Samples were analyzed in the laboratory for ammonium using EPA 350.2, Nitrogen, Ammonia (Colorimetric, Titrimetric, Potentiometric Distillation Procedure), total phosphate using EPA 365.2, Phosphorous, All Forms (Colorimetric, Ascorbic Acid, Single Reagent), alpha-olefin sulfonate using EPA 425.1, Methylene Blue Active Substances, pH using EPA 150.1, pH (Electrometric), and turbidity using EPA 180.1, Determination of Turbidity by Nephelometry. The following table presents the results of the pre and post burn samples:

Table 4-1
Pre and Post Burn Sample Results

Constituent Method		Pre-Burn Sample Results	Post-Burn Sample Results
		MRS16-001	MRS16-002
		3/6/2006	2/4/2008
Ammonia as N	EPA 350.2	0.20J mg/L	0.341 mg/L
pH EPA	150.1	6.84	6.36
Phosphorous (total)	EPA 365.2	0.11 mg/L	0.152
Surfactants (MBAS)	EPA 425.1	<0.1 mg/L	<0.25 mg/L
Turbidity	EPA 180.1	98.6 NTU	85.4 NTU

Pre-burn water and post-burn water results were compared to assess any potential impact. There are no significant differences between the two results collected from the vernal pool. The slight increase in some concentrations (though not all, as the turbidity values actually decreased) may have been caused by the drought conditions described above resulting in the vernal pool containing less water (and therefore more concentrated constituents) when sampled post-prescribed burn as compared to the pre-prescribed burn sampling. It is concluded that the prescribed burn activities had no effect on the water quality of the pool.