

Five Simplified Question placed in the chat box at the CWS Virtual Open House – Dismissed by Host.
D. LeNeveu Aug. 24, 2021

- 1) All geochemical samples including all the core and sand samples were exposed to air that would oxidize sulphide and selenium during extraction, storage, and shipment and are therefore all compromised. Sand was sampled from an outdoor stockpile extracted by air lift methods from the Bru 95-3 well on June 28, 2019. The sand was exposed to oxidation during extraction and for more than one year. Core samples and sand from well Bru 121-1 were exposed to air since the time of extraction Feb 18 2019. Samples received by ALS labs were in low density polyethylene (ldpe) that is not airtight. Will CanWhite engage independent experts to take many representative samples of limestone, aquitard shale, sand, sandstone concretions including oolite and shale interbedded in the sandstone that are not exposed to air during extraction and are immediately sealed in airtight containers and sent for re-analysis?
- 2) Pyrite and selenium sources within the sandstone aquifer will be exposed to aerated water re-injected into the cavities left from sand extraction. The aerated water can oxidize the pyrite to form acid that mobilizes heavy metals and can oxidize toxic selenium to a soluble form. Will CanWhite sample the concretions and shale layers lower in the aquifer and have the samples subject to a full suite of geo-chemical analysis including acid base accounting and trace metal content? The samples must not be exposed to air during extraction and must be in airtight containers.
- 3) In the hydrogeological study it is reported that Stantec determined the minimum limestone thickness to prevent subsidence is 15 meters. The Stantec reports were not produced. A peer reviewed paper by Waltham and Fookes in the Quarterly Journal of Engineering Geology and HydroGeology in 2003 gives the minimum thickness for stability of the limestone for the openings in the sandstone caused by the CanWhite extraction well clusters to be 37.8 meters. Thirty-seven well logs obtained from MB Groundwater show all limestone thicknesses in the Bru are less than 37.8 meters. The limestone thicknesses in the eastern Bru area where extraction will begin are less than 15 meters. This shows the subsidence will assuredly occur in the well clusters in the Bru area. Will CanWhite move their operations westward into the ALY area where the Winnipeg aquifer is saline and the limestone is much thicker?
- 4) The Australia Department of Health and the Water Research Centre of Dallas and other sources state that water that contains iron manganese and particulates will scatter the UV light making sterilization ineffective. How will CanWhite prevent the aquifer from being contaminated with bacteria and microbes that can thrive in the re-injected aerated water given that the UV light treatment will not be effective due to the manganese, iron and particulate concentrations measured in the aquifer water that are too high for effective UV treatment?
- 5) The CanWhite hydrogeological study describes the intermixing of the carbonate and sandstone aquifer waters through the shale aquitard that is compromised by the drilling operations in the well clusters. Intermixing of aquifer waters is a violation of the regulations of the Manitoba Groundwater and Water Well Act. Will CanWhite respect legal binding regulations and withdraw their licence application and cease all operations in the Vivian area?