Addendum No. (4)a

BERMUDA WATER CONSULTANTS LIMITED

WATER QUALITY TEST REPORT:
TULO VALLEY PLANT NURSERY

COMMISSIONED BY: Deanna Edwards (Ministry of Works and Engineering)

SITE LOCATION: Tula Valley Plant Nursery

SOURCE: Groundwater Well and Storage Tank

SUMMARY:

Testing was conducted to determine the feasibility of using existing groundwater as the primary source for a new RO system. The current rainwater harvesting system (tank) is insufficient for peak summer demand, often exhausting its supply within one to two weeks. Our analysis indicates that the groundwater is currently being used to supplement the storage tank, as the chemical signatures of both sources are nearly identical.

LABORATORY RESULTS:

The following parameters were measured on-site to assess the mineral content of the source water:

Parameter	Groundwater Well	Storage Tank
Conductivity (µS/cm)	550	530
Salinity (PPM)	258	260

Note: The close correlation between the well and tank results suggests that the storage tank is currently being recharged with groundwater, or that the groundwater is of high enough quality to mimic filtered rainwater at this time.

TECHNICAL OBSERVATIONS FOR RFP BIDDERS:

While the current salinity levels are relatively low (categorized as fresh/brackish), prospective bidders should consider the following factor when designing an RO system for this site:

Seasonal Variability: Due to the nursery's proximity to the ocean, there is a risk of saltwater intrusion during peak summer droughts. Increased pumping from the well may lead to a rise in salinity.

Dr. Kent Simmons
for Bermuda Water Consultants Ltd