

A Monthly Newsletter About: The Goings-on at the Alaska GMC

productive capacity

he GMC would like to thank Wallace McGregor of Northwestern Explorations for donating thirteen boxes of hard-rock mineral core from the Orange Hill property, located within the Wrangell-St. Elias National Park and Preserve. The history of the property is quite intriguing — those interested will certainly enjoy reading "The Orange Hill Story" in the online version of the Wrangell St. Elias News. The donated material and affiliated, high-quality documentation (maps, well logs, geophysics data/reports, assay logs, CDs containing digital data and derived sample material) will be quite beneficial to those wanting to research the unique porphyry copper-molybdenum deposits in the Nabesna region and a wonderful addition to the priceless, mineral core collection at the GMC.

unitization

Progress on a new GMC facility, The Alaska Earth Science and Data Center, is moving forward. The Department of Natural Resources is currently in promising negotiations with the potential, future land owner of the new facility. The Curator attended a successful meeting with the Alaska Minerals Coordination Group and gave a well-received presentation at the 2010 Geologic Mapping Advisory Board Meeting in Fairbanks. Feel free to download the 2009 DGGS Annual Report for more information.



A portion of Orange Hill core, borehole 117.

probable reserves

GMC interns Joseph Skutca and Kjol Johnson are working on obtaining box-level details and performing quality control on the existing MMS oil and gas collection inventory. GMC intern Herbie Mansavage continues to index and document hardrock mineral core for several prospects and boreholes located in the main GMC warehouse.

development well

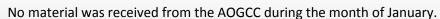
The Curator has contacted staff at the Austin Core Research Center, the USGS Core Research Center in Denver, and the GSC Calgary Geological Core and Sample Repository with the intent to visit each facility. The knowledge gained during these visits will contribute immensely towards the design phase and planned future progress and construction of a new GMC facility in Alaska.





- ✓ ARCO ALASKA INC C.O.S.T. N. Aleutian #1 DST-13 palynology slides (11) from cuttings (4,195.3′–16,715.8′)
- ✓ ARCO ALASKA INC *C.O.S.T. N. Aleutian #1 DST-13* kerogen slides (5) from cuttings (4,195.3′–16,715.8′)

AOGCC Materials Received





Shipments Received

No shipments were received during the month of January.



Data Reports

✓ No. 370: ActLabs Ltd., 2008, Analyses of REE and uranium mineralization in *Bokan Mountain* archive sample splits: Reevaluation of older data (1984–1987) with newer analytical techniques



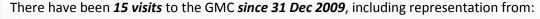
Donations

✓ <u>NORTHWEST EXPLORATIONS</u> *Orange Hill Property* skeletonized mineral core (13 boxes, size B and N). Boreholes include: 102–106, 108, 109, 112–123, and Duval #3.



Thank you to Wallace McGregor, Northwest Explorations, for contributing to the GMC's inventory.

Visits





- ✓ Aeon Biostratigraphic Services (Anchorage)✓ IRF Group, Inc. (Anchorage)
- ✓ U.S. Minerals Management Service (MMS, Anchorage)
- ✓ and the general public



A Monthly Newsletter About: The Goings-on at the Alaska GMC

productive capacity

he Evergreen Resources (Alaska) Corporation coal-bed methane rescue effort continues. GMC staff has successfully moved more than 40 boxes of critical coal-bearing intervals from the five coal-bed methane cores in need of immediate curation out of their shipping container and into the main warehouse without incident. Several tarps were laid down and the boxes were lifted on top of the main shelving units, opened, and allowed to dry. In many cases, the boxes were so badly corroded that a thin metal sheet had to be wedged under each box in order to move them. Nine of Kashwitna Lake #1 boxes could not be moved. As a result, those intervals will be reboxed in-situ in the conex in late spring.

unitization

John Larson (MMS) continues to visit the GMC to document and perform a detailed inventory of a previously undocumented MMS palynology, kerogen, and foram slide collection. The Curator would like to thank John for his dedication and effort to improve the accuracy of the GMC's inventory.

Kenneth Papp and intern Joseph Skutca represented the GMC at the 2010 University of Alaska, Anchorage Geoscience Career Fair held in the UAA Conoco Phillips Integrated Science Building on February 19. Kathy Sheehan-Dugan acquired the booth and was present to represent the Alaska Department of Natural Resources.

probable reserves

GMC interns Joseph Skutca and Kjol Johnson have obtained box-level details and performed quality control on 50% of the existing MMS oil and gas collection inventory. A test version of the GMC's material inventory in Google Earth format has been distributed to a small number of users in hopes of obtaining helpful feedback. Formal documentation for the inventory will also be included.



Results of reboxing Kashwitna Lake #1 (800'-810').

development well

The Curator will be giving an oral presentation at the 2010 Alaska Geological Society Meeting in Anchorage on Friday, April 16, entitled "The Alaska Geologic Materials Center is Going Digital." The talk will focus on proactive changes being made at the GMC to ensure better material preservation and providing inventory details to users in usable, digital formats.



No processed oil and gas well material was received during the month of February.



AOGCC Materials Received

No material was received from the AOGCC during the month of February.



Shipments Received

✓ <u>CALISTA CORP.</u> 2 bags surface samples (Wenz, 2003), 2 boxes pulps (Wenz, 2003 and Foley, 2008 analyses), 7 boxes Nyac surface samples (1998-2007)



Data Reports

No data reports were generated during the month of February.



Donations

No donations were received during the month of February.



Visits

There have been 15 visits to the GMC since 31 Jan 2010, including representation from:



- ✓ Aeon Biostratigraphic Services (Anchorage)
- ✓ Calista Corp.
- ✓ IRF Group, Inc. (Anchorage)
- ✓ United States Geological Survey
- ✓ U.S. Minerals Management Service (MMS, Anchorage)
- ✓ and the general public



A Monthly Newsletter About: The Goings-on at the Alaska GMC

productive capacity

he annual Alaska Miners Association conference was held in Fairbanks, Alaska, March 10 – 12. The meeting was a great success and it was beneficial to talk to so many individuals and companies in the minerals industry. The Curator gave a talk highlighting the recent inventory efforts and improvements occurring at the GMC. The future online inventory, in Google Earth format, was discussed and is planned to be released in April 2010. Other main points garnered from the talk include a need for a new, larger repository, materials curation efforts, and clever ways to create space in the over-capacity warehouse. The GMC would like to thank the AMA and Dave Szumigala, who played key roles in organizing the meeting.

unitization

The GMC would like to thank Joe Kurtak of the Bureau of Land Management and Jeff Foley of Calista Corporation for their recent donations of pulps, hand samples, coarse rejects, and geochemistry results.

The amount of material contributed by BLM and Calista Corporation has been generous over the years. The GMC has more than 100,000 pulp samples and nearly 5,000 pan-concentrate specimens originating from BLM. The material acquired from Calista Corporation approaches 2,500 cubic feet. GMC staff looks forward to working with these groups in the future in an effort to confirm the details of these large collections.

GMC stats slide from the AMA 2010 presentation.

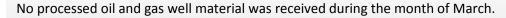
probable reserves

GMC interns Joseph Skutca and Kjol Johnson have obtained box-level details and performed quality control on 100% of the existing Minerals Management Service (MMS) oil and gas collection inventory. Details of the recent inventory have been sent to John Larson of MMS.

development well

The Curator will be visiting the Austin Core Research Center, the USGS Core Research Center in Denver, and the GSC Calgary Geological Core and Sample Repository in April to learn about inventory management and the policies and procedures established at each facility.







AOGCC Materials Received

- ✓ CHEVRON Soldotna Creek Unit 42-05Y washed cuttings (1,000'-8,110')
- ✓ TECK COMINCO **Shale Gas Test NB 04-A** washed cuttings (80'-3,030')
- ✓ TECK COMINCO Shale Gas Test NB 05 washed cuttings (20'-2,554')
- ✓ GROWTH RESOURCES *Houston #1* unwashed cuttings (800'-1,430')
- ✓ PIONEER Hansen 1A-L1 washed cuttings (16,190'-22,650')



Shipments Received

- ✓ CALISTA CORP. 1 pallet of *pulps and surface samples* (Nyac '09)
- ✓ <u>BLM</u> 1 pallet of *pulps and coarse rejects/geochem. results* (Aniak, Bristol Bay, and Admiralty Mining District studies)



Data Reports

No data reports were generated during the month of March.



Donations

No donations were received during the month of March.



Visits

There have been 30 visits to the GMC since 28 Feb 2010, including representation from:



- ✓ Aeon Biostratigraphic Services (Anchorage)
- ✓ Calista Corp.
- ✓ Full Metal Minerals
- ✓ IRF Group, Inc. (Anchorage)
- ✓ University of Alaska, Fairbanks
- ✓ U.S. Minerals Management Service (MMS, Anchorage)



A Monthly Newsletter About: The Goings-on at the Alaska GMC

productive capacity

e are proud to announce that an online version of the GMC inventory is now available! This inventory dataset includes oil and gas well locations and mineral prospect locations related to the materials inventory at the GMC. The oil and gas well locations are provided by the AOGCC well header. Mineral prospect locations are derived from the USGS ARDF, drilling logs, and the U.S. Geographic Names Information System (GNIS). The dataset also contains previously published data layers from Map of Alaska's Coal Resources, USGS ARDF, and Historical Mining Regions and Districts of Alaska. Printable PDF inventory summaries and full documentation of the digital data are also available.

unitization

The GMC would again like to thank Wallace McGregor of Northwestern Explorations for donating 13 boxes of hard-rock mineral core from the Orange Hill property, in the Wrangell-St. Elias National Park and Preserve.

The core was received in January and the affiliated high-quality documentation (maps, well logs, geophysics data/reports, assay logs, CDs containing digital data and derived sample material) arrived a few months later. The future GMC Data Report will be quite beneficial to those wanting to research the unique porphyry copper—molybdenum deposits in the Nabesna region and a wonderful addition to the priceless mineral core collection at the GMC.



Locations of Arctic Slope wells having material at the GMC.

probable reserves

Student interns continue to improve the GMC's oil and gas inventory. Herbie Mansavage contributed significantly by researching and providing the direct web link between well names listed in the online Google Earth GMC inventory and the corresponding downloadable well-history documentation provided on the Alaska Oil and Gas Conservation Commission's website.

development well

The Curator delivered the core and thin section on loan to the Anchorage Museum Imaginarium exhibit. The new exhibit will open to the general public on May 21. Later this month the Curator will visit three major core repositories in the Lower 48 and give a talk at the Alaska Geological Society technical conference on Friday, April 16.

The Sidewall – Apr 2010 Contact: ken.papp@alaska.gov 1



- ✓ UNOCAL *Trail Ridge #1* palynology slides (60) from cuttings (570'-8,220')
- ✓ <u>UNOCAL</u> *Trail Ridge #1* kerogen slides (60) from cuttings (570′-8,220′)
- ✓ U.S. NAVY Grandstand Test #1 palynology slides (12) from core (431'-562')

AOGCC Materials Received





Shipments Received

No shipments were received during the month of April.



Data Reports

No data reports were generated during the month of April.



Donations

✓ <u>NORTHWEST EXPLORATIONS</u> high-quality documentation (maps, well logs, geophysics data/reports, assay logs, CDs containing digital data and derived sample material) affiliated with 13 boxes of Orange Hill property hard-rock mineral core.



Visits

There have been 38 visits to the GMC since 31 Mar 2010, including representation from:



- ✓ Aeon Biostratigraphic Services (Anchorage)
- ✓ Calista Corp.
- ✓ Department of Natural Resources
- ✓ Full Metal Minerals
- ✓ Independent minerals consultant
- ✓ IRF Group, Inc. (Anchorage)
- ✓ Shell Exploration and Production Company
- ✓ University of Alaska, Anchorage
- ✓ U.S. Minerals Management Service (MMS), Anchorage



A Monthly Newsletter About: The Goings-on at the Alaska GMC

productive capacity

he GMC received an impressive donation from Alaska Earth Sciences (AES) of Anchorage. AES donated 254 boxes of core from the Coal Creek prospect, Valdez Creek mining district, Talkeetna Quadrangle, and 239 boxes of core from the Sleitat prospect, Bristol Bay mining district, Taylor Mountains Quadrangle. Borehole location maps, geochemistry results, and drill logs were included with the donation and will be used to generate a GMC Data Report. The Curator would like to thank AES for its kind contribution to the ever-growing, priceless minerals collection at the GMC.

unitization

The GMC Curator would like to thank the Curators and staff at the USGS Core Research Center, Denver, CO, the Austin Core Research Center, Austin, TX, and the GSC Calgary Geological Core and Sample Repository, Alberta, Canada, for their kind hospitality during day-long visits to their impressive facilities. The knowledge gained during this trip will contribute immensely towards the design phase and planned future progress of a new core repository in Alaska and no doubt help improve the management of the current GMC.

The USGS CRC receives approximately 2,000 visitors per year, four times the number of people who visit the Alaska GMC. It was also interesting to note that after the new, 100,000 sq. ft. Austin Core Research Center was built, it was filled to 90% capacity in less than 8 years.

probable reserves

The three interns have been busy filling the remaining gaps in the GMC's hard-rock minerals inventory now that Eagle River has started to thaw. Approximately 90% of the mineral core at the GMC is stored in unheated, unlit shipping containers. The interns, with the help of staff member Kurt Johnson, look to close the gap on the remaining 30% of the undetailed hard-rock inventory.



Unloading pallets of core donated by AES.

development well

The Curator gave a talk at the Alaska Miners Association/Society for Mining, Metallurgy and Exploration luncheon on Wednesday, May 12. The talk highlighted how changes being made at the GMC would benefit the minerals community. The Curator was hopeful after meeting several of the attendees that a renewed collaborative effort with the Alaska minerals community would ensue.



No processed oil and gas material was received during the month of May.



AOGCC Materials Received

No AOGGC material was received during the month of May.



Shipments Received

✓ <u>U.S. DEPT OF INTERIOR</u> *Franklin Bluffs #1* slabbed core (B-half, 58 boxes, 500'-1,613') and cuttings (3 boxes, 0'-970', 1,341'-1,825')



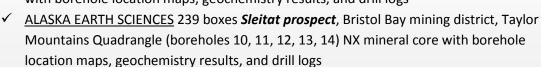
Data Reports

No data reports were generated during the month of May.



Donations

✓ <u>ALASKA EARTH SCIENCES</u> 254 boxes *Coal Creek prospect*, Valdez Creek mining district, Talkeetna Quadrangle (boreholes 06-43, 06-44, 06-45, 06-46) HX and NX mineral core with borehole location maps, geochemistry results, and drill logs





Visits

There have been 22 visits to the GMC since 30 Apr 2010, including representation from:



- ✓ Aeon Biostratigraphic Services (Anchorage)
- ✓ Department of Natural Resources
- ✓ Fairbanks Gold Mining
- ✓ Pacific Rim Geological Consulting, Inc.



A Monthly Newsletter About: The Goings-on at the Alaska GMC

productive capacity

MC staff is continuing to focus its curation efforts on the unique Amchitka Island hard-rock mineral core drilled before and after the nuclear explosion tests that occurred during the late 1960s and early 1970s. Historic information obtained by this project will be entered into the main GMC database, thereby improving crucial documentation about the 700+ boxes of core. GMC staff will be (1) researching the history of the core prior to arriving at the GMC, (2) taking photos of the damaged boxes and core, (3) identify unique boxes, boreholes, and recorded information, and (4) confirm the GMC's inventory to help document what actions would need to be implemented to ensure the core's safety.

unitization

The GMC Curator and staff would like to thank John Hoppe (BLM), Joe Kurtak (BLM), and Larry Freeman (DGGS) for improving the facility's hard-rock minerals inventory. Only 10% of the prospects and properties have both drill records and borehole maps, 60% of prospects have no documentation, and 40% of prospects do not have a preliminary association with a USGS Alaska Resource Data File (ARDF) number. As a result, the GMC needs the assistance of and feedback from all members of the minerals industry to continue progress on the GMC hard-rock database, which hinges primarily on heavy research to quality control the prospects and borehole information. Please contact the GMC if you wish to contribute.



Ground zero drill area prior to the Cannikin explosion event on November 6, 1971.

probable reserves

The three interns have finished inventorying the oil and gas and minerals material located in the GMC's main warehouse basement. The basement contains wet cuts for several wells and more than 1,700 boxes of hard-rock mineral core. The Curator is also pleased to announce that 1-yr extensions have been approved for all three hard-working student interns.

development well

The GMC launched its online Google Earth inventory in April 2010. The next step is to start correlating the materials inventory with more useful information, such as geologic formations, core photos, and thin section photomicrographs. The Curator is hopeful that collaboration with the AOGCC, DOG, and USGS in this regard will make the GMC all the more valuable to its users.



No processed oil and gas material was received during the month of June.



AOGCC Materials Received

No AOGGC material was received during the month of June.



Shipments Received

No shipments were received during the month of June.



Data Reports

No data reports were generated during the month of June.



Donations

✓ <u>BP EXPLORATION (ALASKA)</u> *Duck Island Unit MPI #5-03/SD9* palynology slides (52, 12,248′-13,342′) from core (formally Sag Delta #9)



Thank you to Bob Raven (AEON/IRF Group, Anchorage).

Visits

There have been 25 visits to the GMC since 31 May 2010, including representation from:



- ✓ Aeon Biostratigraphic Services (Anchorage)
- ✓ ConocoPhillips
- ✓ Department of Natural Resources
- ✓ and the general public