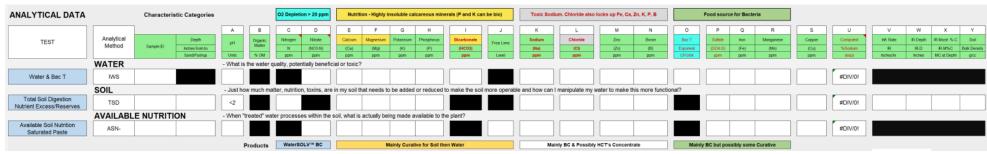
HCT Analytical Log Sheet

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Description: A single Excel Document, for ongoing documenting and tracking analytical data of Water, Soil and Available Nutrition, all encompassing for products, use costs, and application rates throughout the WaterSOLV™ Program.

Section 1



Document data and trend data of Water, Total Soil Composition and Available Plant Nutrition, per water source, per soil sample. Add rows, have all the data needed, establish the baseline, and track progress. Easily identify the nutritional soil reserves, the excess, the deficiencies, the biological food sources, toxins, where you're in balance and where the problems are and what's necessary to address them.



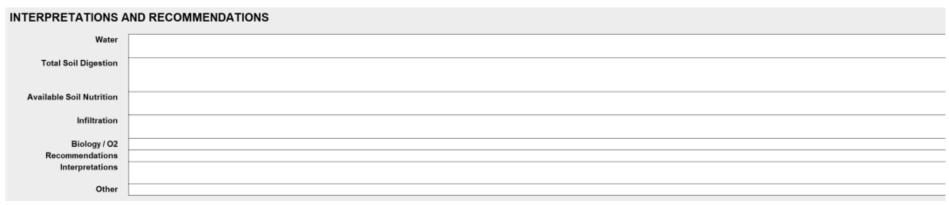
Color coding of cells.

Section 2



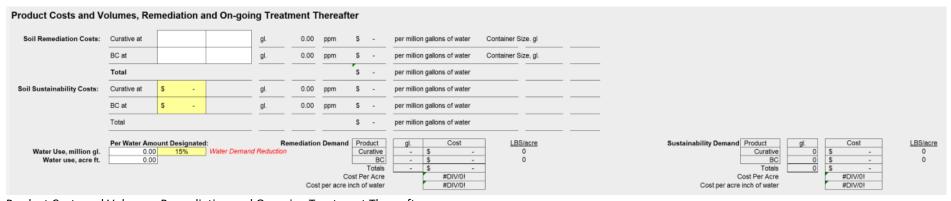
Auto calculated water treatment rates and easily added soil remediation amounts, with estimated timing.

Section 3



Detailed Interpretations and Recommendations.

Section 4



Product Costs and Volumes, Remediation and On-going Treatment Thereafter

Section 5

Analytical Methods:

Irrigation Wter & Bac T - Standard Available Soil Nutrition - Legacy Method Total Soil Composition - Legacy Method Standard methods for analyzing irrigation water. HCT originated the use of Bac T testing of irrigation water.

Developed solely by HCT. Utilizes growers actual, treated, water - 4:1 water to soil ratio versus 1:1 and 72 hours soak time versus 12 to 18 hours. More accurate results. Helps prevent adding multrition that is already present in the soil but not available Developed by Dr. Dave York, Robert Oppold of ISTRC, Denis Barron and Todd Eden of HCT. Where pore space is essential, the accummulation of unconsummed salts and nutrition, must be minimized to acceptable levels.

Test Methods

Method Description IWS Conventional

Legacy

Standard irrigation water suitability analysis, all primary elements, excluding aluminum.

IWS - Bac T Legacy Irrigation water total bacteria (Bac T) colony forming units.

Conventional Deionized water, 1:1 soil to water ratio - 12 to 24 hour chemical retention, extract solute, report elements. ASN-C

ASN-G, GT, S Grower, Grower Treated, Spiked (HCT pHix) Legacy

Exchangeable - Exch. Similar to ASN Conventional, using reagents that "emmulate" roots acid porduction to break down soils for uptake. HCT does not subscribe to this test method or the data thereof. Conventional

Similar to quantifying nutrition or manure, total digestion of soils to see all that is there. Usually multiple times more elements than what "exhangeables" exhibit. Key words - infiltration, pore space, bulk density, available versus complexed nutrients.

Pump Settings

Well

Pump

Total Soil Digestion - TSD

Curative		BC
#DIV/0!		#DIV/0!
3712	mls/gl	3712
0.000	gl./A ft.	0.000
0	mls/A ft.	0
0.0		0.0
#DIV/0!		#DIV/0!
#DIV/0!	fl. ounces per minute	#DIV/0!
0.00000		0.00000
0.000		0.000
0.000		0.000
0.000		0.000
0.000		0.000
		0.000
		#DIV/0!
0.000		0.000
	#DIV/0! 3712 0.000 0 0.0 #DIV/0! #DIV/0! 0.0000 0.000 0.000	#DIV/0I 3712 mls/gl 0.000 gl/A ft. mls/A ft. 0.0 #DIV/0I #DIV/0I 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 #DIV/0I

Turf	High Pressure	Smart Pump	Output	Pressure			SPM	
		PD741-A28HI (HCT)	0.30 GPH	250 PSI	BC			GPM FIG
		PD741-823SI (HCT)	0.52 GPH	250 PSI	Curative /	/ Fertilizer	160	GPH Flo
Turf/Landscape	High Pressure	Manual Pumps	Output	Pressure				GPH Application ppm Tre
		PD041-A28HI (HCT)	0.30 GPH	250 PSI	ВС			
		PD041-823SI (HCT)	0.52 GPH	250 PSI	Curative /	/ Fertilizer		
Landscape / AG Li	Low Pressure	Manual Pumps	Output	Pressure				
		PD051-A38HI (HCT)	0.7 GPH	150 PSI	вс			
		PD051-833SI (HCT)	1.0 GPH	150 PSI	Curative /	/ Fertilizer		
Landscape / AG Lo	Low Pressure	Smart Pumps	Output	Pressure				
		PD751-A38HI (HCT)	0.7 GPH	150 PSI	вс			
		PD751-833SI (HCT)	1.0 GPH	150 PSI	Curative /	/ Fertilizer		

THIS NUMBER HAS TO BE UNDER 100% OR THE PUMP CANNOT HANDLE THE DESIRED VOL. OF PRODUCT OUTPUT (29 mls = 1 fl. ounce - 928 mls = 1 fl. quart)

In the Know

Chemical Need Percent Pump Setting(s)

Mls/100 gl. of water

Liberating minerals an metals in soils, increase pH and in most cases reduce the soluble soidum percentage - making the essential nutrients just as availabe/souluble for plant uptake as the toxic sodium. None of these tests direcelty identify bio exudates; bio-films or H2S. Infiltration rate, depth, management of bio-food sources, all play a role in the balance of soil between aerobic versus anaerobc conditions. 1/2 gl of pool acid, into a average size residential pool 30,000 gl. equates to 8.3 ppm.

Total solids (TS) is the sum of both the total suspended solids (TSS - filterable) and total dissolved solids (TDS - unfilterable) in the process of water:

TSS (mg/l) = ECe x 640

mg/l = ppm

Supporting Tools; Analytical Methods, Test Methods, Pump Settings, In-the-Know.