibernia Field and surrounding area”

Feb. 19  Q.H. Goodbody (Geological Survey of Canada), “Shell facies and brachiopod distribution in the Middle Devonian Bird Fiord Formation, Canadian Arctic”

Mar. 18  P.A. Johnston (Tyrrell Museum), “Lower Devonian bivalves from southeastern Australia”

Apr. 21  D.J.C. Mundy (BP), “Mississippian shelf edge buildups of northern England: paleoecology and sedimentary history”

May 21  J.M. Utting (Geological Survey of Canada), “Palynology of Carboniferous, Permian and Lower Triassic rocks of the Sverdrup Basin, Canadian Arctic Archipelago”

Sep. 06  R. Hall (U. of Calgary) and I. Mcllreath (Petro-Canada), “Field Trip to the Burgess Chale, Yoho National Park”

Oct. 08  M.A. Williamson (Shell), “The Grand Banks - Iberia Connection: evidence from ODP Leg 103 and Eastern Canada”

Dec. 10  Annual Meeting and Dinner: Buzzards Wine Bar: numerous speakers.

Ross McLean succeeded Graham Dolby as the Division’s representative on the Alberta Paleonto-

logical Advisory Committee. Tim Marchant and Ross McLean have been appointed CSPG representatives on the Joint Committee on Palaeontological Monographs, which publishes Paleaeontographica Canadana.

In 1987 we will continue our program of technical meetings and field trips, and we look forward to welcoming an international group of paleontologists to Calgary during the Devonian Symposium in August 1987.

PETROLOGY DIVISION (Jon S. Dudley, Chairman)

The Petrology Division holds monthly talks from January to June. Topics entertained are a broad spectrum including: diagenesis, reservoir engineering and quality, inorganic geochemistry, organic geochemistry as related to inorganic diagenesis. During 1986, 5 talks were held at the Shell Canada Research Centre.

The division co-operated with the Sedimentology Division in arrangements for the 1986 Core Conference. In this effort, members were encouraged to participate with displays involving diagenesis or engineering aspects of reservoirs.

Talks held in 1986 were as follows:

Jan. 14  I.E. Hutcheon (University of Calgary), “Geochemistry of carbonate cements in the Avalon sand, Grand Banks of Newfoundland”


Mar. 11  D.P. James (Esso), “Diagenesis and reservoir quality: study of Upper Jurassic and Manville strata, southwest Alberta”

Apr. 08  N.R. Watts (Texaco), “Evidence of subaerial exposure in the Mississippian Shunda Formation at Canyon Creek, Moose Mountain, Alberta”

Jun. 05  R.G.C. Bathurst (University of Liverpool), “Origin of bedding in shallow water carbonates”.

A similar program is planned for 1987. In addition, some discussions between the Petrology Division and Hugh Greenwood of the Mineralogical Association of Canada are being conducted concerning possible MAC-sponsored sessions at CSPG conferences. This possibility is currently being investigated as to possible common interests between the memberships, and possible session topics. The Petrology Division might act as a liaison with the MAC in this endeavour. The CSPG executive is aware of these discussions and the division will keep it apprised of any developments.
SEDIMENTOLOGY DIVISION (N.C. Meijer Drees, Chairman; A.A. Wegelin, Secretary)

The division organized a successful field trip to Writing-on-Stone Provincial Park on April 26th and 27th. Dale Leckie showed about 10 sedimentologists the spectacular exposures in the Upper Cretaceous Virgelle Sandstone. Characteristic sedimentary structures of the nearshore, lower and upper shoreface, and tidal channel fill facies were seen.

There were no lunch-time lectures this year because the division lost the opportunity to use the Aquitaine Auditorium for its meetings. We are hopeful that this problem will be solved in the near future.

The division, in co-operation with the Petrology Division, organized a successful core conference which is reported elsewhere in this report.

Plans for next year are to locate a downtown auditorium capable of handling up to 50 guests, and to re-institute noon-hour talks. Gary Smith has assumed the chairmanship for 1987.

STRUCTURAL GEOLOGY DIVISION (Deborah A. Spratt, Chairman)

The Structural Geology Division held monthly meetings in the spring and fall of 1986, including its annual informal field trip to an area of structural interest. Eight oral presentations and the field trip provided a basis for regular discussion of structural problems. Speakers and their topics are listed below:

Jan. 06 Ian Moffatt (Gulf Canada), "Tectonic History of the North Bowser Basin and the role of Fluids in Deformation and Diagenesis"
Feb. 10 Don Cook (Geological Survey of Canada), "Balancing Basement-Cored Folds of the Wyoming Province Type - A Unique Solution"
Mar. 10 Peter Gretener (University of Calgary), "Fractures and Their Role in Fluid Flow"
Apr. 07 Andrew Zolnai (Consultant), "Tear Faulting in McConnell Thrust Sheet West of Calgary"
May 05 Jim Aitken (Geological Survey of Canada), "Windermere Taphrogeny - One Man's Catalog of Prejudice"
Jun. 14 Laure Maurel & Deborah Spratt (University of Calgary), "Annual CSGP Structural Geology Division Field Trip: Stratigraphy and Structure in the McConnell Thrust Sheet West of Moose Mountain"
Oct. 06 Robert Daw (Esso Resources), "Structure and Hydrocarbon Distribution of the Adgo Field, Beaufort Sea"

Nov. 10 Willem Langenberg (Alberta Research Council), "The Geometry of Folded and Thrusted Rocks in the Rocky Mountain Foothills near Grande Cache, Alberta"
Dec. 08 Richard Leonard (Shell), "Stratigraphy and Structure Adjacent to the Mount Blackman Gneiss, Rocky Mountain Trench".

A full slate of presentations has been arranged for the spring of 1987 and the division will continue to carry out its mandate of providing a forum for informal discussion of structural and tectonic problems. Ian Moffatt, Gulf Canada Ltd. will replace Deborah Spratt as chairman in June 1987.

LIAISON COMMITTEES

NATIONAL LIAISON COMMITTEE (Eric Mountjoy, Montreal, Chairman; John Gale, St. John's; Phil Hill, Halifax; Jim Noble, Fredericton; Pierre-Andre Bourque, Quebec; Ray Yole, Ottawa; Gene Leavitt, Toronto; Alfred Lenz, London; Bill Brishin, Winnipeg; Don Kent, Regina; Glen Caldwell, Saskatoon; Don Currie, Edmonton; Monica Meding, Vancouver)

The National Liaison Committee met twice during 1986, on May 18th at Ottawa in conjunction with the annual meeting of the GAC, and on December 11th and 12th in Calgary. Reports by members summarized geological activities across the country, particularly as they relate to petroleum geology and the CSPG. At the Calgary meeting the committee heard reports from the Publication Sales Committee, the Manpower Committee, the Life Insurance ad hoc Committee, the Canadian Reef Inventory Project Committee, and the 1988 Expanded Core Conference Committee.

INTERNATIONAL LIAISON COMMITTEE (M.P. Cecile, Chairman; F.G. Young and I.A. Mclreath, in Canada; outside of Canada, continuing from 1985 are: B.C. Dawes (western Australia); Leong Khee Meng (Malaysia and S.E. Asia); E.K. Cullingham (eastern U.S.A.); J.R. Kassube (New Mexico-Colorado); Joe Hull (Denver); L.K. Vopni (Dallas); Shu Yang (Taiwan); T.J. Tan (Houston); Jim Clough (Alaska); Javed Iqbal (Libya); and J.L. Cosgrove (eastern Australia); P.C.M. Wang will be in Taiwan for the next year and will continue on the committee from there. V.L. Budrevics has moved from England to Houston)

During 1986 the International Liaison Committee had an active year, mainly through contacts with international representatives made by Mike Cecile on an opportunistic basis. Principal contacts and activities are as follows:
Jan/86 M.P. Cecile and President D.G. Cook met with Keith Cullingham over lunch. The many things that were discussed included a possible exchange with the Petroleum Exploration Society of New York (PESNY). Keith Cullingham subsequently discussed an exchange with PESNY but was unable to reach any concrete agreement.

Jan/86 M.P. Cecile met with Valdi Budrevics and, among many things discussed, it was decided that an exchange of a North Sea expert for a Beaufort expert might be feasible. Valdi has since moved to Houston and nothing was finalized on this potential exchange.

Jun/86 M.P. Cecile met with Jim Kassube at the CSGP annual conference. Amongst many things discussed were his perception of the CSGP, the role of the International Division, promotion of the CSGP internationally, etc.

Aug/86 J.K. Bryant attended the Circum-Pacific Conference held in Singapore at his own expense and represented the CSGP at the Circum-Pacific Council Meeting. On his return Jim met with the CSGP executive and gave both an oral and written report on both the conference and the council meeting.

Aug/86 The International Liaison Committee continued to place advertisements of international meetings in the RESERVOIR - as in the past these were mainly from the Pacific region.

Aug/86 The speaker exchange with the Rocky Mountain Association of Geologists continues to be successful and will be continued next year. The responsibility for the exchange is now, however, with the technical program committee.

In 1987 we anticipate that the primary function of the committee will be communication concerning international technical activity. In addition the chairman will be asking committee members to reaffirm their membership on the committee. Because of the slump in oil prices we will not pursue any additional exchanges with international groups until such time as it appears economically feasible to do so.

CSGP REPRESENTATIVES TO CANADIAN GEO SCIENCE COUNCIL (W.A. Bell, A.J. Tankard)

Bill Bell and Tony Tankard attended regular meetings of the Canadian Geoscience Council. The objectives of the council are to provide a forum for earth science societies in Canada, to provide advice to governments on geoscience policy, and to work toward the continued health of geoscience in Canada. The many issues discussed included registration and accreditation of geological degrees. W.G.E. Caldwell of the University of Saskatchewan was named as the CSGP representative to the accreditation and registration committee. Other important issues affecting Earth Science in Canada include changes within the Geological Survey of Canada, Canada's commitment to the Ocean Drilling Program, and plans for Lithoprobe.

William Bell has completed his 2-year term representing CSGP on CGC. The Executive Committee has adopted a policy that each year the retiring CSGP representative will be replaced by the immediate Past-President, thus providing the Executive Committee with direct representation on CGC. Accordingly Don Cook will be the new representative.

GEOLOGICAL ASSOCIATION OF CANADA (Don Cook, CSGP Liaison)

The executives of CSGP and GAC, over the past 2 or 3 years, have expressed a desire for greater cooperation and communication between the 2 societies. As a result, the two societies, with the Mineralogical Association of Canada, will hold a joint annual convention in St. John's, Newfoundland in 1988. Planning for this began more than 2 years ago and is proceeding on schedule. The GAC/MAC Annual Meeting in Saskatoon, May 25th to 27th will feature a number of sessions, short courses, and field trips of interest to petroleum geologists, and 2 sessions will be co-sponsored by CSGP and GAC. One is on Reservoir Geology; the other is on Metallic Mineral Potential of the Western Interior Platform.

The Canadian Sedimentological Research Group, a division of GAC, appears to have parallel interests with our Sedimentology Division, and consequently there is potential for mutually beneficial cooperation and communication between these 2 divisions. John Knight is on the CSRG executive and serves as CSGP liaison to that group.

Jack McMillan is our liaison to Geolog, the newsletter of the Geological Association of Canada. It is published and distributed quarterly, and each edition contains 50 to 80 pages of information about earth sciences in Canada, with particular reference to the universities and government surveys.

A group subscription has been in operation since 1977. During 1986, 214 CSGP members subscribed.

ATLANTIC GEO SCIENCE SOCIETY (Don Cook, CSGP Liaison)

The Atlantic Geoscience Society is an independent society which is affiliated with both the
CSPG and the Geological Association of Canada. Through our society’s affiliation with the AGS, 2 jointly-sponsored projects have developed:


The publication of a CSPG Memoir, containing the significant papers presented at the Basins of Eastern Canada Symposium, is planned. This will be a joint publication with AGS. Details appear elsewhere in this report.

Each year the President of the CSPG is invited to participate in a symposium on geological research in Atlantic Canada, sponsored by AGS, and on alternate years to present an address at the annual banquet. In February 1987, Treasurer Bill May represented the CSPG and spoke on the topic of “Recent Industry Downturn and Its Impact on the Geological Community”.

CSEG/CSPG/APEGGA LIAISON COMMITTEE
(Duncan Carswell (CSEG), Chairman; Gordon Williams, Clay Riddell, Bev Pfeffer (CSPG); Bob Comer, John Boyd (CSEG); Rod de Paiva, John Fisher, Larry Staples (APEGGA)

This joint committee was established in response to recommendations contained in the 1982 report of the CSPG/CSEG Joint Committee on Professionalism. The committee consists of three members appointed by each of the three associations, with at least one of each of the CSPG and CSEG representatives holding executive office in their respective societies.

Two topics dominated the work of the CSEG/CSPG/APEGGA Liaison Committee during 1986: (1) establishment of a new Geophysics Syllabus (and thereby specification of the academic qualifications of applicants for registration as Professional Geophysicist), and (2) development of suitable procedures to be followed by the Enforcement Review Committee of APEGGA when dealing with geological and geophysical service companies that appear to be violating the Engineering, Geological and Geophysical Professions (EGGP) Act in their advertising or operations.

During the last two years, a subcommittee of the Liaison Committee, in conjunction with the CSEG, developed a geophysics syllabus outline and program-content paper which were approved by the APEGGA Council in September 1986, and accepted by the APEGGA Board of Examiners in December. These documents expand the range of qualifications in the earth sciences which are acceptable for registration in the Association as a Professional Geophysicist while maintaining appropriate academic standards. These new standards were developed by geophysicists for geophysicists, and should be welcomed by all in the profession.

In 1982, the Enforcement Review Committee of APEGGA began contacting firms that advertised in the “Geological ” and “Geophysical” classifications in the Calgary AGT Yellow Pages without holding Permits to Practice. Because of concerns raised by CSEG and CSPG members of the Liaison Committee in 1983, enforcement activities were put “on hold” until the matter of geophysical registration standards was resolved. During the fall of 1986, consultation among the Enforcement Review Committee, the Liaison Committee and APEGGA Council resulted in new procedures being developed. These procedures will permit the Enforcement Review Committee to enforce the EGGP Act without hindering advertising by companies offering geological or geophysical services but not “practising” geology or geophysics as defined in the Act.

The CSPG members of the CSEG/CSPG/APEGGA Liaison Committee were also called on to represent the society in discussions with the APEGGA Board of Education to choose an earth-science-oriented topic for the annual Education Workshop, to be held in Calgary in 1987.

AAPG HOUSE OF DELEGATES (R.C. Mummery, Chairman; Abby F. Badwi, Robert M. Creed, Ernest M. Manko, James H. Swift, Philip R. Brown (Alternate), Peter W. Hay, E.W. Bogle, Dave Huffman, Gary Freeman, Lionel L. Singleton, John H. Palsgrove, Martin E. Booth, John Hogg, Mic Portugal)

As an International Associate Society of the American Association of Petroleum Geologists, the CSPG is entitled to elect delegates to the AAPG House of Delegates, the number being determined by the number of the CSPG members who are also members of the AAPG. In 1986 the CSPG was entitled to elect 15 delegates to the house.

During 1986, the AAPG delegates had meetings approximately every second month. Several tasks were undertaken. Nominations were submitted for AAPG awards, upcoming AAPG executive elections, and Advisory Board representation. In addition, a strong effort was made to increase communication between the AAPG delegates and the AAPG membership residing in Calgary. A questionnaire was distributed and responses tabulated, regarding the significance of the AAPG to Canadian members. The efforts for increased communication with Canadian AAPG members was recognized by the Tulsa office. This has resulted in personal contact with the current AAPG president. This has allowed additional participation by Canadian members in the current list of AAPG standing committees.
For 1987, the House of Delegates plans include continued efforts to increase communication between the AAPG delegates and Canadian members. A revised questionnaire will be forwarded to the Tulsa office for inclusion in the 1987 Dues Notices. The committee will continue to forward nominations for awards and up-coming executive elections to the Tulsa office. The committee will also continue to review the relationship between the CSPG and AAPG with the hope of increasing communications and awareness of mutual benefits.

NORTH AMERICAN COMMISSION ON STRATIGRAPHIC NOMENCLATURE (T.R. Marchant, C.E. Wright, Commissioners)

The society was represented at the NACSN 41st Annual Meeting in San Antonio, Texas by its Commissioners.

The proposal to include a system of hydrostratigraphic units within the North American Stratigraphic Code is proceeding. Paul Seaber, representing the Hydrology Division of the Geological Society of America, has submitted a note on this proposal to the AAPG Bulletin. This should be published in 1988 and the NACSN will invite comment from the profession. A final decision on these new hydrostratigraphic units will be made by the Commission in 1989.

In 1985-86 the NACSN considered a proposal from John Mann and others (University of Illinois) to create a new lithostratigraphic unit - the submember. Marchant presented the report of the ad hoc committee to the submember to the meeting. The Commission voted to reject this application and to maintain the present system of lithostratigraphic nomenclature.

The Commission considered a request from Brew and Ford (USGS) that form terms of igneous and plutonic rocks (sill, batholith etc.) be eliminated from formal lithostratigraphic nomenclature, and be restricted to informal use only. The Commission appointed a committee to study this proposal and to present a report for consideration at the 1987 meeting.

In related matters, Amos Salvador, of the International Subcommission on Stratigraphic Classification, reported on the revision of the International Stratigraphic Guide. It will include new chapters on Magnetostratigraphy and Uneconformity Bounded Units, with revisions of the chapters on biostratigraphic and lithostratigraphic units (to include metamorphic and igneous rocks). It will also include a glossary of stratigraphic terms.

Susan A. Longacre (AAPG) and Robert H. Fakundiny (AASG) were appointed as Chairman and Vice Chairman of the Commission for 1987.

T.R. Marchant is stepping down as commissioner; his replacement has not been identified.

CANADIAN COMMITTEE - WORLD PETROLEUM CONGRESSES (M.E. Hristevich, CSPG Liaison)

During 1986, the CSPG representative served on the Program Committee of the Canadian Committee. A number of meetings were held during 1986 and the following CSPG members will be participating in the World Petroleum Congress which will be held in Houston from April 26 to May 1, 1987:

Roy Lindseth will be Vice Chairman of the Panel Discussion entitled "Tectonic and Facies Interpretation in Seismic Prospecting".

Doug Gardner will present a paper entitled "Application of Seismic Stratigraphy and Facies Interpretation of Tertiary Sediments, Beaufort Sea".

Ray Price will be Vice Chairman of a session entitled "Earth Science Modelling".

Arne Nielsen will chair a special session on "Primary Migration of Hydrocarbons".

Gerry Henderson, also a member of CSPG, is General Chairman of the Canadian Committee in World Petroleum Congresses.

PETROLEUM RESOURCES COMMUNICATION FOUNDATION (Kathy Scales, Bob Creed, CSPG Liaison)

The Petroleum Resources Communication Foundation (PRCF) was founded in 1975 to increase Canadians' awareness of, and their knowledge of, the petroleum industry in Canada. This was particularly important in 1986, as the unprecedented tumble of world oil prices led to economic chaos in Western Canada, and an industrial upsurge in central Canada.

The CSPG continued to support the PRCF through its membership in PRCF, and through contributions by individual CSPG members, specifically as speakers for the PRCF Speakers Tour. In 1986, 30 volunteers from throughout the oil and gas industry spoke at a total of 40 engagements from coast to coast. This slide presentation was entitled "Canadian Oil: A National Concern".

The PRCF held two courses in 1986: "Fundamentals of Petroleum Technology" for employees of member companies; and "Introduction to the Petroleum Industry", a 1-day pilot seminar held for rural school teachers in Elk Point, in cooperation with the ERCB. As well, the previously published "Our Petroleum Challenge: A New Era" was released in French (10,000 copies distributed). The PRCF also contracted CERI (Canadian Energy
Research Institute) to undertake an employment study on the Canadian petroleum industry (studying numbers of direct, indirect, and induced jobs). Finally, and perhaps most important in terms of national distribution and timeliness, a 4-page briefing paper was issued as an insert to the June 23rd issue of McLean’s, and was distributed to media, politicians and schools as well. This colourful, question-and-answer-format pamphlet was designed to increase the public’s awareness of, and explain the effects of, declining world oil prices.

In 1987, the PRCF will continue to relate information regarding the petroleum industry to the Canadian public, through its successful Speakers Bureau, employee training programs, films, brochures, and statistics (pump prices, employment). As well, a Teachers Guide to “Our Petroleum Challenge” will be published in both French and English in February.

During 1986 Bob Creed turned over PRCF Liaison responsibilities to Kathy Scales. The liaison will be merged with the Youth Science Foundation Liaison, and the Education Committee as the Public Affairs Committee, chaired by Kathy Scales.

BUSINESS COMMITTEES

ANNUAL MEETING (Jeff Reid, Chairman)

The Annual Meeting was held at the Palliser Hotel on February 21, 1986. Ross Lennox presented his Treasurer’s report and Gordon Williams, outgoing President reported on Executive business carried out during the year including outlining a sobering financial picture, with the prospect of the society’s reserves being exhausted by the end of 1987.

After presentation of the society’s annual awards, the incoming President, Don Cook, spoke briefly about challenges for the coming year, focusing particularly on the need to reverse financial trends and the need to restructure the Executive Committee in order to achieve more continuity from one year to the next.

The Annual Meeting was changed to a dinner, business meeting, and dance format in an attempt to increase attendance. Response from the membership was disappointing with attendance of about 150 of which approximately half were guests. For 1986-87 another format will be attempted. The meeting will be split into 2 functions, the first being an Awards Dinner and Dance, a mainly social evening, as a background for presentation of annual awards, the second being a luncheon meeting, the official Annual Meeting, which will present the Treasurer’s report, comments from the outgoing President, and comments from the incoming President. The John Allan hammer and direction of the society will be turned over to the new executive at this meeting.

Jeff Reid stepped down as chairman of the Annual Meeting. He was replaced by Elspeth Snow for the Awards Dinner and Dance, and by Chris LeGallais for the Annual Meeting luncheon.


The Publication Sales Committee had another successful year in 1986. Although CSPG publication sales declined in 1986, a strong increase in AAPG sales pushed total publication sales over the $120,000 dollar mark.

The major factor deemed responsible for the downturn in CSPG publication sales in 1986 was the small number of new publications produced by the society. There were no new memoirs produced in 1986, one new special publication; Palaontographica Canadiana No. 2, produced jointly with the GAC, and lexicon number 6 from Atlantic Canada. It is expected that the publication of two new memoirs in 1987 will increase CSPG sales.

Sales to the United States continued to increase in 1986. The U.S. market now accounts for 46 percent of the total mail order sales. The continued growth in U.S. sales is attributed to attendance, by the Committee, at major U.S. conferences and to new publications catalogue published this year by the committee, and distributed at conventions and to all members.

The committee attended four major conventions during 1986, one in Canada and three in the United States. Sales at the United States meetings (AAPG Pacific Section, Bakersfield, California: AAPG Annual, Atlanta, Georgia: GSA Annual, San Antonio, Texas) were adequate, while sales at the Calgary convention were excellent.

Other duties of the committee, such as liaison with the National Library, distribution of review copies of our publications, advertising, photocopying, and copyright permissions, have continued efficiently.

1987 will mark another year of change for the committee. A full inventory of AAPG publications will be carried in the CSPG office. This will allow members to come into the office and pick up their publication without the 2 to 3 week wait previously experienced. Also, an AAPG member/non-member pricing system will be implemented.

The Publication Sales Committee’s goal for 1987 is a combined total of $150,000 in AAPG and CSPG
sales. Two new Memoirs; Memoir 11 - Shelf Sands and Sandstones, and Memoir 12 - Basins of Eastern Canada, along with one or two special publications and numerous new AAPG publications, should combine to produce an excellent year for the committee.

ADVERTISING COMMITTEE (W.J. Haskett, Chairman)

Advertising Sales responsibilities for the Bulletin of Canadian Petroleum Geology, the Reservoir and other CSPG media have been consolidated under one committee. As 1986 was the inaugural year for the committee, the primary objectives were to assess the present status of advertising in the society and to formulate a marketing strategy for the various CSPG advertising vehicles.

A major objective, set by the CSPG executive, was to make the Reservoir self-sufficient through advertising revenue. Bill Haskett, with aggressive solicitation of advertisements and introduction of advertising innovations, expects to exceed that goal for 1987. Through the fall, several changes to the opportunities available to advertisers were implemented. No longer must clients submit a minimum of four pages of advertising to be guaranteed space in Reservoir. Advertisement space is now sold on a minimum insertion basis of one half page, and all commercial advertisements are printed with a background colour. Special placement orders, such as the back cover, command premium prices. Commencing with the November Reservoir, envelope space was sold. This advertising vehicle is very popular as it allows clients to send preprinted materials directly to our membership. It is expected that this medium will provide significant revenue in 1987.

The Bulletin of Canadian Petroleum Geology continued to provide a small amount of advertisement revenue in 1986. It has a fairly loyal group of advertisers and is expected to provide the same contribution from advertisement sales in 1987.

It has been found that there is a demand for screen advertising at CSPG luncheons. Advertisement space on the two screens at the luncheons has been selling well and is usually booked several months in advance. This is another new revenue stream for the society.

It is anticipated that 1987 will be an excellent year for the Advertising Committee. Through most of 1986 Bill Haskett was the only member of this committee, but several new members have volunteered their time to assist him in 1987. The number of advertisers is steadily increasing, and revenue is expected to be high. As of December 1986 over $31,000 in advertisement space has been booked and confirmed for the 1987 fiscal year. This is a marked increase over previous years and does not include any bulletin revenue.

The CSPG membership provides excellent market opportunities for a vast number of businesses. It is the committee's objective to search out and inform these potential clients as to the availability and ease of targeting their market economically through the many CSPG advertising vehicles.

ADVERTISING BROCHURE (Darcie Greggs, Chairman)

This committee has been placed on hold, and will be inactive until such time as the society is able to approve a budget for it (the current financial position of the society precludes any significant financial commitment). When funding is available, a full committee will be formed and work continued on the brochures.

GRANTS COMMITTEE (Ross Lennox, Chairman)

Projects this year, for which grants were applied, included Memoir 11 (Shelf Sands and Sandstones), Geology of the Calgary Area, and the Atlantic lexicon. To date no grants have been forthcoming for these publications. Most government agencies feel that technical support provided by provincial surveys is a sufficient contribution. Further requests to Alberta Tourism, OCO, and the City of Calgary will be made for "Geology of the Calgary area".

50TH ANNIVERSARY TRUST FUND, BOARD OF TRUSTEES (A.F. Jacobs, Chairman; William A. Bell, A. Neil Hutton, John Maher, Gordon Williams, Marsha Wright, Trustees; J. David Burton)

The 50th Anniversary Trust Fund was established in 1978 to provide a permanent source of revenue for the CSPG Student Industry Field Trip and similar educational endeavours. The fund is registered as a Charitable Foundation, which status allows it to accumulate income and capital gains tax free until 1988 and to receive tax-deductible donations from individuals. After mid 1988 the fund must use its income for the purposes for which it was established, or it becomes taxable - the society's financial circumstances in 1986 forced the Executive to call upon the Fund to defray the costs of the 1986 Student Industry Field Trip. An amount of $12,938 was received in donations during the year.

At yearend (November 30, 1986) the fund stood at $374,420, compared to $329,681 a year earlier. Interest and dividend income were $30,111 and
capital gains amounted to $45,130 at the cost of about $10,000 in brokerage fees and $3,400 in management fees. Net growth of the fund, excluding donations and disbursements, but after deducting brokerage costs was 19.8 percent. It should be noted that, due to the behaviour of the North American stock markets during the past year, this level of increase was essentially reached in mid-1986.

This was the first year of management by Dominion Securities Investment Management Ltd., who took over from Royal Trust a year ago. The board is pleased with the manager's performance and with his market alertness. The board is also pleased with its own decision to change fund managers.

Trustees normally serve 3-year terms. Albert Jacobs, current chairman, and A. Neil Hutton are retiring from the Board of Trustees. Don Cook and Jack McManus will be new members starting in 1987.

50TH ANNIVERSARY FUND SUBCOMMITTEE (J. David Burton, Chairman)

This one-man committee solicits and receives donations to the 50th Anniversary Fund from individuals, corporations, and other sources. Official receipts are issued, and monies are deposited in the fund. An annual tax return for the 50th Anniversary Fund is submitted. Donations of $12,938 were received during 1986.

SPECIAL FUND RAISING COMMITTEE (Bob Creed, Chairman; Fred Calverly, Bob Fraleigh, Gerald Kvil, George Heal, Gordon Holland, Peter Savage, Colin Yeo and over twenty-five additional CSPG members)

This committee was established to raise money for the 50th Anniversary Trust Fund with plans to expand to funding other public oriented CSPG programs. The initial project was the First Annual CSPG Art Event, which, in spite of the economic climate, was a modest financial success. The Art Event resulted in several pieces of commissioned art which were hung in Calgary offices during 1985-86. Additionally an auction and sale of art was held at the Jubilee Auditorium in April 1986. Plans for the Second Annual Art Event commenced in the spring of 1986; an open house for artists was conducted in May and the CSPG once again co-sponsored Art Walk 1986 in September which featured a CSPG sponsored exhibit in the Muttart Gallery. Due to the current state of the industry all plans for future Art Events have been placed on hold.

The committee is currently pursuing additional fund raising avenues which are not contingent on the local economic climate, and these plans will be developed during 1987. The committee has appointed a new chairman for 1987, Bob Fraleigh.

GROUP LIFE INSURANCE (B.J. Pfeffer, Chairman: C.H. Riddell, B.P. Robbins, F.G. Young)

This committee was struck from the Executive Committee to examine the respective merits of two proposals for a group life insurance plan for the society, and to consider the idea generally. The plan offered by Brian Ogden Insurance Limited appears to offer very competitive insurance rates particularly for non-smokers and consequently was recommended to and accepted by the executive for immediate implementation. The CSPG involvement is merely to sanction the plan for its membership. It is in no way involved in its administration. Further, the CSPG derives no financial benefit from the Plan other than revenue that may accrue to the society through advertising in CSPG publications. The plan is endorsed by the executive, and is the only group insurance available through society membership. Nonetheless individual members are encouraged to make their own comparisons, and must accept full responsibility for any decision to purchase from this source. A permanent Group Life Insurance Committee chaired by B.J. Pfeffer has been struck to oversee this new initiative by our society.

MERCHANDISING COMMITTEE (Frank Racicot, Chairman; Marsha Wright, Art Slingsby, Marion Turner)

The purpose of the committee is to design and market high quality promotional merchandise of interest to members. The intention is to sell items at break-even prices or at a very small profit.

This past year has been a learning experience for the committee as a whole and individuals as well. Part of the problems encountered include determining what will appeal to the members, and finding suitable times and places to sell the items, other than at annual conventions. Field trips, luncheons, and an order form in the RESERVOIR have met with a limited degree of success.

Total sales for 1986 were about $2000 with $1300 sold at the convention in June. Our total inventory of products for the last two years was about $4350, in addition to $4804 worth of CSPG ties ordered several years ago.

Future plans include a few new products and finding different methods of distributing them in 1987.

MANAGEMENT TASK FORCE (Gordon Williams, Chairman; Bill Ayrton, Don Cook, Ross Lennox, Clay Riddell)

The Task Force was established last year to devise a new management strategy for the society,
and to recommend ways of improving management effectiveness.

Members of previous Executive Committees from 1980 to 1985 were contacted for suggestions and guidance. In addition, six other societies (AAPG, APEGGA, CAPL, CSEG, GAC, IPAC) were compared to the CSPG in regard to size, financial resources, level of activities and management provisions. This resulted in a report to the Executive Committee in May recommending (1) revision of the makeup of the elected executive and (2) addition of a manager/accountant to the office staff.

The revisions involved eliminating the two existing director positions and creating two new positions designated "Director/Assistant-Treasurer" and "Director/Assistant-Business-Manager". The Director/Assistant Treasurer would normally be the sole candidate for election as Treasurer in the following year, and the Director/Assistant-Business-Manager the sole candidate for election as Business Manager. Continuity in the critical business functions of the society would thus be assured.

By-law changes required to restructure the Executive Committee were approved by the members in a referendum at the end of August, and the elections for the 1987 executive were held under the new structure. As a result of these changes the elected Executive Committee will normally comprise 4 people with experience on the previous year's Executive Committee (Past President, President, Treasurer, Business Manager) and 4 people representing "new blood" (Vice President, Secretary, Director/Assistant-Business-Manager, Director/Assistant Treasurer). Further continuity is provided, as in the past, by the Senior Editor who is an ex-officio member of the Executive Committee.

The Management Task Force will address the remaining aspects of its mandate and complete its work in 1987.

**NOMINATING COMMITTEE** (Gordon Williams, Chairman; B.J. Hicks, N.J. McMillan)

The society's membership approved a restructuring of the executive during 1986, and the Nominating Committee produced the first slate of candidates to be elected to a re-structured executive. The slate presented for the December election was as follows: President, Clay Riddell; Vice-President, Mike Cecile and George Eynon; Secretary, Don Currie and Dave Flint; Treasurer, Bill May; Business Manager, Rick Young and Rory Hankel; Director/Assistant-Treasurer, Alice Payne; Director/Assistant-Business-Manager, Lynne Ibach and Mary Given.

No candidates were nominated by the membership at large. The mail ballot totaled 1080 ballots. The newly elected executive consists of: President, Clayton H. Riddell; Vice-President, Michael P. Cecile; Secretary, David W. Flint; Treasurer, W.R.(Bill) May; Business Manager, F.G.(Rick) Young; Assistant Treasurer, Alice V. Payne; Assistant Business Manager, Lynne E. Ibach; Past President, Donald G. Cook; Senior Editor, ex-officio, James Dixon. The new executive will take office at the Annual Meeting on February 25, 1987.

**MEMBERSHIP COMMITTEE** (Linda Southwood, Chairman; Clay H. Riddell, F.G. (Rick) Young, David Cairns)

Membership statistics for the last five years are presented below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Active</th>
<th>Associate</th>
<th>Student</th>
<th>Emeritus</th>
<th>Corporate</th>
<th>Honorary</th>
<th>Total</th>
<th>Subscribers</th>
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<tr>
<td>1982</td>
<td>3255</td>
<td>3293</td>
<td>3303</td>
<td>3404</td>
<td>3448</td>
<td>212</td>
<td>3726</td>
<td>427</td>
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<td>1983</td>
<td>3255</td>
<td>3293</td>
<td>3303</td>
<td>3404</td>
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<td>3404</td>
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<td>1985</td>
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<td>212</td>
<td>3726</td>
<td>427</td>
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Membership in the society has shown a slight decline this year but remains above 4000. The decrease is not unexpected with the severe downturn in the industry during 1986. Statistics are incomplete for 1987 but comparisons from January 1986 to January 1987 indicate a further decline of greater than 125 members for 1987. Many employers have reduced the size of their staff. Some people have moved on to other disciplines and others have stayed with us for the contacts and support. Changes in the fee schedule were initiated this year to help deal with the difficult financial position the society faced. We hope the two-tiered fee will be of assistance to unemployed members.

Clay Riddell, Rick Young and David Cairns joined the committee this year. We are concerned with a significant decline in corporate memberships, and Clay Riddell has plans to mount a corporate membership drive. We hope that businesses will recognize the importance of having a strong society and the significance of the contributions that the society makes to petroleum geology, and to employee education and training. Rick Young, as an AAPG membership liaison this year undertook the task of reaching Canadian AAPG members who were not members of the CSPG and encouraging their participation. We were pleased to welcome David Cairns, Chairman of the University of Calgary's (undergraduate) Rundle Group as a student liaison and an advisor.

Plans for 1987, in addition to the Corporate Membership drive, include encouraging a larger
student participation. We wish to thank all members for your continuing support and for encouraging others to join. A special thank you to Sheila and Christine in the CSPG office whose support work is essential to the Membership Committee.

MANUAL OF OPERATIONS (Gordon Williams, Chairman)

The Executive Committee sent each operating committee its Terms of Reference at the beginning of the year, with a request to review the terms and to submit revisions to the executive, for approval. Only a small number of committees have submitted changes. The most significant changes were approved by the Executive Committee with regard to outlining the duties of Director/Assistant-Treasurer and Director/Assistant-Business-Manager, and modifying the duties of Treasurer, and Business Manager. All of these changes were made necessary by by-law changes, to restructure the executive, approved by the membership in August 1986.

CSPG BLUE BOOK (Gordon Williams, Chairman)

The Blue Book, a comprehensive listing of all activities performed by members of the society, was being updated at the end of the year. By early 1987, records should be complete to the end of 1986, and available on the office computer.

DISCIPLINE COMMITTEE (Gordon Williams, Chairman)

The purpose of this committee is to consider matters relating to the ethical behaviour of members or officers of the society and to recommend to the executive disciplinary action. No matters were brought forward for review by this committee during 1986.

SOCIAL EVENTS

LOGAN DAY (Gerald Sullivan, Chairman; Rene Levesque, Doug Good, John Maher, Frank Chappel, Elspeth Snow)

The Logan Day Committee scheduled the 9th annual family outing to celebrate Canada's National Geology day on September 26-28, 1986. The event was cancelled due to inclement weather and postponed to 1987.

Next year, Logan Day will be scheduled for late August or early September in the hopes of avoiding snow. The schedule of events will be similar to previous years.

PAST-PRESIDENTS' DINNER (Gordon Williams, Chairman)

The 12th annual Past-Presidents' Dinner was held in September 1986, in the Penthouse of the Palliser Hotel. The evening was attended by Past-Presidents of the society, including the oldest living member, Harry M. Hunter, who was President in 1939. After cocktails and an enjoyable dinner, Past President Gordon Williams introduced members of the current executive present, and President Don Cook reviewed society activities particularly the restructuring of the Executive Committee, and the need for and progress toward balancing expenditures and revenues through cost reductions on one hand and increasing revenues on the other. Discussion followed.

Group photographs of the Past-Presidents and current President were taken for the first time in a number of years.

LADIES' GOLF TOURNAMENT (Debra Eitzen, Chairman)

The First Annual Ladies' Golf Tournament was held on August 14, 1986 at the Douglasdale Estates Golf Course. The tournament was a resounding success. Low gross score was won by Shannon O'Hama and Charlene Haines. Low net score was won by Dawn Arndt and Debra Eitzen. Sincere thanks to our contributors and special thanks to all of our participants. We look forward to another great tournament for 1987. For anyone interested in working on a tournament committee, please contact Debra Eitzen at Canadian Worldwide Energy Ltd, 281-5500.


The 1986 CSPG Men's Golf Tournament was held on June 4th, 5th and 6th at the Calgary Elks Golf and Country Club. It was oversubscribed as usual and those who participated had an enjoyable time. Thanks go to the organizing committee, sponsors and golfers, who made the tournament successful, once again. We will be looking forward to next year's tournament on June 3rd, 4th and 5th, 1987, with great anticipation.

SQUASH TOURNAMENT (Fred Pember, Chairman; Bruce Shultz, Del Pohlman, Kim Roman)

Although the activities of the committee are peripheral to the principal involvements and designs of the society, the tournament is recognized by all those who have participated as a very
worthwhile endeavour for reasons related to sportsmanship, friendship, and genuine fun. The 1986 event was held during April at the Mayland Club in Calgary and was an overwhelming success with about 100 participants. Although the social aspects of the tournament are emphasized, it is interesting to note the number of participating geologists who excel at the sport, many of whom are ranked provincially. The 4th Annual version is slated for March 1987. Greg Laughlin will replace Kim Roman on the committee. We hope to see you there.