SOIL ANALYSIS

	Method	Work Days
Basic Fertility:		
BF1: NO_3-N, PO_4-P, K, Zn		5
BF2: NO_3-N, PO_4-P, K, pH_s		5
Fertility Assay:		
FA1: Fertility Assay 1		5
SP, pH_s, EC_e, Ca, Mg, Na, ESP, B, GR or LR (buffer pH), NO_3-N, PO_4-P, K, Zn		
FA2: Fertility Assay 2		5
FA1, DTPA extractable Mn, Fe, Cu and ammonium acetate extractable Ca, Mg, Na expressed as meq/100 g		
FA3: Fertility Assay 3		5
FA2, *estimated* CEC, extractable Ca, Mg, K and Na expressed as percentage of *estimated* CEC		
FA4: Fertility Assay 4		7
FA2, **measured** CEC, **estimated** exchangeable acidity and cations expressed as percentage of **measured** CEC		
MA1: Mechanical Analysis: Sand, Silt, Clay, Textural Class	S14.10	5
MA2: Mechanical Analysis plus Organic Matter, Moisture & CEC		7
Sodium & Salinity Assay: SP, pH_s, EC_e, Ca, Mg, Na, ESP, B, GR or LR		5
Heavy Metals (40CFR Part 503) : As, Cd, Cr, Pb, Mo, Ni, Se, Zn, Hg		15
Dairy Soil		
DS1: NO_3-N (0-1', 1-2')	S3.10	5
DS2: FA1 plus OM (0-1'); NO_3-N (1-2', 2-3')		8
DS3: DS2 Plus TP (0-1')		10
Individual Analysis:		
Aluminum (Al) (KCl extractable)	SSSA, p 526	4
Arsenic (As)	TTLC	15
Agricultural Use	SSSA, p 814 mod	5
Bicarbonate (HCO_3), soluble	S1.30	6
Boron (B), soluble	S1.50	5
Bulk Density	Hndbk 60.38	4
Calcium (Ca), soluble	S1.60	5
ammonium acetate	S5.10	5
Carbon: Total	S9.30	5
Organic	S9.30, S13.10 mod	10
Organic (LOI, calc)	S9.20	7
Cation Exchange Capacity	S10.20	7
Chloride (Cl), soluble	S1.40	6
Copper (Cu), extractable	S6.10	5
Electrical Conductivity (EC_e)	S1.20	5
Field Capacity (FC), 1/3 bar	Hndbk 60.30	7
Gypsum Requirement (GR)	Hndbk 60.22(d)	6
Iron (Fe), extractable	S6.10	5
Lime: Content, quantitative	S13.10 mod	7
Presence (LP), qualitative	Hndbk 60-23a	4
Requirement (LR) Buffer pH	S2.50	5
Magnesium (Mg), soluble	S1.60	5
ammonium acetate	S5.10	5
Manganese (Mn), extractable	S6.10	5
Moisture, (%)	Hndbk 60-26	3
Molybdenum (Mo), extractable	S6.10	5
Nematode Identification		6

Nitrogen: Ammonia (NH_4-N)	S3.50	7
Kjeldahl (TKN)	S8.10	7
Nitrate (NO_3-N)	S3.10	5
Organic (Org-N) (Calc of TKN & NH_4-N)		7
or Org-N (Calc of TN, combustion; NO_3-N, NH_4-N)		7
Total (Combustion)	S9.30	7
Organic Matter (LOI)	S9.20	7
Permanent Wilting Point (PWP), 15 bar	Hndbk 60.31	7
pH_s value	S1.10	7
Phosphate (PO_4-P), extractable	S4.10	7
Phylloxera		7
Potassium (K), soluble	S1.60	5
ammonium acetate	S5.10	5
(Acid K), acid extractable	SSSA, p 561 mod	5
Saturation Percentage (SP)	S1.00	5
Selenium (Se), Agricultural Use	S6.10	5
Sodium (Na), soluble	S1.60	5
ammonium acetate	S5.10	5
Sodium Adsorption Ratio (SAR)	S1.60	5
Sulfate (SO_4-S), extractable	S1.70	6
Verticillium Wilt		14
Zinc (Zn), extractable	S6.10	5

Soil Monitoring:

SM1: Moisture; Saturation Extract EC_e (soluble salts), Cl, Ca, Mg, Na; SAR (calc), TN, NO_3-N, NH_4-N, PO_4-P, TOC, Inorganic Carbon; DPTA extractable Zn, Mn, Fe (Methods: P1.10; S1.20, S1.40, S1.60; S9.30, S9.10, S3.50, S4.10; S6.10) — 10