

Chris Garrett

From: Todd Keay <tkeay@elmontgomery.com>
Sent: Tuesday, December 18, 2018 12:03 PM
To: Chris Garrett; TIMOTHY BAYLEY
Cc: Peacey, Victoria (RC); Donna Morey; mcasmussen@fs.fed.us
Subject: RE: Locations of historic pumping

Hi Chris

All historical pumping for mine dewatering operations occurred east of the Concentrator Fault...mainly at the Silver King mine, the Lake Superior and Arizona (LS&A) mine, and the Belmont mine. The Silver King did not make enough water to provide adequate supply for processing. The real pumping began in 1910 when Boyce-Thompson and his board of directors for the newly formed Magma Mining Company decide to pursue dewatering the Magma mine at Shaft No.1. This dewatering activity at the Magma mine likely helped with dewatering of the LS&A workings to the south, as they eventually came pretty close to being connected.

There were likely some wells along Queen Creek in the townsite of Superior that were also pumped starting at some point in the early 1900s - no real info on the timing of when those wells and galleries were dug. Those wells would nearly all be west of the Concentrator Fault.

Hope that helps.

Todd

From: Chris Garrett [cgarrett@swca.com]
Sent: Tuesday, December 18, 2018 11:43 AM
To: Todd Keay; Timothy Bayley
Cc: Peacey, Victoria (RC); Donna Morey; mcasmussen@fs.fed.us
Subject: Locations of historic pumping

Hi Todd –

This is a minor clarification that is being requested in the DEIS, and I think it's good information if we have it.

We already have a nice brief discussion of the historic pumping period: *"Mining near Superior started roughly in 1875, with dewatering of the Magma Mine beginning in earnest in 1910 as production deepened. Dewatering continued with little interruption until 1998 after active mining ceased at the Magma Mine. In 2009, Resolution resumed dewatering as construction on Shaft 10 began (cite WSP 2017). Since 2009, Resolution has reported pumping about 13,000 acre-feet of groundwater under their dewatering permit. Almost all of this water is treated and delivered to the New Magma Irrigation and Drainage District."*

The question asked was: at what location was the historic pumping conducted? And specifically where was it in relation to the Concentrator fault.

Any thoughts on the actual pumping location pre-1998? I would have assumed it was just from sumps at the bottom of various Magma Mine shafts, but I guess I've never heard one way or another. Any input is great, but not a critical piece of information.

Thx!

C

Chris Garrett, P.HGW.

Professional Hydrologist - Ground Water

Cell: (903) 372-0285

Office: (602) 274-3831



The contents of this email and any associated emails, information, and attachments are CONFIDENTIAL. Use or disclosure without sender's authorization is prohibited. If you are not an authorized recipient, please notify the sender and then immediately delete the email and any attachments.