Coordinator’s Corner
Kent Wilkins, OWRB Drillers Program Coordinator

It has been a great year for the Oklahoma Water Resources Board in spite of budget shortfalls. The Well Drillers and Pump Installers program remains strong, as indicated by the addition of 50 new firms licensed during 2010. I would like to thank the Well Drillers and Pump Installers Advisory Council for their strong leadership and willingness to improve the program each year.

Please be aware that a number of rule changes have been proposed for 2011. The primary rule change will hopefully streamline our enforcement capability by allowing field citations to be issued by field inspectors. Feel free to give me a call for a copy or download the proposed changes from our website at www.owrb.ok.gov.

The annual Oklahoma Ground Water Association (OGWA) Drilling Conference and Exhibition will be held at the National Center for Employee Development (NCED) Conference Center and Hotel in Norman on February 17-18, 2011. Tom Christopherson from the Nebraska Driller’s Program will be the McElhiney Lecturer, presenting the keynote address at 8:30 a.m. on February 17, focusing on the results of the Nebraska Grout Study. OWRB Rule and Regulations will be presented both days of the conference. Participants may attend a number of excellent technical courses for continuing education credit. Registration costs are as follows: Member with CEUs, $75; Nonmember with CEUs, $225; Member without CEUs, $40; Nonmember without CEUs, $120. Membership for a contractor and Technical is $100. Manufacturer/Supplier is $300. Educational sessions may count towards the Kansas and Arkansas CEU requirements.

The OGWA is also sponsoring a Nielsen Environmental Field School course in conjunction with their annual Conference & Exhibition. The 2-day course has been approved for 16 hours of continuing education units (CEUs) by the Oklahoma Corporation Commission for their licensed remediation consultants. OGWA will charge each member an early bird rate (before December 31, 2010) of $300, non-members $400. Beginning January 01, 2011, rates go up to $400 for members, $500 for non-members. This includes the course, course materials, tradeshow attendance, and lunch both days. The last day to enroll is January 31, 2011 (or when class is full).

Check out more conference and association information at www.ogwa.biz. Don’t miss this excellent opportunity to gain useful information while obtaining required continuing education credit. As always, if I can be of any assistance, please contact me at (405) 530-8852.

Well Drillers’ Logs Used to Define Geohydrologic Properties of the Garber-Wellington Aquifer

As part of the Garber-Wellington Water Management Study, the U.S. Geological Survey is building a digital groundwater-flow model that will be used to evaluate the maximum annual yield and to predict the impacts of long-term groundwater withdrawals on the aquifer. The groundwater-flow model requires many different types of hydrologic data, including a geohydrologic framework for describing how the geology relates to flow properties within the aquifer.

The rocks forming the Garber-Wellington aquifer include fine-grained, cross bedded sandstones interbedded with siltstones and mudstones of fluviol-deltaic origin. Individual sandstones pinch out or grade laterally into mudstone over shorter distances. The transmissivity of the aquifer depends largely on the percentage of sandstone. A three-dimensional representation of the sandstones and mudstones is necessary to model the flow in the heterogeneous aquifer.

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Well Drillers’ Logs Used. . . (continued)

In order to develop a three-dimensional representation of the lithologic properties of the aquifer, USGS Oklahoma Water Science Center analyzed lithologic descriptions from well drillers’ logs and data obtained geophysical logs. Gamma-ray data from more than 600 geophysical logs were scanned and digitized. The data were used to delineate sandstone and mudstone lithologies primarily for deeper zones in the aquifer. Lithologic descriptions from about 12,000 drillers’ logs provided lithologies primarily for the shallow zones and for areas where gamma-ray data are sparse. Well locations of the lithologic logs were mapped, log descriptions were categorized into texture classes, and a percent sand map was generated from categorical summaries. The percent sand determined from both the drillers’ lithologic descriptions and the gamma-ray logs will be used as the primary index for three-dimensional lithologic properties in the groundwater-flow model.

Unlicensed Driller Fined by OWRB

A final order was approved and signed by the Oklahoma Water Resources Board members on November 9, 2010, levying a fine of $15,450 on an unlicensed driller. The order found that Dan Bandimere, doing business as Enviroguard Technologies of Ft. Smith, Arkansas, failed and refused to file an application and become licensed after receiving notice of license requirements and failed to comply with the minimum constructions standards for drilling, installing, and completing heat exchange wells in Oklahoma. The OWRB ordered fines of $5,000 for failure to obtain a license and operator certification, $5,000 for failure to meet minimum standards regarding the diameter size of boreholes, and $5,000 for failure to meet minimum standards required for the heat loop material. The unlicensed firm was also ordered to pay $450 for failure to file 9 multi-purpose completion reports within 60 days after completion of drilling.