WILLIAM C. MEREDITH CO., INC. EAST POINT, GEORGIA AQUIFER TEST 18 MARCH 1991

A test well, PWI, was constructed between MW5 and MW7 on 12 December 1989 to determine aquifer parameters to be used in corrective action studies. The depth of the well was 43.0 feet and the well screen and riser was 4" diameter stainless steel. Figure 1 shows well details. The aquifer test was begun at 1055 hours on the morning of 5 May 1990 and pumping continued uninterrupted until 1105 on 6 May 1990 for a total elapsed time of 24 hours 10 min. Recovery was measured until 2000 hours on 6 May 1990. A total of 4,114.7 gallons were pumped for an average of 2.84 gpm. Pump intake was set at 33.4' below casing, just above the top of screen (35.0'). Static water level was 17.97 and the maximum drawdown level was approximately 30.8 feet for a total drawdown of about 12.8 feet. All wells within an approximate 100' radius of PWI showed the effects of the pumping well. These drawdowns varied from 3.64' at MW5, 25' east of PWI to .79' at MW8, 100' north of PWI. See table 1.

Using the Jacob method for data analysis values for T and S were derived from time drawdown data for wells MW5 and MW6. The transmissivity (T) was found to be approximately 800 gpd/ft while the storativity (S) averaged .0025

Based on the results of the aquifer test it appears that PW1 pumping at a rate of approximately 3 gpm will capture essentially the entire width at the contaminated plume. There was only a very slight effect at MW9, however this well is located very near the limit of the plume. It is recognized that this well, PW1, is not designed to recover the deeper contaminated zone, however it does appear that it can meet the objectives of recovering the shallow contamination.

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