

# Lillooet Geosciences Workshop

Hosted by:

The District of Lillooet; Village of Lytton; and Area A, Squamish-Lillooet  
Regional District. Co-sponsored by Geoscience BC.

October 2005

The Beringer Group

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## *Summary*

On October 13th, 2005 twenty-five participants from industry, government, major geoscience producing agencies and the local community met in Lillooet for a one-day geoscience workshop. With an open-house scheduled for the afternoon to present the morning's findings, the intent was to engage the local community in geoscience. The workshop was unique in that it was the first time in B.C. that community representatives have met with industry, non-government organizations and government representatives to identify geoscience surveys for their region for the ultimate purpose of attracting mineral exploration investment. This document, aimed at the broader community, describes the importance of geoscience as it relates to attracting exploration investment and captures the specific projects for the Lillooet area defined and prioritized by the workshop's participants for this end.

Geoscience is the study of the earth and related processes; including ground water, soils, natural hazards (such as earthquakes and landslides), and natural resources (such as minerals, metals, coal, oil and gas). When referring to geoscience in the present context, it refers to "minerals geoscience" which consists of studies, such as geological mapping, geochemistry and geophysics, which will aid industry in the search and evaluation of mineral and metal deposits.

The primary objective of the workshop was to define projects that would serve to increase the attractiveness of the area for mineral exploration. Thus the core of the session was to generate ideas. After presentations from a series of speakers, representatives from the Ministry of Energy and Mines, Mining and Minerals Division; BC Geological Survey; Geoscience BC; and the Geological Survey of Canada, the participants divided evenly into three breakout groups to brainstorm potential projects. Given the time limitations, emphasis was placed on producing and capturing potential projects rather than discussion and debate of each project's relative merits. Each breakout group was composed of at least one speaker as well as a mix of representatives from government, industry, and the local community.

The participants identified twenty-five projects and one "principle"; an idea that wasn't a discrete initiative but something that could be a component of many other projects. Voting was then conducted on each of the projects. Included in the voting process were three projects identified for the Lillooet area in the "Five Year Minerals Geoscience Plan for British Columbia," produced by the BC Geological Survey and Geological Survey of Canada in 2001. Twenty-five separate projects were ultimately voted on as several similar projects were suggested by different groups.

The voting was not designed to order the projects in a strict ranking of highest priority to lowest but rather the point system was intended to give an idea of the relative importance assigned by the group.

The intention is for the various stakeholders in the workshop to use the results of the group effort to aid in their decision-making about projects to undertake, fund or seek funding for, recognizing that the projects proposed and the scores reflect the priorities of only those present, under the prevailing market and commodity conditions. Endorsement by the local community, government, and First Nations are being sought as a next step.

## *Introduction to Geosciences*

### *What is 'geoscience'?*

- Geoscience is the study of the earth and related processes; including ground water, soils, natural hazards (such as earthquakes and landslides), and natural resources (such as minerals, metals, coal, oil and gas).

In the present context, it refers to “minerals geoscience” which consists of studies, such as geological mapping, geochemistry and geophysics, which will aid industry in the search and evaluation of mineral and metal deposits.

### *What is the relationship between geoscience and investment in exploration?*

- Companies use geoscience data to determine where they will expend their exploration efforts. Given that there is a limit to funds available for exploration, companies must make a decision on where best to spend their exploration dollars. All else being equal, companies are more likely to invest in exploration in an area where good geoscience data already exists. Good geoscience information improves our understanding of mineral potential, thus allowing industry to better direct their exploration efforts, and increases their chances of discovering mineral deposits.

The entire lifecycle for mining can be viewed as being comprised of six stages:

- Geoscience
- Exploration
- Discovery
- Development
- Production
- Reclamation

Based on the best available data (geoscience), companies and prospectors choose areas to focus their search for mineral deposits (exploration). Once a financially viable deposit is found (discovery) then preparations are made (development) for extraction of the resource (production). When mineral extraction is complete, the mine is returned to its natural state (reclamation). Each stage is dependent on the last and geoscience is necessarily the starting point for every cycle.

Mining is a globally competitive business. Not only does BC compete with other jurisdictions in Canada in attracting exploration investment, it does so with countries as far away as Australia. Geoscience can be thought of as a marketing tool to attract the interest of exploration and mining companies to an area. Geoscience surveys are the foundation for mineral exploration and development.

### *Who produces public minerals geoscience?*

- There are several agencies involved in producing public geoscience data in BC: British Columbia Geological Survey (BCGS, a Provincial body); Geological Survey of Canada (GSC, a Federal body); and Geoscience BC (a non-profit, non-government). Each of the above agencies:
  - Gather or support the gathering of geoscience information through field surveys
  - Interpret, deliver, and market the collected geoscience information.

- Have as part of their mandate attracting industry investment in resource exploration in BC

Universities also produce public geoscience data.

*What is the benefit to the local community of supporting the collection of geoscience data?*

- Exploration for mineral deposits provides economic benefits to host communities through use of local services and facilities and employment of local people. Better geoscience data improves the chances of investment in exploration and potential development. A multiplier effect exists for every dollar invested in geoscience. Studies in Canada and Australia have shown a \$3 to \$15 dollar return on investment for every \$1 spent on public geoscience. For example, in an area south-east of the Mt. Polley mine near Quesnel, an \$100,000 airborne survey led to more than 700 claims being staked and \$500,000 being spent by industry in the first nine months.
- New mines bring economic development to an area through well-paid jobs, and significant secondary employment in ancillary services and local industry, improvements to infrastructure and transportation, and add to the local tax base. In some cases there is a 2 or 3 jobs produced for each job at the mine.

As a side-benefit, geoscience information is also useful for making other natural hazard, land-use, natural resource and environmental decisions.

*Why do we need more geoscience surveys in the Lillooet area?*

- Although some geoscience surveys have already been conducted in the Lillooet area, proposed new studies will fill holes in the existing data and improve the overall knowledge of the geology in the Lillooet area. These gaps in the information may relate to the age, quality, level of detail of current information, the types of studies conducted, and the area covered.

### *Workshop Approach*

The primary objective of the workshop was to define specific projects that would serve to increase the attractiveness of the area for mineral exploration. The core of the session was the generation of ideas.

In advance of the breakout groups the following speakers delivered fifteen-minute presentations:

- Mayor Kamenka and Mayor O'Conner: Welcome, background and purpose of the workshop
- Mike Cathro, Ministry of Energy and Mines, Mining and Minerals Division, Kamloops: Review of mineral exploration and development opportunities in the Lillooet area
- Dave Lefebure, Chief Geologist and Brian Grant, Manager - Geoscience Initiatives, BC Geological Survey: Review of existing provincial and federal geoscience information in the Lillooet area and the "Five Year Minerals Geoscience Plan for B.C."
- Rob Stevens, Interim Executive Director, Geoscience BC: Role and function of Geoscience BC.

- Lynn Anglin, Acting Director, Pacific Region, Geological Survey of Canada, Vancouver: Role of the Geological Survey of Canada.

The participants divided evenly into three breakout groups to brainstorm potential projects. Given the time limitations, emphasis was placed on producing and capturing potential projects rather than discussion and debate of each project's relative merits. Each breakout group was composed of at least one speaker (from a geoscience producing agency) as well as a mix of representatives from government, industry, and the local community.

Voting was then conducted on each of the projects. Included in the voting process were three projects identified for the area in the 2001 "Five Year Minerals Geoscience Plan for British Columbia," produced by the BC Geological Survey and Geological Survey of Canada (BC Ministry of Energy and Mines Information Circular 2001-2). These three projects are identified below as being created by Group 4.

The voting was not designed to order the projects in a strict ranking of highest priority to lowest but rather the point system was intended to give an idea of the relative importance assigned by the group. Each participant was able to cast one vote per project (high, medium, or low, with no abstentions) with their vote multiplied by a weighting (5 points, 3 points, 1 point, respectively) in order to come to the final total. Nineteen workshop members participated in the voting, so the possible score for any project ranges from 19 to 95.

### *Key Geoscience Projects and Activities Recommended*

The specific projects recommended by the session participants are listed in Appendix 2 of this report. The majority of the projects suggested can be divided into three basic types, or some combination thereof:

1. Geology: mapping the rocks and soils
2. Geochemistry: analyzing rocks, soils and sediment for metals or minerals
3. Geophysics: scanning the earth's crust to evaluate the physical properties of the underlying rocks such as their magnetic character.

More specific terminology may be used in describing the types of activities proposed, for example: geological mapping, regional geochemical surveys, collection of sediments from streams, airborne magnetic studies, remote sensing and imagery, radiometrics etc. but these all refer essentially to the above three basic categories of studies.

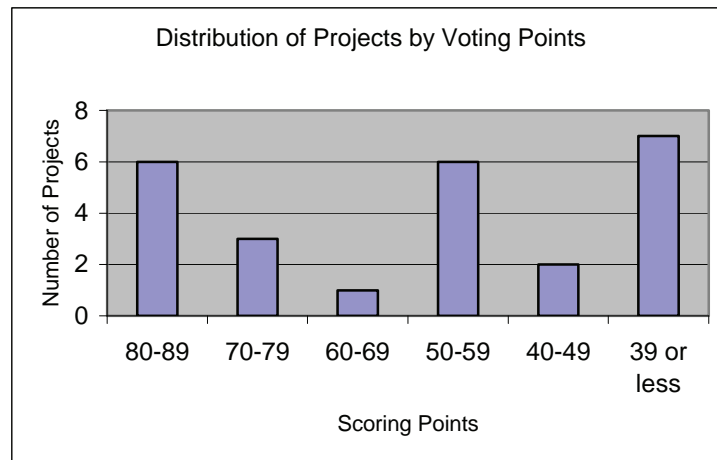
Other types of activities and initiatives recommended included:

- Market studies: the various aspects of getting industrial minerals to market, identifying who is buying what, distance to markets, developing partnerships, etc.
- Community/ First Nations / University Student training: engaged on a paid basis in geoscience survey activities to give new-entrants to the industry on-the-job field training.
- Marketing: publicizing of successes and increasing awareness of industrial mineral potential in the area.
- Inventory of traditional First Nations territory: compilation of a lay-persons guide and mineral inventory

The participants identified 25 projects and one "principle"; an idea that wasn't a discrete initiative but something that could be a component of many other projects. By including the three projects from the 5-year plan and voting only once on duplicate projects a points rating was given to 25 separate projects. Similar projects generated by different groups are identified in the lists with the same letter (e.g. Group 1, Project 5 and Group 2, Project 3 are both tagged with a 'b').

The following observations are drawn from the scores assigned to the 25 projects:

- None of the projects received a unanimously 'high' rating or a unanimously 'low' rating.
- The exact point score for each initiative is meaningless and is only meant to indicate relative priority (in a 'high,' 'medium,' 'low' sense) to all the other proposed projects on that day.
- The point scores assigned by voting to each project were between 27 and 83 (56 points difference). The general distribution of scores is shown in the chart below.



- The distinct grouping of project scores at either end and middle of the range would suggest that the group as a whole was relatively uniform in their opinions about the different projects' priority ratings of 'high,' 'medium,' or 'low.'
- Of the top five rated projects (81-83 points), three are geological, geophysical, or geochemical in nature and the other two relate to market studies and involvement of First Nations.
- The 3 projects from the 5-year plan (Group 4) scored the lowest number of points.
- 12 projects have a geological / bedrock / overburden mapping component
- 5 projects have a geochemical component
- 12 projects have a geophysical component
- 7 projects have a mineral deposit study component
- 5 projects have to do with industrial mineral market studies

### *Next Steps*

The intention for the afternoon of the workshop was to have an open house which promoted a discussion with community representatives (Mayors and councilors) and First Nations leaders. However, only two local representatives chose to attend. A plan is underway to find a future opportunity to present the findings to the community government and First Nations. In the meantime, there will be consultation with First Nations to better incorporate their views and priorities into the geoscience proposals.

The BC Geological Survey committed to delivering a full geoscience project appropriate to its resources next year in the Lillooet area. Further discussion will also take place around how to generate projects that could be funded by Geoscience BC.

## *Appendix 1 – List of Participants*

<i>Name</i>	<i>Company</i>
Bill Smith	Goldbridge Bralorne Mines
Bob Krause	Wyn-Dev – Geologist
Brian Grant	BC Geological Survey
Chris O'Connor	Mayor, Lytton
Dave Gale	Strongbow Exploration
David Deering	Mining Engineer, Burnaby
David Lefebure	BC Geological Survey
Deb Arnott	CFDC Sun Country
Greg Kamenka	Mayor, Lillooet
Jo Shearer	Homegold Resources
John Courchesne	District of Lillooet
John Haugen	Lytton First Nation
John L. Dormer	Pacific Bentonite Ltd.
Leo Lindinger	Consultant
Lyn Anglin	Geological Survey of Canada
Marie Barney	St'at'imc Land and Resource Authority
Mel Stewart	J.M. Stewart Surveys Ltd
Mike Cathro	Min. of Energy, Mines, Resources, Kamloops
Nick Ferris	J-Pacific Gold
Nigel Skermer	Pacific Bentonite Ltd.
Paul Schiarizza	BC Geological Survey Branch
Randy Polischuk	Miner, Lillooet BC
Rob Stevens	Geoscience BC
Rudi Durfeld	Durfeld Geological
Tom Illidge	Goldbridge

Appendix 2 – List of Geoscience Projects

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>			<b>5</b>		<b>3</b>		<b>1</b>	
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 1 Project 1	Spences Bridge Formation Mapping	1:50,000 Bedrock Mapping of Volcanics (structure, stratigraphy)	92I / 5E, 6W, 11W, 12 & 13	na	11	55	6	18	1	1	<b>74</b>
Group 1 Project 2	Spences Bridge Formation, Gang Ranch	Overburden sampling below treeline Mobile Metal Ion / till sampling / mapping. Detailed geochemical surveys - silts etc.	Shulaps - Yalakom	c	7	35	8	24	3	3	<b>62</b>
Group 1 Project 3	Spences Bridge - Gang Ranch Geophysics	Hi-Resolution Magnetometer Radiometrics Electromagnetic	Belt of Rocks Southwest of Spences Bridge & Gang Ranch	na	14	70	3	9	1	1	<b>80</b>
Group 1 Project 4	Spences Bridge - Gang Ranch Surface Geology	Surficial / Overburden mapping	Spences Bridge - Lillooet - Gang Ranch	na	3	15	10	30	5	5	<b>50</b>
Group 1 Project 5	Hat Creek #2 Coal Deposit	Bedrock Mapping High-Resolution Geophysics 1:10,000 - 1:20,000	Northeast of Lillooet	b	4	20	6	18	9	9	<b>47</b>

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>								
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>5</b> <b>Points High</b>	<b>Votes Medium</b>	<b>3</b> <b>Points Medium</b>	<b>Votes Low</b>	<b>1</b> <b>Points Low</b>	<b>Total Score</b>
Group 1 Principle	Student Training	Community / First Nations / University Student training on "real" geoscience surveys	Lillooet Region	a	na	na	na	na	na	na	<b>na</b>
Group 2 Project 1	Spences Bridge	Mapping Geology Mineral Potential Alteration (Portable Infrared Mineral Analyzer) Include detailed compilation (e.g. thesis maps) Add Airborne Magnetic Survey	Merritt - Watson Bar	c	13	65	6	18	0	0	<b>83</b>
Group 2 Project 2	Local First Nations Mineral Inventory of First Nations Traditional Territory	Compilation (Layperson Guide) "Clear Conclusions" Outreach & Training	Local First Nations Mineral Inventory of First Nations Traditional Territory	a	12	60	7	21	0	0	<b>81</b>
Group 2 Project 3	Coal Bed Methane Gas	Drilling / Testing Engineering Studies Seismic	e.g. Hat Creek	b	2	10	3	9	14	14	<b>33</b>

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>		<b>5</b>	<b>3</b>	<b>1</b>				
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 4	Lillooet - Lytton	Industrial Minerals / Market Study Bentonite Magnatite Dimension stone Talc Limestone Jade Alumina Gravel	Lillooet - Lytton	e	12	60	7	21	0	0	<b>81</b>
Group 2 Project 5	Red Hill (Ashcroft Ranch)	Geological Mapping Mineral Deposits Massive Sulphide Airborn Magnetic Survey & Electromagnetic survey	Red Hill (Ashcroft Ranch)	f	2	10	13	39	4	4	<b>53</b>
Group 2 Project 6	Harrison Fault North Harrison Lake - Mt. Meager	Geological Mapping Mineral Deposit Alteration Airborne Geophysics Detailed Geochem	Harrison Fault North Harrison Lake - Mt. Meager	na	4	20	8	24	7	7	<b>51</b>

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>				<b>5</b>	<b>3</b>	<b>1</b>		
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 7	Nahatlach to Bralorne	Geological Mapping Geochemistry - silt, mossmat, till, rock Mineral Potential Mapping & Deposits Porphyry Copper Moly Gold Vein Talc Jade Magnesite Airborne Magnetism & Radiometric	Nahatlach to Bralorne	d	na	na	na	na	na	na	<b>na</b>
Group 2 Project 8	Shulaps - Yalakom	Mineral Deposits Study Airborne Magnetic and Radiometric Geochemistry (silt, mossmat, rock)	Shulaps - Yalakom	g	12	60	7	21	0	0	<b>81</b>
Group 3 Project 1	Mineral Deposits of the Shulaps	Metallogenetic Study. Gold, platinum, copper.	Goldbridge (Shulaps)	g	na	na	na	na	na	na	<b>na</b>
Group 3 Project 2	Intrusion-Related Gold	Mineral Deposits (Thematic Study)	Regional, Lytton - Lilloet - Blackdome, East of Coast Mountains	na	2	10	8	24	9	9	<b>43</b>

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>								
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>5</b> <b>Points High</b>	<b>Votes Medium</b>	<b>3</b> <b>Points Medium</b>	<b>Votes Low</b>	<b>1</b> <b>Points Low</b>	<b>Total Score</b>
Group 3 Project 3	Publicize Successes; Increased awareness of industrial mineral potential and importance to region. Importance of access.	Industrial Minerals	Regional, largely east of Coast Mountains near access	e	5	25	8	24	6	6	55
Group 3 Project 4	Inventory of Clay Deposits with Quality	Industrial Minerals	Fraser River Valley, Interior Plateau, Other?	na	2	10	4	12	13	13	35
Group 3 Project 5	Limestone and Lime Sources	Industrial Minerals	Regional, along access corridors	na	2	10	5	15	12	12	37
Group 3 Project 6	Perlite, other agricultural / soil conditioners	Industrial Minerals	Interior Plateau, Fraser Valley, Other?	na	0	0	7	21	12	12	33
Group 3 Project 7	Follow Bralorne Structure South (1 year) Further to Lillooet (2 years)	Mapping Geology 1:50,000 Geophysics	Carpenter Lake to Anderson Lake to Cayoosh Creek	d	11	55	7	21	1	1	77

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>								
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>5</b> <b>Points High</b>	<b>Votes Medium</b>	<b>3</b> <b>Points Medium</b>	<b>Votes Low</b>	<b>1</b> <b>Points Low</b>	<b>Total Score</b>
Group 3 Project 8	Potential for Polymetallic Massive Sulphides in Volcanics - like Kutcho Creek deposit geology,	Regional Mapping	Venables Valley Red Hill	f	na	na	na	na	na	na	<b>na</b>
Group 3 Project 9	Texas Creek Mapping (gold, copper, molybdenum)	Mapping Project Geophysics	Lillooet to Stein Valley, Mt Brew	d	10	50	9	27	0	0	<b>77</b>
Group 3 Project 10	Airborne Geophysics for Porphyry (Open Pit) Copper, Gold	Geophysics Step 1 - Detailed Magnetics / radiometrics Step 2 - Electromagnetic (targeted)	Camelfoot to Blackdome & East of the Fraser	na	13	65	5	15	1	1	<b>81</b>
Group 3 Project 11	Targeted Followup of Regional Geochemical Surveys	Additional silt, soil, rock, heavy mineral sampling of "hot spots" defined by regional Regional Geochemical Surveys (but not doing exploration)	Number of areas chosen from data	na	2	10	15	45	2	2	<b>57</b>
Group 3 Project 12	Chasing Bralorne Geology Further South - do a transect first	Regional Mapping Geophysics	Just northwest of Boston Bar, Nahatlash	d	3	15	12	36	4	4	<b>55</b>

<b>Geoscience Workshop Projects by Breakout Group</b>			<b>Weighting</b>			<b>5</b>	<b>3</b>	<b>1</b>			
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 4 Project 1	Gambier Pendants	Geological Mapping	Coast Range	na	1	5	4	12	14	14	31
Group 4 Project 2	Porphyry Copper-Molybdenum Study	Mineral Deposits Geology Study	Coast Range	na	0	0	4	12	15	15	27
Group 4 Project 3	Aeromagnetic Survey	Geophysical	Coast Range	na	1	5	5	15	13	13	33

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>			<b>5</b>	<b>3</b>	<b>1</b>			
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 1	Spences Bridge	Mapping Geology Mineral Potential Alteration (Portable Infrared Mineral Analyzer) Include detailed compilation (e.g. thesis maps) Add Airborne Mag	Merritt - Watson Bar	c	13	65	6	18	0	0	83
Group 2 Project 2	Local First Nations Mineral Inventory of First Nations Traditional Territory	Compilation (Layperson Guide) "Clear Conclusions" Outreach & Training	Local First Nations Mineral Inventory of First Nations Traditional Territory	a	12	60	7	21	0	0	81

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>		<b>5</b>	<b>3</b>	<b>1</b>				
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 4	Lillooet - Lytton	Industrial Minerals / Market Study Bentonite Magnatite Dimension stone Talc Limestone Jade Alumina Gravel	Lillooet - Lytton	e	12	60	7	21	0	0	<b>81</b>
Group 2 Project 8	Shulaps - Yalakom	Mineral Deposits Study Airborne Magnetic and Radiometric Geochemistry (silt, mossmat, rock)	Shulaps - Yalakom	g	12	60	7	21	0	0	<b>81</b>
Group 3 Project 10	Airborne Geophysics for Porphyry (Open Pit) Copper, Gold	Geophysics Step 1 - Detailed Magnetics / radiometrics Step 2 - Electromagnetic (targeted)	Camelfoot to Blackdome & East of the Fraser	na	13	65	5	15	1	1	<b>81</b>
Group 1 Project 3	Spences Bridge - Gang Ranch Geophysics	Hi-Resolution Magnetometer Radiometrics Electromagnetic	Belt of Rocks Southwest of Spences Bridge & Gang Ranch	na	14	70	3	9	1	1	<b>80</b>

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>		<b>5</b>	<b>3</b>	<b>1</b>				
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 3 Project 7	Follow Bralorne Structure South (1 year) Further to Lillooet (2 years)	Mapping Geology 1:50,000 Geophysics	Carpenter Lake to Anderson Lake to Cayoosh Creek	d	11	55	7	21	1	1	<b>77</b>
Group 3 Project 9	Texas Creek Mapping (gold, copper, molybdenum)	Mapping Project Geophysics	Lillooet to Stein Valley, Mt Brew	d	10	50	9	27	0	0	<b>77</b>
Group 1 Project 1	Spences Bridge Formation Mapping	1:50,000 Bedrock Mapping of Volcanics (structure, stratigraphy)	92I / 5E, 6W, 11W, 12 & 13	na	11	55	6	18	1	1	<b>74</b>
Group 1 Project 2	Spences Bridge Formation, Gang Ranch	Overburden sampling below treeline Mobile Metal Ion / till sampling / mapping. Detailed geochem surveys - silts etc.	Shulaps - Yalakom	c	7	35	8	24	3	3	<b>62</b>

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>		<b>5</b>	<b>3</b>	<b>1</b>				
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 3 Project 11	Targeted Followup of Regional Geochemical Surveys	Additional silt, soil, rock, heavy mineral sampling of "hot spots" defined by regional Regional Geochemical Surveys (but not doing exploration)	Number of areas chosen from data	na	2	10	15	45	2	2	57
Group 3 Project 3	Publicize Successes; Increased awareness of industrial mineral potential and importance to region. Importance of access.	Industrial Minerals	Regional, largely east of Coast Mountains near access	e	5	25	8	24	6	6	55
Group 3 Project 12	Chasing Bralorne Geology Further South - do a transect first	Regional Mapping Geophysics	Just northwest of Boston Bar, Nahatlash	d	3	15	12	36	4	4	55
Group 2 Project 5	Red Hill (Ashcroft Ranch)	Geological Mapping Mineral Deposits Massive Sulphide Airborn Mag & Electromagnetic	Red Hill (Ashcroft Ranch)	f	2	10	13	39	4	4	53

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>			<b>5</b>		<b>3</b>		<b>1</b>	
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 6	Harrison Fault North Harrison Lake - Mt. Meager	Geological Mapping Mineral Deposit Alteration Airborne Geophysics Detailed Geochem	Harrison Fault North Harrison Lake - Mt. Meager	na	4	20	8	24	7	7	51
Group 1 Project 4	Spences Bridge - Gang Ranch Surface Geology	Surficial / Overburden mapping	Spences Bridge - Lillooet - Gang Ranch	na	3	15	10	30	5	5	50
Group 1 Project 5	Hat Creek #2 Coal Deposit	Bedrock Mapping High-Resolution Geophysics 1:10,000 - 1:20,000	Northeast of Lillooet	b	4	20	6	18	9	9	47
Group 3 Project 2	Intrusion- Related Gold	Mineral Deposits (Thematic Study)	Regional, Lytton - Lillooet - Blackdome, East of Coast Mountains	na	2	10	8	24	9	9	43
Group 3 Project 5	Limestone and Lime Sources	Industrial Minerals	Regional, along access corridors	na	2	10	5	15	12	12	37
Group 3 Project 4	Inventory of Clay Deposits with Quality	Industrial Minerals	Fraser River Valley, Interior Plateau, Other?	na	2	10	4	12	13	13	35

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>		<b>5</b>	<b>3</b>	<b>1</b>				
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 3	Coal Bed Methane Gas	Drilling / Testing Engineering Studies Seismic	e.g. Hat Creek	b	2	10	3	9	14	14	<b>33</b>
Group 3 Project 6	Perlite, other agricultural / soil conditioners	Industrial Minerals	Interior Plateau, Fraser Valley, Other?	na	0	0	7	21	12	12	<b>33</b>
Group 4 Project 3	Aeromagnetic Survey	Geophysical	Coast Range	na	1	5	5	15	13	13	<b>33</b>
Group 4 Project 1	Gambier Pendants	Geological Mapping	Coast Range	na	1	5	4	12	14	14	<b>31</b>
Group 4 Project 2	Porphyry Copper-Molybdenum Study	Mineral Deposits Geology Study	Coast Range	na	0	0	4	12	15	15	<b>27</b>
Group 1 Principle	Student Training	Community / First Nations / University Student training on "real" geoscience surveys	Lillooet Region	a	na	na	na	na	na	na	<b>na</b>

<b>Breakout Group Geoscience Workshop Projects by Voted Score</b>			<b>Weighting</b>			<b>5</b>		<b>3</b>		<b>1</b>	
<b>Project #</b>	<b>Project Title</b>	<b>Project Type</b>	<b>Project Area</b>	<b>Related Projects</b>	<b>Votes High</b>	<b>Points High</b>	<b>Votes Medium</b>	<b>Points Medium</b>	<b>Votes Low</b>	<b>Points Low</b>	<b>Total Score</b>
Group 2 Project 7	Nahatlach to Bralorne	Geological Mapping Geochemistry - silt, mossmat, till, rock Mineral Potential Mapping & Deposits Porphyry Copper Moly Gold Vein Talc Jade Magnesite Airborne Magnetics & Radiometric	Nahatlach to Bralorne	d	na	na	na	na	na	na	<b>na</b>
Group 3 Project 1	Mineral Deposits of the Shulaps	Metallogenetic Study. Gold, platinum, copper.	Goldbridge (Shulaps)	g	na	na	na	na	na	na	<b>na</b>
Group 3 Project 8	Potential for Polymetallic Massive Sulphides in Volcanics - like Kutcho Creek deposit geology	Regional Mapping	Venables Valley Red Hill	f	na	na	na	na	na	na	<b>na</b>