

# ALFALFA FERTILITY CHALLENGE

## PROBLEM 1

A series of pivots runs in a line north to south over 5 miles  
Each has its own well Same soil, seed, culture, cut schedule

North most produce 8 tons

South most produces 11 tons

WHY? Course of action?

## PROBLEM 2

A field that is 3 years old with good stand, good quality  
And no apparent issues is producing 11 tons per acre.  
A consultant runs a soil test and tells grower has has a  
problem. His soil Potassium is low, only 40 ppm on test.  
Should be in range 80-100 ppm. He advises  
immediately to apply fertilizer to prevent crop failure.  
What Should grower do?

## PROBLEM 3

You are called to visit a ranch in intermountain area. From a mile away you notice that the ranch is actually two adjacent ranches. The north ranch is chlorotic and pale. The south ranch is normal alfalfa green color. What question should you ask? What's happening here?

## PROBLEM 4

A Grower is applying Liquid fertilizer (10-34-0) to his alfalfa. The soil P test is low. He is applying small quantities after each cutting through the water. He has been told this is more efficient than a single winter application and can save money by using less total fertilizer. The total amount of P<sub>2</sub>O<sub>5</sub> is less than crop removal. What will happen in this field?

## PROBLEM 5

A grower has an excellent field. Good stand, good production history. Everything appears good. He discovers that production has dropped recently by 15%. Why?

What should we do? Soil, plant and water test are normal.

Water flow rate and pressure to pivot is same. No pest or disease pressure.