

**Minutes of the 4<sup>th</sup> Annual Meeting of the Western Canada Sedimentary Basin  
(WCSB) Workshop of Provincial and Federal Geological Surveys**

Thursday, June 5, 2003  
Room 3100 – 3<sup>rd</sup> Floor  
444-7<sup>th</sup> Avenue, S.W. Calgary

**Chairperson:** Derek Brown, Director, Ministry of Energy and Mines

**Present:**

BC Ministry of Energy and Mines -- Fil Ferri (recorder), Mark Hayes and Derek Brown;  
Alberta Geological Survey -- Stefan Bachu, Dinu Pana, Fran Hein, Matt Grobe, Reg  
Olson, Rick Richardson, and Kevin Parks;  
Alberta Energy and Utilities Board - Cynthia Langlo;  
Saskatchewan Geological Survey - Chris Gilboy, Kim Kreis, Steven Whittaker and Per  
Kent Pederson;  
Manitoba Geological Survey - Ruth Bezys;  
GSC (Calgary) - Benoit Beauchamp, Dave Hughes, Martin Fowler and Tony Hamblin;  
National Energy Board - Jim Davidson and Brent Hogue; and,  
US Geological Survey - Jennie Ridgley.

**Summary of 2003 ACTION ITEMS and other suggestions:**

**1.1 Identification of Areas of Common Interest**

- Provinces identify their 5 most important gaps in energy geoscience
- Meet with Federal representatives and review common goals
- Look at supply and demand trends 5-10, 15 or 20 years down the road.

**1.2 Improvement of Inter-Agency Cooperation and Industry Involvement**

- Provinces to voice their needs to federal ADM and DM's (i.e. return GSC programs in the WCSB)
- Derek Brown to try to get WCSB onto the agenda for the Council of Energy Minister's meeting in September, 2003 (Halifax)
- Get CAPP on board to advocate energy geoscience
- Joint CSPG poster showing WCSB and each province's related programs
- Find an industry advocacy group to support energy geoscience (Mike Cecile and Rick Richardson are now starting this with SEPAC)

**1.3 Draft Brochure**

- Rick Richardson to circulate the "draft brochure"

**1.4 Structural Compilation Project**

- Reg Olson to lead/coordinate

## **1. Welcome and Introduction**

Derek Brown welcomed everyone and attendees introduced themselves. The agenda was approved as submitted.

It was agreed to review last year's action items and to record any new action items for this year. A number of items were discussed at the start of the meeting, including:

- What is the overall goal of the group?
- Do we need to record action items or is it a forum for information exchange?
- Stakeholder issues need science to support or refute disputes

## **SOME HIGHLIGHTS OF DISCUSSIONS THROUGHOUT THE DAY:**

### **Tectonic Elements WCSB, CBM, Data Integration**

Reg Olson wanted to review minutes to see if several of the action items from 2002 workshop were addressed.

Manitoba will try and follow through on tectonic study of WCSB for Saskatchewan and Manitoba based on federal funding.

- Benoit Beauchamp and Martin Fowler will ask others what they want from GSC
- Saskatchewan needs GSC facilities and expertise as these are lacking in provincial surveys
- Stefan Bachu stated that the WCSB Workshop goals have not been achieved and perhaps the focus should be changed.
- Chris Gilboy felt the workshop is still a good idea and that we must raise the profile of energy geoscience and get GSC involved in the WCSB again.

### **Derek Brown**

Should industry be invited? If so we need more results to present.

### **Derek Brown**

As larger companies leave WCSB, smaller companies will need material and publications from provincial and federal surveys.

### **Benoit Beauchamp**

ADM, DM's in federal government very sensitive to needs of provinces, it is up to provinces to voice their needs (e.g. GSC programs in WCSB) -- they will listen!!!

### **Reg Olson**

Must come out of meeting with clear goals, for example that the tectonic elements of WCSB be one product we collectively undertake.

### **Jenny Ridgley**

American states are organized into regional working groups, which meet with US Federal representatives to review and coordinate common goals. Policy makers should be educated about potential supply problems for gas in immediate near future.

### **Benoit Beauchamp**

Must tell government people that geoscience is necessary for new discoveries – right now their belief is that market will drive this. Stressed the need for creativity.

### **Mark Hayes**

Supply of natural gas is an issue.

### **Jenny Ridgley**

Agrees with Mark that not a lot of reserves are coming on steam, only 10 years of reserves. WCSB is viewed as main source of gas and we need geoscience to help find new gas and unconventional resources.

### **Saskatchewan Representative**

Suggests an action item to undertake to put ‘energy geoscience’ and ‘supply of gas’ as topics at next ministers meeting. Get CAPP on board to advocate geoscience.

### **Jennie Ridgley**

Energy, Coal and Oil and Gas: a large chunk goes to resource assessment nationally for national security purposes. These assessments are done in a short time frame, under 2 years. This gives industry ideas as to where to go next. USGS looks for multidisciplinary and multiple group projects.

\*Science is a part of resource assessment.

### **Projects include:**

- **World Energy** - assessments are snapshots (done quickly) to have a broad look at what is there; have done WCSB and predict that supply will not be there in next few years;
- **Shallow Biogenic Gas** - study how biogenic gas accumulations grow and over how long;
- **Petro Mod Modeling** - 1, 2, and 3 models of hydrocarbon generation migration and mapping to reflect depositional and tectonic history;
- **Gas Hydrate** - learn enough about geology, etc. for production and part of Malik test well; and
- **Resource Methodology** - work with Canadian Potential Gas Committee regarding methodology and how they differ.

### **Martin Fowler**

Asked provinces to identify the 5 most important gaps in energy geoscience.

**Derek Brown**

Suggested that we have a poster at CSPG, showing WCSB and each province's related projects.

**Benoit Beauchamp**

Must make group a bit more formal and have a more formal name. Must have a yearly action result and a rotating chairperson.

**Jenny Ridgley**

Provinces must decide on priority items at the federal level. What funds do we need?

**Benoit Beauchamp**

GSC has personnel, but no funds.

**Jenny Ridgley**

Provinces must decide how to spend money and if not enough how to work around it. Provinces should integrate and coordinate their projects.

**Benoit Beauchamp**

Suggested that Dave Hughes give Energy Supply problem to Energy ministers and tie Energy geoscience to supply problems.

**Derek Brown**

Wants to champion getting energy geosciences on the agenda at the Minister's meeting or get industry executives to push for this.

**Rick Richardson**

Put a brochure together on WCSB and show how provinces are working together.

**Mark Hayes**

Look at supply and demand trends 5-10 and 15 or 20 years into the future. Show that we must start doing something about this now. Brochure will be needed by September, 2003.

**Reg Olson**

Will facilitate basement study with people from each province.

**Benoit Beauchamp and Rich Richardson**

Benoit will spear head trying to find an industry advocacy group to support energy geoscience.

**Chris Gilboy**

To write a letter to Federal Minister regarding increasing Federal programs in WCSB; ask high-level CSPG members to show their support by writing to the Federal government as well.

**Derek Brown**

Perhaps all provinces should write to the federal government to get their attention.

**Dave Hughes**

Will distribute his energy supply presentation.

**Chris Gilboy**

Focus on the unconventional resource.

**Rich Richardson**

Has put energy geoscience issues onto the National Geological Survey's committee agenda.

**Dave Hughes**

Action item to get provincial Ministers to write to Federal Minister as above.

**2. Program Review and Update**

Copies of the Power Point Presentations and final minutes will be sent to representatives of each organization. All presentations will be saved onto one CD and distributed to attendees with the 2003 minutes.

**Review last year's minutes, action items and issues. Program Review**

(Please see individual PowerPoint Presentations)

Issues include:

- Coalbed Gas (Natural Gas from Coal) – important to BC, Alberta, less in Saskatchewan and none in Manitoba (2001)
- Data Integration(2001)
- Structural setting of WCSB (2002)
- Advancement of communication initiatives by Jan boon (2001)

**3. Progress Review**

**3.1 Geological Storage/Sequestration (CO2) – Kyoto and Climate Change Geoscience components – Stefan Bachu**

- Means of Geological Sequestration or Storage of CO2
- Geological Sequestration Options
- Worldwide Experience with Geological Sequestration of CO2
- Alberta's Climate Change Taking Action
- CO2 Emission Reductions
- Energy Research and Technology Areas

**3.2 Overview of Alberta - Reg Olson**

- Alberta Geological Survey has 3 sections: 2 technical energy sections and one mineral section. Energy Section – selected aspects of the energy section is to

bring geoscience and assist energy. Mineral Section: enhancement of mineral exploration activities in Alberta.

- Structural Compilation – started in 2000 on the mineral side, consists of broader information. The Primary Information: 55 degrees north – this material is all on a database.
- This year – extend structural compilation to Southern Alberta focusing on the Prairie region and northeastern Alberta. Database information on faults as well as there is a report available.

### 3.3 Manitoba Survey – Ruth Beyzs

- Sedimentary and Industrial Minerals Section of Geological Survey
- Mapping of aggregate and industrial mineral resources to aid in exploration and to ensure these are not alienated during land use planning
- Proposed stratigraphic and scout drilling within WCSB and Hudson Bay Basin
- Phanerozoic mapping and stratigraphic data base construction
- Surficial geology compilation
- Limited resources

### 3.4 Saskatchewan Summary – Chris Gilboy, Kim Kreis, Steve Whitaker and Per Pedersen

- Expand Energy and Geoscience program from a Weyburn-specific focus to one that is province wide
- Must ensure there is a will and need for this from government (provincial and federal) and industry groups
- Saskatchewan government is committed to this concept and has increased funding to the Petroleum Geology Branch
- Started a Technical Advisory Committee
- Continue with Federal/Provincial TGI Programs
- Develop and implement Federal/Provincial Cooperative Geological Mapping Strategy within the province.

### 3.5 GSC and New Energy Synthesis Project – Benoit Beauchamp and Martin Fowler

### 3.6 BC Organizational Changes and WCSB Activity – Derek Brown, Mark Hayes and Fil Ferri

### 3.7 US Geological Survey – Jennie Ridgley

### 3.8 Other issues – Derek Brown

### 3.9 Develop Action Plans – All

**Western Canada Sedimentary Basin Workshop #4  
Thursday, June 5, 2003, Calgary**

**Agenda**

- 8:15 – 8:30 **Muffins and coffee**
- 8:30 – 9:00 **Introduction: Challenges, future trends, our role, review agenda** *Derek Brown*
- 9:00 – 9:15 **Review last year’s minutes, action items and issues - All**
- 9:15 – 9:45 **Special session – Kyoto and Climate Change Geoscience components (ex. acid gas/CO2 geological storage and monitoring) Review Alberta’s “Climate Change Taking Action”** *Stefan Bach*
- 9:45 – 10:15 **Overview of Alberta - Rick Richardson, Cynthia Langlo, Brent Hogue**  
□ *Kevin Parks and Matt Grobe, Coalbed Methane*  
□ *Reg Olson, Basement Structure in the WCSB*
- 10:15 – 10:30 **Nutritional Break**
- 10:30 – 10:45 **Manitoba Summary - Ruth Bezys**
- 10:45 – 11:15 **Saskatchewan Summary - Chris Gilboy, Kim Kreis, Steve Whittaker, Per Pedersen**
- 11:15 – 11:45 **GSC and New Energy Synthesis Project - Benoit Beauchamp, Martin Fowler**
- 11:45 – 12:15 **BC Organizational Changes & WCSB Activity - Derek Brown, Fil Ferri, Mark Hayes**
- 12:15 – 1:15 **Lunch (Provided)**
- 1:15 – 1:45 **US Geological Survey - Jennie Ridgley, USGS/Cross Border Studies**
- 1:45 – 2:15 **Other issues for discussion (if appropriate) – Geopolitics, landuse, stakeholder issues - Derek to facilitate**
- 2:15 – 3:15 **Develop Action Plans**
- 3:15 – 3:45 **Nutritional break and farewells until next year**

**Future Topics:**

- CSUG – role, capacity, cooperative projects
- Groundwater – Alberta “Water for Life” geoscience focus
- Aggregate for infrastructure in NEBC

**Ground Rules for Meeting:**

1. Discussions should focus on WCSB only
2. Emphasize technical material
3. Energy-related

**ATTENDEES**  
**June 5, 2003 WCSB WORKSHOP**

<b>ATTENDEES</b>	<b>AFFILIATION</b>	<b>EMAIL</b>
Stefan Bachu	AGS/EUB	<a href="mailto:Stefan.bachu@gov.ab.ca">Stefan.bachu@gov.ab.ca</a>
Dinu Pana	AGS/EUB	<a href="mailto:Dinu.pana@gob.ab.ca">Dinu.pana@gob.ab.ca</a>
Matt Grobe	AGS/EUB	<a href="mailto:Matt.grobe@gov.ab.ca">Matt.grobe@gov.ab.ca</a>
Reg Olson	AGS/EUB	<a href="mailto:Reg.olson@gov.ab.ca">Reg.olson@gov.ab.ca</a>
Kevin Parks	AGS/EUB	<a href="mailto:Kevin.parks@gov.ab.ca">Kevin.parks@gov.ab.ca</a>
Rick Richardson	AGS/EUB	<a href="mailto:Rick.Richardson@gov.ab.ca">Rick.Richardson@gov.ab.ca</a>
Fran Hein	AGS.EUB	<a href="mailto:Fran.hein@gov.ab.ca">Fran.hein@gov.ab.ca</a>
Cynthia Langlo	Alberta EUB	<a href="mailto:Cynthia.langlo@gov.ab.ca">Cynthia.langlo@gov.ab.ca</a>
Derek Brown	BC MEM	<a href="mailto:Derek.brown@gems6.gov.bc.ca">Derek.brown@gems6.gov.bc.ca</a>
Mark Hayes	BC MEM	<a href="mailto:Mark.hayes@gems3.gov.bc.ca">Mark.hayes@gems3.gov.bc.ca</a>
Filippo Ferri	BC MEM	<a href="mailto:Fil.ferri@gems3.gov.bc.ca">Fil.ferri@gems3.gov.bc.ca</a>
Ruth Bezys	Manitoba GS	<a href="mailto:rbezys@gov.mb.ca">rbezys@gov.mb.ca</a>
Benoit Beauchamp	GSC-Calgary	<a href="mailto:bbeauch@nrcan.gc.ca">bbeauch@nrcan.gc.ca</a>
Martin Fowler	GSC - Calgary	<a href="mailto:mfowler@nrcan.gc.ca">mfowler@nrcan.gc.ca</a>
Dave Hughes	GSC-Calgary	<a href="mailto:dhughes@NRCan.gc.ca">dhughes@NRCan.gc.ca</a>
Tony Hamblin	GSC - Calgary	<a href="mailto:thamblin@nrcan.gc.ca">thamblin@nrcan.gc.ca</a>
Per Kent Pedersen	SIR	<a href="mailto:ppedersen@ir.gov.sk.ca">ppedersen@ir.gov.sk.ca</a>
Kim Kreis	SIR	<a href="mailto:kkreis@ir.gov.sk.ca">kkreis@ir.gov.sk.ca</a>
Chris Gilboy	SIR	<a href="mailto:cgilboy@ir.gov.sk.ca">cgilboy@ir.gov.sk.ca</a>
Steve Whittaker	SIR	<a href="mailto:swhittaker@ir.gov.sk.ca">swhittaker@ir.gov.sk.ca</a>
Brent Hogue	NEB	<a href="mailto:bhogue@neb-une.gc.ca">bhogue@neb-une.gc.ca</a>
Jim Davidson	NEB	<a href="mailto:jdavidson@neb-one.gc.ca">jdavidson@neb-one.gc.ca</a>
Jennie Ridgley	USGS	<a href="mailto:Ridgley@usgs.gov">Ridgley@usgs.gov</a>