



Department of Energy
Office of Legacy Management

MAR 17 2010

Mr. Richard Chang
U.S. Nuclear Regulatory Commission
Mail Stop T8 F5
Washington, DC 20555-0001

Subject: Decommissioning Monitoring Well 54-SC at the Shirley Basin South, Wyoming,
UMTRCA Title II Disposal Site

Dear Mr. Chang:

As discussed in previous correspondence, the U.S. Department of Energy (DOE) intends to decommission monitoring well 54-SC at the Shirley Basin South, Wyoming, disposal site. This work is scheduled to be accomplished in spring 2010.

When the site was transitioned to DOE from Petrotomics Company in 2005, monitoring well 54-SC was identified as an Upper Sand aquifer well. The completion log for this well did not include screen information. A video camera was sent down the casing in 2008 to determine actual conditions. The video indicated that the well is continuously screened through both the Upper Sand and Main Sand aquifers of concern. It is likely, therefore, that sample results do not represent the Upper Sand aquifer. Our greatest concern is that groundwater from the Upper Sand aquifer, which is the first aquifer under the disposal cell and most likely to contain tailings contaminants, probably is leaking downward through the well into the Main Sand aquifer. Decommissioning of this well is necessary to avoid potential cross-contamination of the aquifers at that location. The well will be injected with bentonite grout, cut off below surface grade, and capped with concrete. The surface will be backfilled with soil to match the surrounding grade and seeded with a native seed mix.

DOE installed a replacement well in fall 2008. The new well, 101-SC, is completed and screened in the Upper Sand aquifer. The monitoring well network at the site is shown on the enclosed figure. All of the wells indicated by the color blue were installed in fall 2008 and are included in the annual sampling event.

2597 B 3/4 Road, Grand Junction, CO 81503	<input type="checkbox"/>	99 Research Park Road, Morgantown, WV 26505
1000 Independence Ave., S.W., Washington, DC 20585	<input type="checkbox"/>	11025 Dover St., Suite 1000, Westminster, CO 80021
10995 Hamilton-Cleves Highway, Harrison, OH 45030	<input type="checkbox"/>	955 Mound Road, Miamisburg, OH 45342
232 Energy Way, N. Las Vegas, NV 89030	<input type="checkbox"/>	
REPLY TO: Grand Junction Office		

MAR 17 2010

Mr. Chang

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Please call me at (720) 377-9682 if you have any questions or concerns.

Sincerely,

Scott R. Surovchak
2010.03.16
17:23:00 -06'00'

Scott R. Surovchak
Site Manager

Enclosure

cc w/enclosure:

K. Frederick, WDEQ

D. Harris, WDEQ

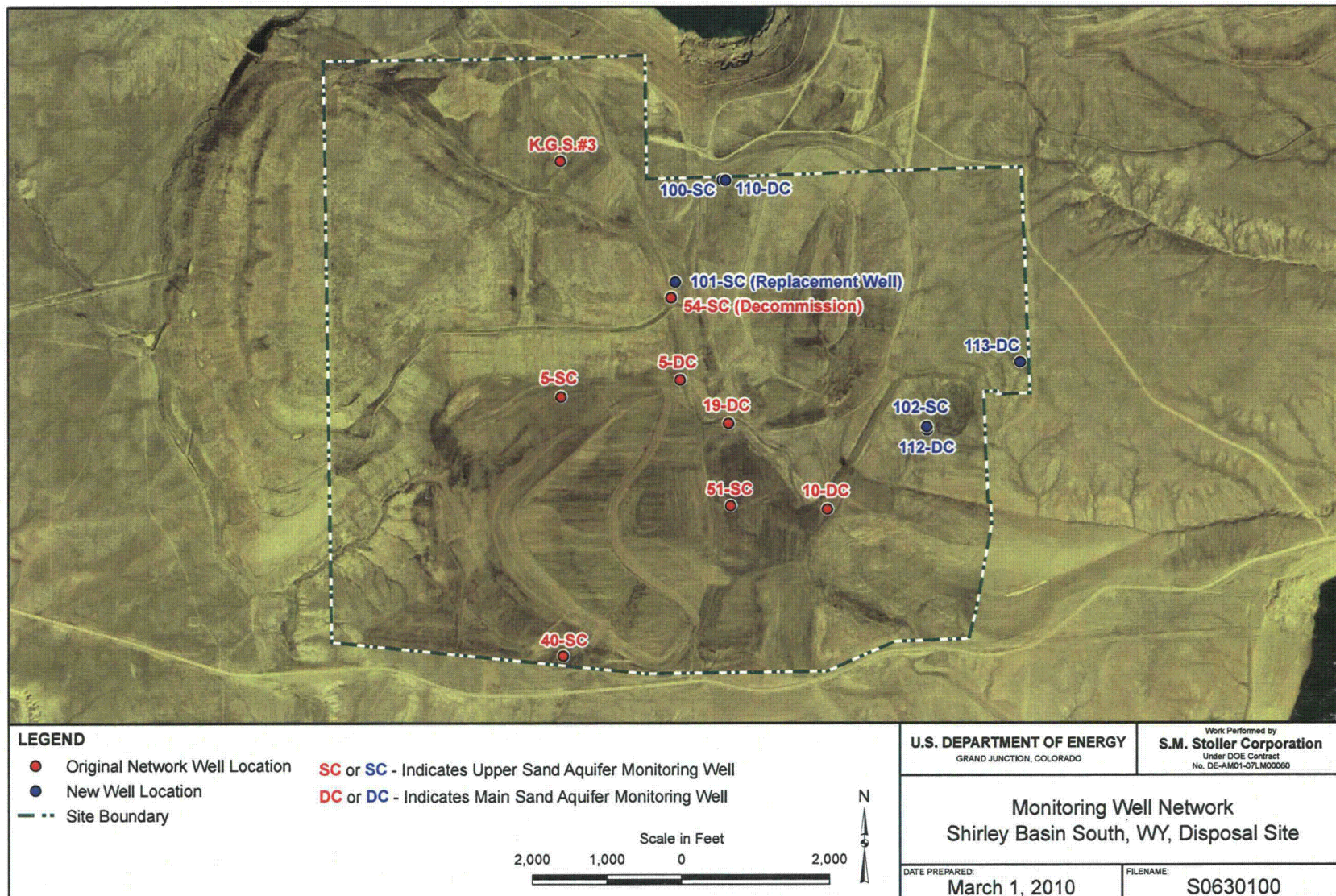
R. Bush, DOE-LM

T. Pauling, DOE-LM

D. Johnson, Stoller

File: SBS 410.02 (Roberts)

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