Analysis by:

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Note: only 2 cups of soil are needed for most tests. See soil sampling guidelines on the website. Mix composite samples well after removing gravel, clumps and debris. Scoop out 2 cups of soil. Prices include priority mail from Oahu to the lab in Ohio. Outerisland samples need to be sent to me on Oahu. Samples are consolidated and shipped every 5-10 days. Shipments usually reach the lab within 5-7 days. Reporting turn around is 10-20 days from the time that I receive samples. For reporting turn around of 7-12 work days, there is an unconsolidated shipment fee of \$15. The following tests are commonly requested but the lab can do more; please inquire.

## Interpretation & Recommendation is \$15 per sample (less for multiple samples) Consulting and Field Time is \$75 per hour (\$60 per hour for ag accounts)

Analysis Code	SOIL ANALYSIS	Test Price
S001C	Standard Soil- Mehlich 3 (scoop) extractable P, Ca, Mg, K, Na, S, B, Fe, Mn, Zn, Cu, Al, Olsen P, CEC (calculated), % Base Saturation, pH (1:1)	\$30
S001CN	Standard Soil plus N- includes Standard Soil plus nitrate-N & ammonium-N (KCl extractable)	\$35
S005C	Complete Soil- includes Standard Soil plus soluble salts (2:1), nitrate-N & ammonium-N	\$40
S003	<b>Soil-Less Media-</b> water extraction with pH, soluble salts, nitrate-N, ammonium-N, P, Ca, Mg, K, Na, S, B, Fe, Mn, Zn, Cu, Al, Mo, Co	\$35
S006	Saturated Soil Paste- water extraction with soluble salts, chloride, nitrate-N, ammonium-N, bicarbonate, S, P, Ca, Mg, K, Na, B, Fe, Mn, Zn, Cu, Al, SAR (calculated), pH	\$45
S015A	Alkaline Soil Package- ammonium acetate (pH 8.1) extractable Ca, Mg, K, Na, S, Mehlich 3 extractable Fe, Mn, Cu, Zn, nitrate-N, ammonium-N, Calculated CEC, % Base Saturation, pH (1:1)	\$40
S014	<b>Green Roof Media-</b> total porosity %, aeration porosity %, water retention porosity %, bulk density at field capacity	\$125
S290	Infiltration Rate via Drop Method	\$100
S171	Percent Sand, Silt & Clay (ASTM D422)	\$45
S176	Mechanical Analysis & Sand Fractions (ASTM D422)	\$70
S184	Moisture Measurement (% saturation)	\$20

## SOIL ANALYSIS (continued)

S019	<b>Soil Health Tool-</b> H3A Extractable Soil Nutrients plus water extractable organic carbon & nitrogen, C:N ratio, total inorganic N, Respiration (IRGA), Soil Health Score	\$80
S113	Soil Respiration IRGA (24 hour)	\$40
S242	Autoclaved Citrate Extractable Protein (ACE Protein)	\$45
S241	Permanganate-Oxidizable Carbon (POXC)	\$40
S273	Water-Stable Aggregate Test (gravimetric)	\$50
S138	Total Carbon (for soil pH <7)	\$15
S139	Total Organic Carbon (acid treated)	\$20
S112	Total Nitrogen	\$15
S202	Total Carbon/Nitrogen Ratio	\$25
S106	Aluminum (KCI extractable)	\$15
S107	Ammonium Acetate Extractable- Ca, Mg, K, Na, S	\$20
S110	Nitrate & Ammonium Nitrogen (5:1 1N KCI)	\$20
S131	Bulk Density (estimated)	\$10
S136	Calcium Carbonate Equivalent (CCE)	\$35
S204	CEC (ammonium acetate displacement)	\$35
S140	Chloride (2:1 calcium nitrate extract)	\$10
S225	Olsen Phosphorus (ICP)	\$10
S256	Sodium Adsorption Ratio (as paste)	\$25
S205	Soil pH (1:1 water:soil)	\$10
S206	Soil pH (CaCl2)	\$10
S210	SMP/Sikora Buffer pH	\$10
S216	Soil pH (as a paste)	\$10
S260	Soluble Salts as EC (2:1 water:soil)	\$10
S262	Soluble Salts as a paste (ECe)	\$25
S320	Sieving for 7 different screen sizes	\$50

## **TISSUE ANALYSIS**

T002	Complete Tissue (wet chemistry)- N, P, K, Ca, Mg, S, B, Fe, Mn, Cu, Zn, Al, Na (samples must be oven dried)	\$45
T122	Total Carbon	\$15
T125	Chloride	\$15
T200	Corn Stalk Nitrate Test	\$20
T225	Dry Weight	\$10
T155	Molybdenum	\$15
T165	Nitrate & Ammonium-N (acetic acid extract)	\$20
T170	Nitrogen (total)	\$15
F002	Forage Evaluation- (wet chemistry)- moisture, crude and digestible protein, estimated crude fiber, TDN, ENE, ADF, NDF, Ca, Mg, K, P, Na, Fe, Mn, Zn, Cu (S & B can be added for \$10 each)	\$45
F006	Nitrate & Ammonium (water soluble)	\$15
	WATER ANALYSIS	
W002	Standard Irrigation Water- pH, hardness, EC, SAR, RSC, Ca, Mg, K, Na, Fe, B, Cl, OH, SO4-S, carbonate, bicarbonate, cation:anion ratio	\$55
W004	Complete Irrigation Water- includes Standard Irrigation Water plus Mn, Cu, Zn, Al	\$65
W125	Chloride (titration)	\$15
W007	Effluent Water Analysis- includes Complete Irrigation Water plus total P & Nitrate-N	\$75
W005	Nitrate-N & Nitrite-N	\$25
IA642	Phosphorus (dissolved)	\$20
W190	Phosphorus (total)	\$15
W201	Salt Concentration (TDS)	\$15
IB215	Silica (as soluble silicate)	\$30
W225	Total Suspended Solids	\$20
W250	Total Volatile Solids	\$20

## **AMENDMENT ANALYSIS**

Z001	<b>Standard Manure-</b> includes N, P, K, moisture, organic matter, mineral matter	\$55			
Z002	Complete Manure- includes Standard Manure Manure plus Ca, Mg, Na, S, Fe, Mn, Cu, Zn, B	\$70			
Z004	Compost Analysis- includes Complete Manure plus pH, C:N ratio	\$80			
<b>Z003</b>	Nitrate & Ammonium Nitrogen	\$20			
Z155	Moisture %	\$10			
Z210	Soluble Salts	\$10			
L001	Standard Lime Analysis- Ca, Mg, fineness	\$55			
L002	<b>Complete Lime-</b> includes Standard Lime plus Na, K, S, Fe, Mn, Cu, Zn, B	\$65			
L166	Limestone pH	\$10			
L179	Water Solubility (%)	\$20			
FERTILIZER ANALYSIS					
X001	Standard Fertilizer- includes N, P, K	\$80			
X002	Complete Fertilizer- includes Standard Fertilizer plus Ca, Mg, Na, Fe, Mn, Cu, Zn, B	\$100			
X003	<b>Liquid Greenhouse Fertilizer-</b> EC, pH, Cl, nitrate-N, ammonia-N, P, K, S, Ca, Mg, Na, B, Fe, Mn, Zn, Cu, Mo, Co, Al	\$40			
X183	Salt Index	\$15			
X190	Sulfur	\$20			
X200	Conductivity	\$15			
X205	Specific Gravity	\$10			
IB007	CFR 503 Metals*- As, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Se, Zn	\$150			
Individual Metals for \$20 each (unless noted), reported in 2 to 18030   Arsenic*   IB110   Cobalt   IB190   IB040   Barium   IB120   Copper*   IB210   IB050   Beryllium   IB140   Lead*   IB230   IB060   Cadmium*   IB236   Lithium (\$25)   IB280   IB080   Chromium (Hexavalent)   IB170   Mercury* (\$35)   IB290   IB090   Chromium*   IB180   Molybdenum*   IB300   IB3		Nickel* Selenium* Silver Titanium (\$25) Vanadium			