

Analytical Catalog 2022

Amount (\$)

**PLANT TISSUE ANALYSIS**

**Grape Petiole Analysis:**

G1: NO <sub>3</sub> -N, P, K .....	5
G2: NO <sub>3</sub> -N, P, K, Zn, Mn, Na, B, Ca, Mg, Fe, Cu .....	5
G2: plus TN .....	5
G3: G2 plus Cl .....	5
G3: G3 plus TN .....	5

**Leaf Analysis:**

L1: N, P, K .....	5
L2: N, P, K, Zn, Mn, Na, B, Ca, Mg, Fe, Cu .....	5
L3: L2 plus Cl .....	5

**Petiole Analysis:**

P1: NO <sub>3</sub> -N, PO <sub>4</sub> -P, K .....	5
P2: NO <sub>3</sub> -N, PO <sub>4</sub> -P, K, Zn, Mn, Na, B, Ca, Mg, Fe, Cu .....	5
P3: P2 plus Cl .....	5

**Alfalfa Analysis:**

Fractioned: AA1 - AA4	Baled: AA5 & AA6	
AA1: Top Third: B, Mo, Cu .....		5
AA2: Middle Third Stems: PO <sub>4</sub> -P, K .....		5
AA3: Middle Third Leaves: SO <sub>4</sub> -S .....		5
AA4: All of the Above .....		5
AA5: Baled: K, B, Mo, Cu, Total: P, S .....		5
AA6: K, B, Mo, Cu, PO <sub>4</sub> -P, SO <sub>4</sub> -S, Total: P, S .....		5

**Crop Removal Analysis:**

CRA1: Moisture, N, P, K, Ash .....	9
CRA2: Moisture, N, P, K, Ash, Zn, Mn, Na, B, Ca, Mg, Fe, Cu .....	9
CRA3: CRA2 plus Cl .....	9

**Individual Plant Tissue Component Analysis:**

(Add only \$10 for additional elements on the same extract and method)

(\* = extract method B4.20, \*\* = Method B3.10)

* Aluminum (Al) .....	B4.20 .....	5
Ash .....	TMECC 03.02-B .....	9
* Boron (B) .....	B4.20 .....	5
* Calcium (Ca) .....	B4.20 .....	5
Carbon (C) .....	B2.20 .....	5
CDFA Pesticide Screen .....	:	7
** Chloride (Cl) .....	B3.10 .....	5
* Copper (Cu) .....	B4.20 .....	5
* Iron (Fe) .....	B4.20 .....	5
* Magnesium (Mg) .....	B4.20 .....	5
* Manganese (Mn) .....	B4.20 .....	5
Moisture % .....	B1.10 .....	5
* Molybdenum (Mo) .....	B4.20 .....	5
** Nitrate Nitrogen (NO <sub>3</sub> -N) .....	B3.10 .....	5
Nitrogen (N) .....	B2.20 .....	5
** Phosphate (PO <sub>4</sub> -P) .....	B3.10 .....	5
* Phosphorus (P) .....	B4.20 .....	5
** Potassium (K): extractable .....	B3.10 .....	5
* Potassium (K): digestible .....	B4.20 .....	5
* Sodium (Na) .....	B4.20 .....	5
* Sulfur (S) .....	B4.20 .....	5
** Sulfate Sulfur (SO <sub>4</sub> -S) .....	B3.10 .....	5
* Zinc (Zn) .....	B4.20 .....	5

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

Analytical Catalog 2022

Amount (\$)

**SOIL ANALYSIS**

**Basic Fertility:**

BF1: NO <sub>3</sub> -N, PO <sub>4</sub> -P, K, Zn .....	5
BF2: NO <sub>3</sub> -N, PO <sub>4</sub> -P, K, pH <sub>s</sub> .....	5
BF3: BF1 plus extractable Ca, Mg, Na .....	5

**Fertility Assay:**

FA1: SP, pH <sub>s</sub> , EC <sub>e</sub> , Ca, Mg, Na, ESP, B, GR or LR (buffer pH), NO <sub>3</sub> -N, PO <sub>4</sub> -P, K, Zn .....	5
FA1: Plus Cl .....	5
FA2: FA1 plus DTPA extractable Mn, Fe, Cu and ammonium acetate .....	5
extractable Ca, Mg, Na expressed as meq/100 g	
FA3: FA2 plus <i>estimated</i> CEC, extractable Ca, Mg, K and Na expressed as .....	5
percentage of <i>estimated</i> CEC plus Al and H, if needed	
FA3: Plus OM .....	5
FA4: FA2 plus <i>measured</i> CEC, <i>estimated</i> exchangeable acidity and cations .....	7
expressed as percentage <i>measured</i> of CEC	
MA1: Sand, Silt, Clay, Textural Class ..... S14.10 .....	5
MA2: MA1 plus Organic Matter, Moisture, CEC .....	7
Rock, % by weight.....	5
Laser Particle Size Distribution ASTM 4464.....	: 10-15

**Heavy Metals (40CFR Part 503):**

As, Cd, Cr, Pb, Mo, Ni, Se, Zn, Hg, (As, Pb, Se, Hg 15 working days) .....	15
--	----

**Dairy Soil:**

DS1: NO <sub>3</sub> -N (0-1', 1-2') .....	5
DS2: FA1 (0-1'); NO <sub>3</sub> -N (1-2') .....	8
DS3: FA1 (0-1'); NO <sub>3</sub> -N (1-2', 2-3') .....	8

**Individual Soil Component Analysis:**

(Add only \$10 for additional elements on the same extract and method)

(\* = extract method S6.10, \*\* = Method S5.10, \*\*\*=method S1.60)

Aluminum (Al) (KCl extractable) .....	SSSA, p 526 .....	5
*** Bicarbonate (HCO <sub>3</sub> ), soluble .....	S1.30 .....	5
*** Boron (B), soluble .....	S1.50 .....	5
Bulk Density .....	Hndbk 60.38 .....	5
*** Calcium (Ca), soluble .....	S1.60 .....	5
** Ammonium Acetate extractable .....	S5.10 .....	5
Carbon: Total Organic - TOC (Total C, less carbonates, if present) .....	S9.30, S1.10, S13.10.....	7
Carbon:Nitrogen ratio .....	S9.30, S1.10, S13.10.....	7
Cation Exchange Capacity (Ba saturation and CaSO <sub>4</sub> displacement) ..	S10.20 .....	7
*** Chloride (Cl), soluble .....	S1.40 .....	5
* Copper (Cu), extractable .....	S6.10 .....	5
Electrical Conductivity (EC <sub>e</sub> ) .....	S1.20 .....	5
Field Capacity (FC), 1/3 bar .....	Hndbk 60.30 .....	: 7
Gypsum Requirement (GR) .....	Hndbk 60.22(d).....	5
* Iron (Fe), extractable .....	S6.10 .....	5
<u>Lime:</u> Content, quantitative (CaCO <sub>3</sub> equivalence) .....	S13.10 mod .....	7
Presence (LP), qualitative .....	Hndbk 60-23a .....	5
Requirement (LR) (Buffer pH) .....	S2.50 .....	5
*** Magnesium (Mg), soluble .....	S1.60 .....	5
** ammonium acetate extractable .....	S5.10 .....	5
* Manganese (Mn), extractable .....	S6.10 .....	5
Moisture, (%) .....	Hndbk 60-26 .....	5
* Molybdenum (Mo), extractable .....	S6.10 .....	5
Nematode Identification .....	:	8

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

**SOIL ANALYSIS (continued)**

**Individual Soil Component Analysis (continued):**

(Add only \$10 for additional elements on the same extract and method)

(\* = extract method S6.10, \*\* = Method S5.10, \*\*\*=method S1.60)

<u>Nitrogen:</u>	Ammonia (NH <sub>4</sub> -N) .....	S3.50 .....	5
	Kjeldahl (TKN) .....	S8.10 .....	7
	Nitrate (NO <sub>3</sub> -N) .....	S3.10 .....	5
	Total N (NO <sub>3</sub> -N + TKN) .....		10
	Organic (Org-N) (Calculation of TKN & NH <sub>4</sub> -N) .....		7
	or Org-N (Calculation of TN(combustion), NO <sub>3</sub> -N & NH <sub>4</sub> -N) .....		7
	Total (Combustion) .....	S9.30 .....	5
Organic Matter: (LOI) .....		S9.20 .....	7
Permanent Wilting Point (PWP), 15 bar .....	Hndbk 60.31 .....		7
pH <sub>s</sub> value .....		S1.10 .....	7
Phosphorus, Total .....		S16.10 .....	7
	Phosphate (PO <sub>4</sub> -P), extractable (Olson) .....	S4.10 .....	5
	Phosphate (PO <sub>4</sub> -P), extractable (weak Bray) .....	S4.20 .....	5
Phylloxera .....			6
Phytophthora .....			15
*** Potassium (K), soluble .....		S1.60 .....	5
** ammonium acetate extractable.....		S5.10 .....	7
Total .....		S16.10 .....	5
Saturation Percentage (SP) .....		S1.00 .....	5
*** Sodium (Na), soluble .....		S1.60 .....	5
** ammonium acetate extractable .....		S5.10 .....	5
Sulfur, Total .....		B4.20 .....	5
	Sulfate (SO <sub>4</sub> -S), extractable .....	S11.10 .....	5
	Sulfate (SO <sub>4</sub> -S), soluble .....	S1.70 .....	5
Verticillium Wilt .....			20-25
* Zinc (Zn), extractable .....		S6.10 .....	5

**POTTING MIXES (Growing Media)**

Fertility Assay: SP,pH, EC <sub>e</sub> , B, Ca,Mg, Na,K, Zn, Cl, NO <sub>3</sub> -N, PO <sub>4</sub> -P, Cu, Fe, Mn (all water soluble) .....	6
--	---

**ORGANIC SOIL AMENDMENT (Manure, Compost, etc.) 1 quart, plastic bag**

Depending on matrix, methods from TMECC or RMMA.

OSA1: Moisture, N, P, K .....	7
OSA2: OSA1 plus Ash, Organic Matter (LOI), C:N Ratio, Ca, Mg, Na, Fe, Cu, Mn, Zn, S .....	10
OSA3: OSA2 plus Cl .....	12
OSA4: Heavy Metals (40CFR Part 503): As, Cd, Co, Cu, Cr, Pb, Mo, Ni, .....	15
Se, Zn, Hg (As, Pb, Se, Hg: (15 working days)	

**DAIRY MANURE**

DM1: Moisture, N, P, K .....	7
DM2: DM1 plus Ash, Ca, Mg, Na, S, Cl .....	10

**SOIL AMENDMENT ANALYSIS Sample Size: 1 pint, plastic bag**

GA1: Gypsum plus Moisture (CaSO <sub>4</sub> ·2H <sub>2</sub> O, Moisture) .....	10
GA2: GA1 plus P, K, Al, As, Ba, B, Ca, Cd, Cr, Co, Cu, Fe, Pb, .....	10
Li, Mg, Mn, Hg, Mo, Ni, Se, Si, Ag, Na, Sr, S, Sn, Ti, V, Zn	

**FERTILIZER ANALYSIS**

FRT1: Nitrogen .....	B2.20 .....	5
FRT2: N, P <sub>2</sub> O <sub>5</sub> , K <sub>2</sub> O .....	B2.20 .....	5
FRT3: N, P, P <sub>2</sub> O <sub>5</sub> , K, K <sub>2</sub> O, Al, As, Ba, B, Ca, Cd, Cr, Co, Cu, Fe, Pb, .....		10
Li, Mg, Mn, Hg, Mo, Ni, Se, Si, Ag, Na, Sr, S, Sn, Ti, V, Zn		

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

**FORAGE AND FEED ANALYSIS** Sample Size: 1-1½ pounds, plastic bag  
(entire sample used); feeds reported on “as received basis”.

**Individual Component Analysis:**

Ash .....	:	9
Crude Fiber .....	:	6
Crude Protein .....	B2.20 plus calc	6
Fat .....	:	6
Moisture .....	B1.10	6
Neutral Detergent Fiber (NDF) .....	:	6
Acid Detergent Fiber (ADF) .....	:	6

**Feed/Hay Analysis:**

RFV DM, Moisture, Acid Detergent Fiber, Crude Protein, NDF, calculated RFV (on hay and haylage only) adjusted protein, NEI, Nem, Neg, TDN on Forages only .....	:	8
Basic NDF RFV plus Minerals (Ca, P, Mg, K, Na, Fe, Mn, Zn, Cu) pH on ensiled forages. Calculated adjusted protein, Ash, TDN, NEI, Neg, Nem for forages only .....	:	8
TAG1 DM, Moisture, Crude Protein, Crude Fat, Crude Fiber .....	:	6
TAG1 Analysis plus Ash .....	:	6
TAG2: TAG1 Analysis plus Ash, Calcium, Phosphorus .....	:	6

**FOOD SAFETY Swab Analyses**

**Bacteriology - Swab Analyses**

Coliform/E. coli, MPN Petrifilm .....	:	7
Listeria, Genus, P/A .....	:	7
Listeria, Genus, P/A - with confirmation .....	:	7
Salmonella, P/A .....	:	7
Salmonella, P/A - with confirmation .....	:	7
E. coli, 0157:H7, P/A .....	:	7
E. coli 0157:H7 Confirmation .....	:	14
APC (Aerobic Plate Count) .....	:	7
Enterobacter .....	:	7
T. Coli Petrifilm .....	:	7
E. Coli Petrifilm .....	:	7
Swab Kit includes treated sponge & sterile packaging (per kit) .....		
Pack of 20 Swab Kits (per pack) .....		
Pack of 100 Swab Kits (per pack) .....		

**WATER ANALYSIS**

**Agricultural**

<u>Aq Suitability:</u> (250 ml plastic) .....	5
pH, EC, Cl, B, HCO <sub>3</sub> +CO <sub>3</sub> , SO <sub>4</sub> , NO <sub>3</sub> -N, SAR, SAR <sub>adj</sub> , LI (Langelier Index), Dissolved: Ca, Mg, B, Na, Fe, Mn	
<u>pH Titration Curve:</u> (7.0, 6.8, 6.5, 6.0, 3.0, 2.0) .....	(1 liter plastic) 7

**Regional Water Board Monitoring Samples (Submitted)**

Region 5: RB5 w/Geo Tracker (NO <sub>3</sub> -N+NO <sub>2</sub> -N) .....	(1 250 ml plastic)	
1st Year, first sample .....		8
Additional samples for 1st year with the same Irrigated Lands Coalition Member ID#) .....		8
2nd Year Annual Samples .....		8
Additional samples (With same Irrigated Lands Coalition Member ID#) .....		8

**Wastewater Analysis**

<u>Wastewater General Mineral:</u> (1 liter plastic, 250 ml plastic w/HNO <sub>3</sub> ) .....	15
Alkalinity (OH, CO <sub>3</sub> , HCO <sub>3</sub> ), EC, SO <sub>4</sub> , Cl, pH, TDS, Hardness, NO <sub>3</sub> -N LI (Corrosivity), Total: P, K, Ca, Mg, Na, Fe, Mn, Cu, Zn	
<u>Storm Water Runoff:</u>	
EC, pH, TSS, Oil & Grease .....	(250 ml plastic, 1 liter amber glass w/HCl) 12
EC, pH, TSS, TOC .....	(250 ml plastic, 250 ml plastic w/H <sub>2</sub> SO <sub>4</sub> ) 10

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

**Dairy Water Analysis**

<u>Process Water Analysis:</u>	(1 liter plastic, 250 ml plastic w/HNO <sub>3</sub> , 250 ml plastic w/H <sub>2</sub> SO <sub>4</sub> )	
DPW1: EC, pH, NO <sub>3</sub> -N, NH <sub>4</sub> -N, TKN, TDS, TP, TK .....		12
DPW2: DPW1 plus HCO <sub>3</sub> , CO <sub>3</sub> , Cl, SO <sub>4</sub> , Total: Ca, Mg, Na .....		15
<u>Well Water Analysis:</u>	(1 liter plastic)	
DWW1: EC, pH, NO <sub>3</sub> -N, Field NH <sub>4</sub> -N* .....		10
DWW2: DWW1 plus HCO <sub>3</sub> , CO <sub>3</sub> , Cl, SO <sub>4</sub> , TDS, Dissolved: Ca, Mg, Na .....		10
*NH <sub>4</sub> -N will be run if Field NH <sub>4</sub> -N is detected .....		10
<u>Canal Water Analysis:</u>	(1 liter plastic)	
DCW1: EC, NO <sub>3</sub> -N, TDS .....		15

**WATER ANALYSIS**

**Bacteriology Water Analyses**

Coliform, E. coli, P/A SM 9223B .....	(Sterilized w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	3
Coliform, E. coli, MPN SM 9223B .....	(Sterilized w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	3
Coliform, Fecal, E. coli, MPN (MTF 1x10) .....	(Sterilized w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	7
E. coli 0157:H7 .....	(Sterilized w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	8
Listeria, Genus, P/A .....	(Sterilized w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	7
Salmonella, P/A .....	(Sterilized w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	7
Bacteriological <i>Friday/weekend</i> samples above, add \$16 per sample .....		10-14

**Homeowner - Nonregulatory** (1 liter plastic, 250 ml plastic w/HNO<sub>3</sub>)

HO1: Alkalinity, EC, Ca, Cl, Fe, Mg, NO <sub>3</sub> -N, Na, Hardness, pH .....	6
HO2: HO1 plus Ag Suitability .....	10

**Regulatory Domestic Water Analysis**

<u>General Mineral:</u> Alkalinity (OH, CO <sub>3</sub> , HCO <sub>3</sub> ), EC, SO <sub>4</sub> , Cl, pH, MBAS, TDS, Hardness, Corrosivity, NO <sub>3</sub> -N, Ca, Mg, Na, Fe, Mn, Cu, Zn .....	: 10
(2-1 liter plastic; 1-250 ml plastic w/HNO <sub>3</sub> )	

<u>General Physical:</u> Color, Odor, Turbidity .....	(1 liter amber glass) .....	4
---	-----------------------------	---

<u>Copper and Lead:</u> (First-draw) .....	(1 liter plastic) .....	: 12
--	-------------------------	------

<u>Inorganic Scan I:</u> Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Silver, Thallium .....	: 20
(1 liter plastic, unpreserved & 2-250 ml plastic w/HNO <sub>3</sub> )	

<u>Inorganic Scan II:</u> Inorganic Scan I plus Cyanide .....	: 20
(1 liter plastic, unpreserved; 2-250 ml plastic w/HNO <sub>3</sub> & 500 ml plastic w/NaOH)	

Radioactivity:

Gross Alpha: (2-1 liter plastic w/HNO <sub>3</sub> ) .....	: 14
--	------

Uranium: (500 ml plastic w/HNO <sub>3</sub> ) .....	: 14
---	------

<u>Total Radium EPA 903:</u> (1 liter plastic) .....	: 14
--	------

Radium 226: (1 liter plastic) .....	: 28
-------------------------------------	------

Radium 228: (1 liter plastic) .....	: 28
-------------------------------------	------

Organic:

<u>Organic EPA 504:</u> Ethylene dibromide (EDB), Dibromochloropropane (DBCP) .....	: 15
(3-40 ml VOA w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> )	

<u>Organic EPA 507:</u> Alachlor, Atrazine, Simazine, Thiobencarb .....	: 15
(1 liter amber glass)	

<u>Organic EPA 508:</u> Endrin, Lindane, Methoxychlor, Toxaphene, Chlordane, Heptachlor, Heptachlor epoxide .....	: 21
(1 liter amber glass)	

<u>Organic EPA 515.1:</u> Bentazon; 2,4-D; 2,4,5-TP, Picloram .....	: 15
(1 liter amber glass)	

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

**WATER ANALYSIS (continued)**

<u>Organic EPA 525.2: Screen</u> .....	(1 liter amber glass).....	:	15
<u>Organic EPA 531.1: Carbofuran</u> .....	(1-40 ml amber VOA w/MCAA buffer+Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	:	10
<u>Organic EPA 547: Glyphosate</u> .....	(1-40 ml VOA amber w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	:	20
<u>Organic EPA 548: Endothall</u> .....	(1-40 ml VOA amber w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	:	15
<u>Organic EPA 549: Diquat</u> .....	(1 liter amber plastic w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ).....	:	15
<u>Organic EPA 1613: Dioxin</u> .....	(2-1 Liter amber glass, unpreserved).....	:	15
<u>Volatile Organic EPA 524 (GC/MS) Reg &amp; Unreg:</u>	(Set of 3 VOA w:HCl) .....	:	15
Partial List:	1,1,1-Trichloroethane; Trichloroethylene; 1,1-Dichloroethylene; Benzene; Xylenes; Monochlorobenzene; Ethylbenzene; 1,3-Dichloropropene; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; 1,2-Dichloroethane; Vinyl; chloride; Carbon tetrachloride; 1,4-Dichlorobenzene; 1,1,2-Trichloroethane; Cis-1,2-Dichloroethylene; Trans-1,2- Dichloroethylene; 1,1-Dichloroethane; Trichlorofluoromethane (Freon 11); 1,2-Dichloropropane; 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)		

**Individual Water Component Analysis (1 liter plastic, unless indicated; call for specifics):**

**All Total Metals are \$5.00 more than the listed price for Waters**

(Add only \$10 for additional elements on the same extract and method)

(\* = SM 3120-B/EPA200.7, \*\* = EPA 300)

Acidity (as CaCO <sub>3</sub> ) .....	SM 2310-B .....	:	5
Alkalinity (as CaCO <sub>3</sub> ) .....	SM 2320-B .....	:	5
* Aluminum (Al) .....	SM 3120-B/EPA 200.7 .....	:	5
Asbestos, EPA 100.2 (fibers >0.5 um) .....	(2-1 liter plastic or glass wrapped in foil) .....	:	10
Asbestos, EPA 100.2 (fibers >10 um) .....	(2-1 liter plastic or glass wrapped in foil) .....	:	10
Arsenic .....	EPA 200.8 .....	:	10
* Barium (Ba) .....	SM 3120-B/EPA 200.7 .....	:	5
* Beryllium (Be) .....	SM 3120-B/EPA 200.7 .....	:	5
* Boron (B) .....	SM 3120-B/EPA 200.7 .....	:	5
Bromate (BrO <sub>3</sub> ) ... (250 ml amber Glass w/EDA).....	EPA 317.0 .....	:	10
Bromide .....	EPA 300.1 .....	:	10
Cadmium (Cd) .....	EPA 200.8 .....	:	10
* Calcium (Ca) .....	SM 3120-B/EPA 200.7 .....	:	5
Carbon: Total Organic .....	(250 ml plastic w/H <sub>2</sub> SO <sub>4</sub> ) ... SM 5310-B (NPOC) .....	:	10
Carbonate and Bicarbonate (CO <sub>3</sub> , HCO <sub>3</sub> ) .....	SM 2320-B.....	:	5
** Chloride (Cl) .....	EPA 300.0 .....	:	5
* Chromium (Cr), Total .....	SM 3120-B/EPA 200.7 .....	:	5
Hexavalent (Cr VI) .....	(250 ml plastic w/(NH <sub>4</sub> OH/NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> ) .....	:	10
Color .....	(1 liter amber glass) .....	:	4
* Copper (Cu).....	SM 3120-B/EPA 200.7 .....	:	10
Cyanide (CN) .....	(500 ml plastic w/NaOH) .....	:	10
DBCP .....	(3 Vials w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	:	10
Electrical Conductivity (EC), Specific Conductance .....	SM 2510-B .....	:	4
** Fluoride (F) .....	EPA 300.0 .....	:	5
Haloacetic Acids (HAA5) ... (250 ml amber glass w/NH <sub>4</sub> Cl).....	EPA 552.3.....	:	10
Hardness (Calculation from Ca+Mg) .....	SM 2340-B/EPA 200.7 .....	:	5
* Iron (Fe): .....	SM 3120-B/EPA 200.7 .....	:	5
Ferrous (Fe) .....	(500 ml plastic w/HCl) .....	:	21
Iron Bacteria.....	(1-100 mL Sterile Plastic Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ).....	:	10

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

**WATER ANALYSIS (continued)**

**Individual Water Component Analysis (1 liter plastic, unless indicated; call for specifics) (continued):**

**All Total Metals are \$5.00 more than the listed price for Waters**

(Add only \$10 for additional elements on the same extract and method)

(\* = SM 3120-B/EPA200.7, \*\* = EPA 300)

Laser Particle Size Distribution ASTM 4464..... (250 ml plastic).....	:	10-15
Lead (Pb) .....	EPA 200.8 .....	15
MTBE .....	(Set of 2 Vials w/HCl) .....	EPA 524 .....
	:	15
* Magnesium (Mg) .....	SM 3120-B/EPA 200.7 .....	5
* Manganese (Mn) .....	SM 3120-B/EPA 200.7 .....	5
Mercury (Hg) .....	EPA 7470 or 7471 .....	10
* Molybdenum (Mo) .....	SM 3120-B/EPA 200.7 .....	5
* Nickel (Ni) .....	SM 3120-B/EPA 200.7 .....	5
Nitrogen: Ammonia (NH <sub>4</sub> -N) .....	SM 4500-NH3-H .....	10
Un-ionized (NH <sub>3</sub> -N) (calc pH, Field Temp) .....		10
** Nitrate (NO <sub>3</sub> -N) .....	SM 4500-NO3-F/H/EPA 300.0 .....	5
** Nitrite (NO <sub>2</sub> -N) .....	SM 4500-NO2-B/EPA 300.0 .....	5
Organic (Org N) (TKN - NH <sub>4</sub> -N) .....		10
Kjeldahl (TKN) .....	SM 4500-NH3- H/D/EPA 351.2 .....	10
Total N (NO <sub>3</sub> -N + TKN) .....		10
Odor, Threshold .....	(1 liter amber glass) .....	SM 2150-B .....
	:	4
Oil & Grease .....	(1 liter glass w/HCl) .....	EPA 1664A .....
	:	10
Oxygen, Dissolved (DO)(done in-field) (Sampling Kit) .....		10
Oxygen Demand, Biochemical (BOD5) ... (1 liter plastic) .....	SM 5210-B .....	7
Oxygen Demand, Chemical (COD) .....	SM 5220-D .....	7
pH value .....	SM 4500-H B .....	4
Perchlorate .....	(1 liter plastic) .....	EPA 314.0 .....
	:	12
** Phosphorus: Phosphate, Ortho (PO <sub>4</sub> -P) (Sampling Kit) .....	EPA 300.0 .....	5
* Total (P, digested) .....	EPA 200.7 .....	7
* Potassium (K) .....	SM 3120-B/EPA 200.7 .....	5
Selenium (Se) .....	EPA 200.8 .....	10
* Silica (SiO <sub>2</sub> ) Total .....	SM 3120-B/EPA 200.7 .....	5
* Silver (Ag) .....	SM 3120-B/EPA 200.7 .....	5
* Sodium (Na) .....	SM 3120-B/EPA 200.7 .....	5
Solids: Total (Total Solids) .....	SM 2540-B .....	7
Total Filterable (Total Dissolved Solids) .....	SM 2540-C .....	7
Volatile Dissolved Solids .....	EPA 160.4 .....	9
Fixed Dissolved Solids .....	EPA 160.4 .....	9
Total Nonfilterable (Total Suspended Solids) .....	SM 2540-D .....	7
Settleable Matter (Settleable Solids) .....	SM 2540-F .....	5
** Sulfate (SO <sub>4</sub> ) .....	EPA 300.0 .....	5
Sulfide Hydrogen (H <sub>2</sub> S) .....	(1 liter plastic) .....	10
Sulfide Total .....	(1 liter plastic w/Zn Acetate) .....	10
* Sulfur (S) .....	SM 3120-B/EPA 200.7 .....	5
Surfactants (MBAS) .....	(1 liter plastic) .....	SM 5540-C .....
	:	5
Thallium (Tl) .....	EPA 200.8 .....	10
Trihalomethanes, Total (TTHM) ... (3 VOA w/Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> ) .....	EPA 524.2 .....	10
1,2,3 Trichloropane (TCP) .....	(Set of 3 VOA amber glass w/HCL) .....	10
Turbidity .....	(1 liter amber glass) .....	SM 2130-B .....
	:	4
Vanadium (V) .....	EPA 200.8 .....	10
* Zinc (Zn) .....	SM 3120-B/EPA 200.7 .....	5

PRICES SUBJECT TO CHANGE WITHOUT NOTICE/NO SUBSTITUTIONS ON PACKAGE PRICES

**SUPPLIES (taxable items)**

3-Foot "T" handle Soil Sampler (AMS)  
3-Foot "T" handle Soil Sampler (JMC)  
Soil sampler with stationary foot pedal (JMC)  
3-Foot Ratcheting "Backsaver" Soil Sampler (JMC)  
5-Foot Auger (4' ext, 2 1/4" Mud Auger, Cross Handle)  
Replacement and extension parts available upon request  
pH Paper (package of 100)  
Cl<sub>2</sub> Test Strips  
NH<sub>4</sub>-N Test Strips  
Hanna Cl<sub>2</sub> Checker Kit  
Reagent 25/pk  
Chlorine gallon of NSF Certified

**REFERENCE MATERIALS (taxable items)**

Western Fertilizer Handbook, 9<sup>th</sup> Edition  
Western Fertilizer Handbook, 3<sup>rd</sup> Horticulture Edition

**Sampling is available. Please call your Dellavalle Consultant or Technician for a quote.**

*Analyses to be subcontracted to outside laboratories are noted with a ":" following the price. Additional analyses may be subcontracted at any time at the discretion of Dellavalle Laboratory. Should analyses be subcontracted, it will be to a laboratory currently and appropriately certified for that analysis.*

*Submission of samples to Dellavalle Laboratory for analysis without specifying details - including, but not limited to: required methods, reporting limits, or quality control restrictions - indicates that the methods for which Dellavalle Laboratory maintains accreditation are sufficient and all other details are to be left to Dellavalle Laboratory's expertise.*