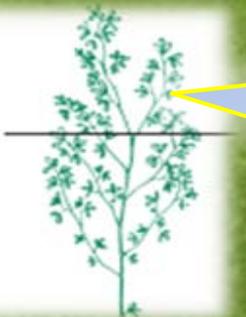


Yield is 6 tons/ac.

ALFALFA

All growth stages:
Submit top 6 inches or top half of plant if less than 8 inches tall.
Sample 20-25 plants.



Alfalfa Plant Tissue Analysis:

- N = 4.0% Low (Sufficiency Range: 4.0 – 5.0)
- P = 0.33% Medium (Sufficiency Range: 0.25 -0.5)
- K = 3.2% Medium (Sufficiency Range: 2.0 – 3.5)
- S = not analyzed
- Ca = 1.5% Medium (Sufficiency Range: 1.8 – 3.0)
- Mg = 0.7% Medium (Sufficiency Range: 0.3 – 1.0)

Micronutrients can also be analyzed: Zinc, Iron, Manganese, Copper, Boron and Molybdenum.
For salinity problems, Sodium and Chloride can also be analyzed.

Soil Probe



Irrigation Water Applied = 37 ac-in

Water Quality Analysis

Pounds per Acre:

- Nitrate-N = 0.25
- Potassium = 28.1
- Sulfate-S = 130.2
- Calcium = 383.7
- Magnesium = 62.1
- Sodium = 199.6
- Chloride = 78.3
- Bicarbonate = 1,205.0
- Carbonate = 0

Micronutrients can also be analyzed: **Iron**, **Manganese** and **Boron**
Total Salts = 2,087.00

ECiw = 0.363 mmhos/cm
SAR = 0.85
pH = 7.64



0 – 6" depth

Soil Analysis

Pounds per Acre and ppm:

- Organic Matter = 2.32% (High)
- Nitrogen Mineralized = 50.2 lbs./ac.
- Nitrate-N = 5.3 lbs./ac. (Very Low)
- Phosphorus = 35.2 ppm (Very High)
- Potassium = 43.0 ppm (Medium)
- Sulfate-S = not analyzed
- Calcium = 86.2 ppm (Very Low)
- Magnesium = 14.6 ppm (Very Low)
- Sodium = 2.0 ppm (Very Low, evaluate with SAR)

Micronutrients can also be analyzed: Zinc, Iron, Manganese, Copper, Boron and Molybdenum.



ECe = 0.69 mmhos/cm (No problem with Salts)
SAR = 1.39 (low SAR, No Problem with Infiltration)
pH = 7.5 (no problem with pH; i.e. nutrient availability)

Conventional Irrigation (soil salinity concentrates about 1.5 times the water EC) → Leaching Fraction (LF) = 0.3086/Fc^{1.702} (LF = 1.7%)
Fc = ECe(ct)/ECiw (i.e., ECe(ct) = 2.0 & ECiw = 0.363); Fc = 5.51