Acceptable SWS Result	
Margianl SWS Result	
Failed SWS Result	

Sample No.	Upper Depth (m)	Lower Depth (m)	Depth Factor	FS	CS	Cl	15 Bar	Field Capacity	Bulk Density	Wilting Point	delta AWC	PAWC
10-SCL	0	0.1	1.3	0	75.1	16.8	16	31.41	1.27	18.65	16.21	
	0.2	0.3	2.6	0	67.5	20.5	13	22.15	1.47	14.72	10.96	
	0.5	0.6	2.1	0	67.3	22.9	14	18.79	1.57	14.81	6.24	
	0.7	0.8	2.4	0	59.0	24.4	15	18.49	1.58	15.31	5.02	
	0.9	1	1.6	0	49.3	29.5	17	20.22	1.54	16.93	5.07	82.83

Sample No.	Upper Depth (m)	Lower Depth (m)	Depth Factor	FS	CS	Cl	15 Bar	Field Capacity	Bulk Density	Wilting Point	delta AWC	PAWC
91-SCL	0	0.1	1.2	0	82.0	13.9	12	27.07	1.35	14.92	16.40	
	0.2	0.3	3.8	0	74.5	17.4	14	23.12	1.44	15.96	10.35	
	0.5	0.6	1	0	59.6	34.0	19	25.13	1.43	19.42	8.16	
	0.8	0.9	3	0	58.7	36.9	21	25.73	1.42	21.11	6.56	
	0.9	1	1	0	47.3	37.5	22	26.57	1.40	22.06	6.34	93.19

Sample No.	Upper Depth (m)	Lower Depth (m)	Depth Factor	FS	CS	Cl	15 Bar	Field Capacity	Bulk Density	Wilting Point	delta AWC	PAWC
42	0	0.1	1.4	0	77.0	19.0	12	27.25	1.36	14.41	17.40	
	0.2	0.3	1.6	0	59.0	35.0	15	25.15	1.43	15.65	13.61	
	0.5	0.6	4	0	61.0	37.0	16	21.89	1.51	16.29	8.47	
	0.8	0.9	2	0	57.0	37.0	18	22.26	1.50	18.10	6.26	
	0.9	1	1	0	56.0	38.0	19	23.14	1.48	19.05	6.08	98.64

PAWC is determined using the above PAWCER Pedo-transfer Function (supplied by Ian Grant, Agricultural Chemistry Pty Ltd). Ian Grant was suggested by Dennis Baker (E.S.S.A / Nominated Laboratory Representative) and has worked previously in PAWCER development for soil science applications.

A summary of the function is as follows:

Steps	Function
1	Upper and lower depths relate to the soil samples collected
2	Depth factor is the height of the soil column based on the texture observed, within the upper and lower depths. These values may extend beyond the upper/lower depth, however this is to ensure accruacy of the texture and depth of texture observed. The depth factor must equal 10 for 1.0m
3	CS (Coarse Sand/Sand) and Cl (Clay) laboratory result percentages are inserted. FS (Silt) is not included, as per RPI 08/14 example calculation.
4	15 Bar laboratory result is inserted.
5	Field Capacity is determined by assessing upped depth, FS, CS, CL and 15 Bar. Example calculation below;
	(0.995+0.0011*(FS+CS))*13.2*EXP(-2.845*Upper depth)+(1.0054+0.0041*Cl)*15 Bar
6	Bulk density is determined by the calulation using the field capacity and CL percentage. Example calculation below;
	(85.82+0.12*Cl)/(37.74+Field Capacity)
7	Wilting point is determined by the calulation using the upper depth, Cl and 15 Bar. Example calculation below;
	100*(-2.41+0.0566*Cl)*(-0.0176+0.022*Upper Depth)+1.0054*15 Bar
8	delta AWC is calculated for the individual depth using the field capacity, bulk density and wilting point. Example calculation below;
	(Bulk Density*Field Capacity)-(Bulk Density*Wilting point)
9	PAWC is then calculated by the delta AWC multiplied against the depth factor, with all results added. Example calculation below;
	delta AWC*Depth Factor+ delta AWC*Depth Factor + delta AWC*Depth Factor + delta AWC*Depth Factor + delta AWC*Depth Factor (Five Depths)