

COMPARISON OF A NEUTRON PROBE WITH A PR-2 SOIL MOISTURE METER¹

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Abstract: In 2006, a project was initiated at Navajo Mine in northwest New Mexico to study the redistribution of soluble salts in a newly reclaimed area. As part of the project, soil moisture was monitored at 34 sites on a monthly basis from September 2006 to September 2008 and weekly during the growing season (May – September). Soil moisture readings were collected with two instruments, a Troxler neutron probe and a Delta-T PR-2/6 moisture meter. Both instruments were calibrated using gravimetric samples. A part of the study was to determine if the PR-2/6 probe would provide reliable soil moisture readings, compared to the neutron probe in spoil material having various levels of soluble salt. In general, the PR-2/6 probe gave similar results and was determined to be a useful instrument to measure soil moisture in these spoil materials.

Additional Key Words: soil water measurement, water measurements

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