



THE OHIO GEOLOGICAL SOCIETY

An Affiliate (1963) of the American Association of Petroleum Geologists (AAPG)

The Newsletter of the Ohio Geological Society

November 2002

2002-2003 Officers

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President's Column

Hello to all Members!

I would like to take a few moments and remind our members of the Ohio Geological Society Web Site. Located in the site are the calendar of upcoming meetings, abstracts of past talks, and maps and directions to the meeting location. We also have a listing of upcoming events as well as other meetings from adjoining states. There are lists of Society Publications, Society Officers and contacts, membership information, slide sets and videos that are available. Please check out our site.

Last month Ernie Slucher made a presentation on Coal Bed Methane. This is a relatively under explored resource within our state and as technology advances it should become better utilized. Pennsylvania, Virginia and West Virginia are other states of the Appalachian Basin who have already shown that Coal Bed Methane projects are viable. Should you have questions or wish additional information, please contact Mr. Slucher at 614-265-6627.

Given the hectic schedules everyone has in December, the date of the 5th Annual Holiday Gala has been set to January 17th at 6pm, at the Ramada Plaza Hotel in Columbus. Many of our members have had conflicts with just about any December date selected so we plan to try this to allow for additional people to attend. Details are sure to follow soon.

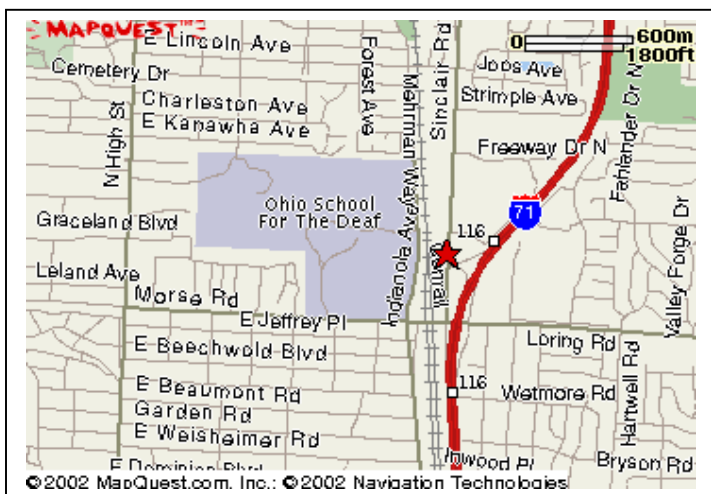
We continue to work to put together a slate of speakers to represent many different aspects of the geological field and hope that you will attend. **The November 18th speaker is Paul Archer, who will present a paper, titled "Production Evaluation of the Colfax Rose Run Field, Fairfield Co., Ohio."**

*****NEW MEETING LOCATION***** Our meetings will be held at the Ramada Plaza Hotel, 4900 Sinclair Rd, Columbus 614-846-0300. Also, please make note of the revised meeting dates for the 2002-2003 year: November 18th, January 17th (Holiday Gala), January 27th, February 18th, March 17th, April 21st, and May 19th.

R2

Editorial comments, letters, and **CONTRIBUTIONS** welcome and usually used!
Contact OGS Editor Pete MacKenzie (614) 781-3271 or pete@cgasinc.com.

OGS MEETING November 18th, 7:30 p.m. Ramada Plaza Hotel



Paul Archer, President, GeoPetro, LLC., will be giving a talk titled: “**Production Evaluation of the Colfax Rose Run Field, Fairfield Co., Ohio.**” Dinner will be at Justin’s Place in the Ramada Plaza Hotel in north Columbus at 5:30 p.m. For more information or to RSVP, contact Ron Rea at (614) 265-6585 or ron.rea@dnr.state.oh.us

DIRECTIONS: The meeting will be in a board room at the Ramada Plaza Hotel, 4900 Sinclair Rd., Columbus, OH 43229 (614-846-0300). From southbound I-71 the exit 116 ramp ends at Sinclair Rd, turn right to the hotel entrance. From northbound I-71 take Exit 116 and turn left (on Morse Rd), go under the freeway (stay right) to the first street, Sinclair Rd., turn right, hotel is one block up on the right.

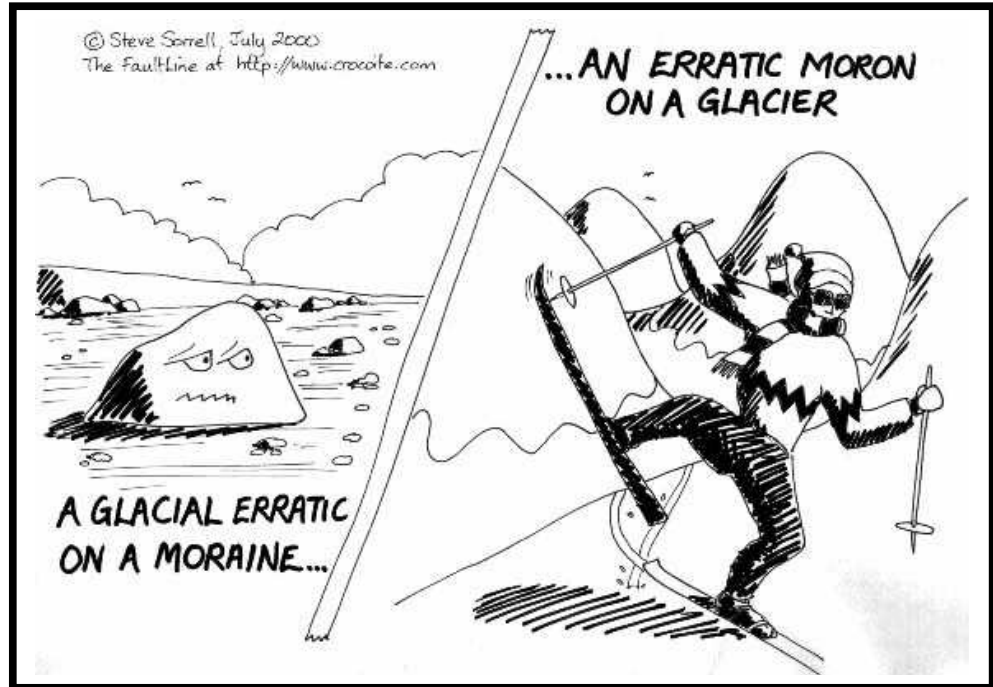
Paul Archer – GeoPetro, LLC. - Abstract

Production Evaluation of the Colfax Rose Run Field, Fairfield Co., Ohio

Five wells produce oil and gas from the Colfax Field in Fairfield County, Ohio. Most of the production is from the Rose Run Sandstone preserved in an erosional remnant created at the Knox Unconformity. The main Rose Run sand body within the Colfax remnant appears to be fairly consistent in terms of thickness and porosity based on log evaluations, however production varies dramatically from one part of the reservoir to another. Detailed core analysis is available from sidewall cores taken in one well in the field. Quartz is by far the dominant framework grain. The only other significant framework grain is potassium feldspar. Cementation is moderate, with quartz overgrowths as the predominate cement. Primary intergranular porosity accounts for the bulk of total porosity. Secondary dissolution porosity only amounts to 1% to 3% of total porosity. After reevaluating drill cutting samples and log data, it was concluded that the variability experienced in well performance is probably due to differences in grain size, pore size, and sorting across the reservoir. The nuclear magnetic resonance log was shown to be useful in characterizing that pore size and pore size distribution throughout the reservoir section.

A reservoir engineering study evaluated existing production and various possible methods for depletion of the Rose Run Formation. The study reviewed the productive geologic intervals, estimated the original oil in place, and then estimated the drainage area affected by the five existing wells. Estimates of the ultimate recovery of the oil and gas reserves associated with each well were completed through performance/decline trend analysis, volumetric analysis, material balance, and computer modeling. Finally, the study evaluated the possible increase in ultimate recovery through additional conventional drilling, horizontal drilling, re-stimulation, and water flooding.

It was concluded that the existing wells are efficiently draining the western half of the reservoir and additional drilling, whether conventional vertical wells, or horizontal wells, would have little additional impact on ultimate recovery from this part of the reservoir. The better producing wells, from a material balance standpoint, are draining 15 to 22 acre areas. From the material balance evaluation, it appears parts of the eastern portion of the field may not be adequately drained by the existing wells. The simulator model, probably because of limited reservoir data and the simple geologic model utilized, suggested a much more uniform and complete recovery across the entire field, and little additional oil recovery was predicted for anywhere in the field regardless of the future development approach taken. One reservoir engineering evaluation suggested, however, that parts of the reservoir have qualities that appear to make waterflooding a possible enhanced recovery option. In the end, a recommendation was made to drill at least one additional well in the southeastern part of the field, collect additional reservoir data, and further evaluate the potential for waterflooding.



Thanks to Steve Sorrell for permission to publish this cartoon . . . www.crocoite.com

Culled from various sources . . . we've all seen these, but they are still good for a laugh . . .

How to tell you are a Geologist:

- You have bent your lawn mower's crankshaft more than once.
- You spot geological continuity faults in movies.
- Your pockets tend to be filled with tiny bits of rock.
- You look at scenery and think: "That's nice, I wonder how it formed?"
- You have more pairs of boots than shoes.
- You have ever hung a picture using a Brunton as a level, and your Estwing as your hammer.
- You don't think trilobites look like cockroaches.
- Your rock collection weighs more than you do.
- You don't think of "cleavage" the same way everyone else does.
- You are planning on using your Estwing on vacation.
- You can point out where Tsumeb is on a world globe.
- The baggage handlers at the airport know you by sight and refuse to help you with your luggage.
- You have driven a 22-passenger van over "roads" that were really intended for cattle.
- You have more pictures of your rock hammer and lens cap than of your spouse.
- You consider a "recent event" anything that has happened in the last hundred thousand years.
- You follow when you see the local university's geology class going on a field trip.
- You think there's nothing wrong with looking at the stone facades of buildings with your hand lens.
- You get cranky because the light strips you installed on your bookshelves aren't full spectrum.
- You file stratigraphically yet can find important files faster than your assistant.
- You have ever been on a field trip that included scheduled stops at a gravel pit AND a liquor store.

CALENDAR

Ohio Geological Society Meetings (Ramada Plaza Hotel, 5:30 p.m. dinner, 7 p.m. happy hour, Presentation at 7:30 p.m):

- November 18 Paul Archer, "Production Evaluation of the Colfax Rose Run Field, Fairfield Co., Ohio"
January 17 4th Annual Holiday Gala
January 27 Mark Baranoski, Cambrian of Ohio
February 18 Greg Mason, The North Zanesville Crater
March 17 Ed Tegland, "Crooked CDP Lines and Structures: 'Whose fault is it?'"
April 21 AAPG Distinguished Lecturer
May 19 TBA - contact Jason Henthorne (330) 264-4454 or jason@petroevaluation.com right away to secure this space!

Others meetings or events of note:

- November 21 AIPG Annual Meeting, Fawcett Center, The Ohio State University, www.aipg-ohio.org
November 22 PTTC Workshop: Reservoir Analysis from Drill Cuttings and Cores, Western Michigan University
<http://wst023.west.wmich.edu/pttc.htm>
December 3 PTTC Short Course: Exploration and Evaluation of Fractured Reservoirs with Emphasis on Fault-Related Fracture Systems. Washington, PA, <http://karl.nrcce.wvu.edu/>
December 12 OOGA Open House, Ohio Oil & Gas Association office, Granville, Ohio, www.ooga.org
May 11-14 AAPG Annual Meeting, Salt Lake City, UT, www.aapg.org



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