

EXECUTIVE SUMMARY

AquaTrack surveys of seeps 304 and 303 in OU1 delineated the channels that feed those seeps. The surveys indicated that the primary channels feeding these two seeps run east/west under the north arm of Landfill 4 and the bulk of Landfill 3. The data also indicates that the channels have interconnections. The channels and points of intersection with a larger conducting feature, assumed to be the primary plume, identified in these three surveys are shown in figure E-1 immediately following this summary. Two channels appear to be running north/south down the center and west side of Landfill 4. The confluence of these anomalies is also associated with both the confluence of power and water lines and was assumed to be the result of electrical interference. With the assumed man-made interferences remove this anomaly was positioned in the center of a wide north/south channel headed for the center of Landfill 4. The following recommendations are suggested for follow up to address questions raised by this survey. First the anomaly located almost under the test building, adjacent to Landfill 4, needs further examination. CPT would probably be the optimum way to probe this feature. Second if the north/south channels running down the center and west side of Landfill 4 need to be further defined an AquaTrack survey could be conducted energizing seep 303 or 304 while using the fence running along north side of the golf course for grounding. Third that seeps 318 and 317 be energized and the same five diagonal profile used for 303 and 304, be surveyed to identify the specific channel feeding 318 and 317.

Monitor well 680 was also energized and the results from that survey suggest that any channels under Landfill 4 probably run north/south. The channel on the east side of Landfill 4 is weak. AquaTrack works best when current flows along the water channels being tracked. The way well 680 was positioned the current appears to be flowing mostly in sheet flow. Water channels in this area appear to be perpendicular to the flow of water to well 680 and are only weakly highlighted at best.

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