



*Kathleen Sebelius, Governor
Roderick L. Bremby, Secretary*

DEPARTMENT OF HEALTH
AND ENVIRONMENT

www.kdheks.gov

Division of Environment

Dear: _____

Re: KWWC License No.: _____

Recent oil and gas exploratory holes have encountered strong flows of saltwater (up to 2000 gallons per minute) from depths of 130-160 feet below ground level in an area in Nemaha County. The most recent flow of saltwater originated at a depth of 135 feet, in consolidated sedimentary limestone. The saltwater flows have occurred in the Western Half (W/2) of Section 13-T2S-R14E, Nemaha County.

The purpose of this letter is to inform you of the potential pressurized saltwater flow problem whenever you may have an opportunity to drill test holes or construct or reconstruct a water well within this area of Nemaha and Brown Counties.

Enclosed is a map which defines an area, two townships in size (T2S-R14E, Nemaha County, and T2S-R15E, Brown County), where the Department is establishing the following restrictions to reduce the risk of penetrating a pressurized saltwater zone.

1. You may construct, reconstruct, treat or plug any water well, or test hole within this area, with the stipulation that all holes and borings do not penetrate through the unconsolidated formations (glacial tills, outwash, alluvial and colluvial deposits associated with valley fills),
2. Prior to the drilling of any test hole or the construction or reconstruction of any water well into or below the consolidated strata, underlying the unconsolidated formations, you must first contact this office to obtain approval to proceed. Approval may be granted to drill to a specified depth for the specific well site location by researching available water well information in our office. The Department will assist you in determining the maximum depth a boring may be completed to avoid intercepting the pressurized zone. It will be necessary for you to provide the legal location of the well or test hole location, and

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3. The Department is requiring that groundwater samples be collected and sent to the Topeka Office for quality analysis. We are requiring at least a quart sample of groundwater be collected and submitted to us from any test holes and all water wells you may construct or reconstruct within the two townships. It is necessary that the collected samples be in our office within a week of collection so that deterioration of the minerals won't occur, thus altering the results of the analysis to reflect inaccurate concentrations. The groundwater samples will assist our effort to monitor the groundwater quality in this area, and to better define the lateral extent of the shallow pressurized saltwater zone.

The regulations which cover the above restrictions and requirements are from amended Article 30 and are as follows:

Section 28-30-6(d). Confined waters shall be separated from each other and from unconfined waters encountered in the same bore hole with grout or other approved materials in areas designated by the department.

Section 28-30-6(1). All groundwater producing zones that are known or suspected to contain natural or man-made pollutants shall be adequately cased and grouted off during completion of the well to prevent the movement of the polluted groundwater to either overlying or underlying fresh groundwater zone.

Section 38-30-4(d). Water samples. Within thirty (30) days after receipt of the water well record (form WWC-5) on a well, the department may request the contractor or landowner who constructs or reconstructs his or her own water well to submit a sample of water from the well for chemical analysis. Insofar as is possible, the department will define in advance, areas from which well water samples are required.

The Department appreciates your support and cooperation concerning this matter and we look forward to working with you. Please contact us if you have any questions concerning this matter.

Sincerely,

Richard Harper
Unit Chief, Water Well Section
Bureau of Water

RH:db
Enclosure

DESIGNATED AREA FOR WATER WELL AND TEST HOLE
 DRILLING RESTRICTIONS AND MANDATORY
 GROUNDWATER SAMPLING BECAUSE OF SHALLOW
 PRESSURIZED SALTWATER FLOW ALONG THE
 NEMAHA AND BROWN COUNTY LINE.



NEMAHA COUNTY

BROWN COUNTY