Description to Using CSV Report of Research Soil Samples

Use MicroSoft Excel to open the ResearchResults#.csv file that was attached to your reporting e-mail from soiltest@vt.edu. Any software that can open a Comma Separated Values (csv) file can be used.

The contents should look similar to this –

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
1	Name	Sample ID	LabID	pH	BpH	P ppm	K ppm	Ca ppm	Mg ppm	Zn ppm	Mn ppm	Cu ppm	Fe ppm	B ppm	% OM	SS ppm	CEC meq/100g	% Acidity	% Base Sa	% Ca Sat	% Mg Sat	% K Sat	P Rating	K Rating	Ca Rating	Mg Rating	SS Rating	OM Rating
2	THOMPSON TOM	1001	46502	7.02	N/A	38	87	1093	305	3	24.7	0.8	8.1	0.6			8.2	N/A	100	66.6	30.7	2.7	H	M+	VH	VH		
3	THOMPSON TOM	2001	46503	6.63	6.35	29	134	1055	265	3.3	19.7	1	6.6	0.6			8.1	3.7	96.3	65.1	27	4.2	H	H	H+	VH		
4	THOMPSON TOM	3001	46504	5.71	6.02	75	255	766	221	3.3	29	0.8	20.2	0.4			8.5	26.4	73.6	44.7	21.2	7.6	VH	VH	H-	VH		

You might want to rename and save the file by using “Save As” to an *.xlsx file.

The first 5 columns of the spreadsheet look like this –

	A	B	C	D	E
1	Name	Sample ID	LabID	pH	BpH
2	THOMPSON TOM	1001	46502	7.02	N/A
3	THOMPSON TOM	2001	46503	6.63	6.35
4	THOMPSON TOM	3001	46504	5.71	6.02

with columns of:

Name = research client (your) name;

Sample ID = sample identification that you provided on the sample information sheet;

LabID = Lab Identification number that was assigned to your sample by the laboratory;

pH = the measured (1:1) soil to water pH;

BpH = the measured Mehlich Buffer pH,

a value of “N/A” means that a buffer index/pH was not determined because the water pH was ≥ 6.95;

The next 11 columns look like –

	F	G	H	I	J	K	L	M	N	O	P
	P ppm	K ppm	Ca ppm	Mg ppm	Zn ppm	Mn ppm	Cu ppm	Fe ppm	B ppm	% OM	SS ppm
	38	87	1093	305	3	24.7	0.8	8.1	0.6		
5	29	134	1055	265	3.3	19.7	1	6.6	0.6		
2	75	255	766	221	3.3	29	0.8	20.2	0.4		

with:

P = phosphorus **K** = potassium **Ca** =calcium **Mg** = magnesium

Zn = zinc **Mn** = manganese **Cu** =copper **Fe** = iron

B = boron **OM** = % Organic Matter content by LOI method **SS** = Soluble Salts (ppm)

Element values are "plant-available" Mehlich-1 nutrient levels in ppm on a weight basis, such as mg/kg of soil.

Blank values for %OM and SS mean that the test was not performed.

The next 6 columns look like –

	Q	R	S	T	U	V
	CEC meq/100g	% Acidity	% Base Sa	% Ca Sat	% Mg Sat	% K Sat
	8.2	N/A	100	66.6	30.7	2.7
	8.1	3.7	96.3	65.1	27	4.2
	8.5	26.4	73.6	44.7	21.2	7.6

with columns of:

CEC = estimated Cation Exchange Capacity in meq/100 g

% Acidity = % acidity **% Base Sat** = % base saturation

% Ca Sat = % calcium saturation **% Mg Sat** = % magnesium saturation **% K Sat** = % potassium saturation

These reported values are calculated from the previous measured values.

A reported % Acidity of "N/A" means that a buffer index/pH was not determined, and that the acidity is probably less than 1 meq/100 g and/or 5%, and the soil pH is alkaline (greater than 7.0).

The last 6 columns look like –

W	X	Y	Z	AA	AB
P Rating	K Rating	Ca Rating	Mg Rating	SS Rating	OM Rating
H	M+	VH	VH		
H	H	H+	VH		
VH	VH	H-	VH		

with columns giving a Low, Medium, High or Very High rating to the resulting test value.
Ratings for the micronutrients are not provided since they are crop dependent, (if available at all).

For more information on these ratings and reported values see -

Soil Test Note #1, *Explanation of Soil Tests*, at http://pubs.ext.vt.edu/452/452-701/452-701.html

Lab Procedures at https://www.soiltest.vt.edu/content/dam/soiltest_vt_edu/PDF/lab-procedures-new.pdf

Interpretations and Recommendations at www.soiltest.vt.edu/PDF/recommendation-guidebook.pdf