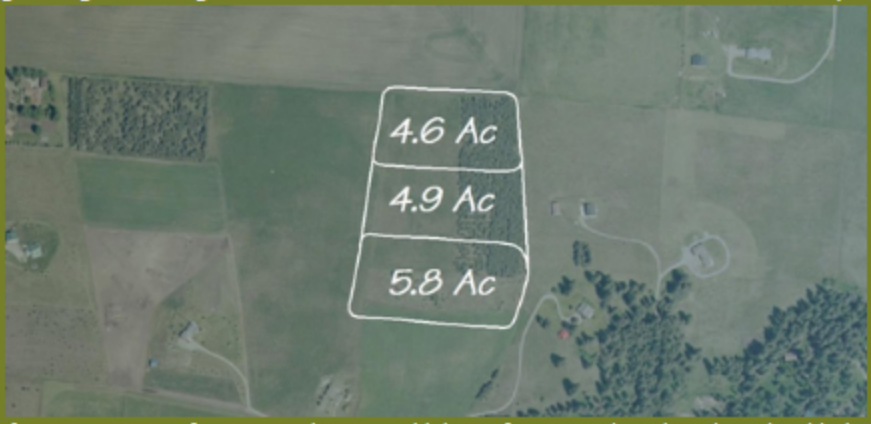
Project Report

Landowner: Joe Landowner **Location:** 1234 Pasture Lane Kalispell MT 59901
Phone: 406-270-1234 (M) **Date:** 4/15/2007 **Acres:** ~15 Ac broke into 3 paddocks
Geo Location: 48° **'**.*" N 114° **'**.***" W **Field Consultant:** Markus Braaten
General Soil Type: sand - loamy sand **Irrigation:** Yes **Stand Age:** N/A
Forage Species: Paddocks to be seeded spring of 2007... I recommend a mix of Potomac Orchard grass, Paddock or Regar Brome & Tall Fescue
Weed Species: Rescout immediately prior to chemical control activities... current evidence of quack grass and significant knapweed pressure in paddock furthest south.
Nutrient Management: (lbs/ac/yr) **None:** X **N:** **P:** **K:** **S:** **Manure:**
Current Grazing/Management Program: Horses have continuous access but are maintained at a relatively low stocking rate.



Management Objectives: Primary focus currently is to establish new forage stands in the indicated paddocks above. There is irrigation to assist in stand establishment.
General Recommendations: Paddock Establishment - Site prep is currently underway. Seedbed preparedness is critical in this situation; it is going to be important to incorporate the manure & shavings as much as possible to ensure good soil to seed contact and even stand emergence. Based on our earlier conversation, I would suggest seeding down a mix of orchard grass, Paddock or Regar Brome & some tall fescue. It may be necessary to irrigate to assist in establishment.

Weed control: There is significant knapweed weed pressure in the southern most paddock... chemical control will be required. Timing of the chemical spray application will be critical to ensure weed control and minimize injury to the new stand. Reassess paddocks prior to seeding as they may require a preseeding application of glyophosphate especially if we are seeing quack grass emergence. Continue to address weed issues in other paddocks and ensure that fed hay is weed free. Another strategy to assist in weed control would be with the implementation of a fertility program to enhance forage stand density and competitiveness. We have pulled soil samples and recommendations are enclosed. For chemical control, weeds should be sprayed when they are actively growing prior to seed formation. Start scouting for weeds towards the end April or and no later than the 1st part of May. There is evidence of quack grass pressure. This is a highly invasive grass with minimal forage quality... we will want to keep a close eye on this weed and take appropriate action if it continues to spread. Quack has extensive rhizomes and its' spread is facilitated by tillage. In future efforts to improve paddocks it is going to be important to spray the quack grass out prior to tillage.

Soil Fertility Assessment

Landowner: Joe Landowner **Location:** 1234 Pasture Lane Kalispell, MT 59901
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Geo Location: 48° **'**.*" N 114° **'**.***" W **Field Consultant:** Markus Braaten
General Soil Type: sand - loamy sand **Irrigation:** Yes **Stand Age** N/A
Field ID: Horse Paddocks **Crop:** Grass **Target Yield:** N/A - establishment
General Consideration & Recommendations: Please refer to enclosed soil analysis. Moisture is probably going to be the most limiting factor in this field. The soil is sandy; irrigation will assist in extending the grazing season and could be required to establish the new stand. We will need to keep an eye on our pH as we move forward... 6.8 is considered ideal and we're a little on the acidic side especially on the hill top where the Christmas trees used to be, but I don't think were at the point of needing a lime application. Phosphate levels are concerning, especially since we are in an establishment mode as this nutrient is critical in root formation and development. To ensure vigorous stand development I would recommend the following blend **40-60-40-20 & 1# Boron** (lbs of actual N-P2O5-K2O-S per acre). This blend should be broadcast and incorporated prior to seeding. In the established paddocks we can anticipate that a 2 tn/ac grass crop will remove roughly the following; 50 lbs of Nitrogen, 20 lbs of Phosphorus, 76 lbs of Potassium and 8 lbs of Sulfur along with smaller amounts of micronutrients. For the established paddocks, I would recommend the following blend **60-50-60-20 & 1# Boron** (lbs of actual N-P2O5-K2O-S per acre) It is also imperative that we follow up any fertility program with a soil sample at least every other crop year to assess progress.