the Rack
Rack Petroleum Ltd.

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It's time! The Ultimate Yield™ Program is ready for your farm!

So you have 2 farms side by each with very similar environments and you ask yourself ...

Why does one have a better stand than the other?

Sometimes we may answer the question with, "well one must have got more rain" or "one must have received more nitrogen". However when you break it down, all the little things added together is what makes the difference. We tried an interesting experiment this year. We compared the application of the Ultimate Yield program to that of a more traditional program.

The Rack has fine tuned its agronomy field scouting program and expanded it to include all factors that determine yield to help make better agronomic decisions. A lot of retailers sometimes focus a little too much on only fertilizer and crop protection because that's what we sell. We took it a step further and looked at every factor that determines yield in a given environment and how they relate. We are convinced that as a retailer we need to add value to the products we sell our customers by looking for answers and solutions to problems they may have in all production issues, not just fertility and crop protection. Focusing in only on fertility and crop protection does not allow us to understand how all the yield determining factors relate.

These 2 fields are a good example of what can happen when one field scores 9/10 for management decisions and the other scores 6/10.

Inside this issue:

Harvest is coming! Watch out for the next Rack Petroleum Newsletter to come!

Now that I have your interest what management decisions could possibly make such a difference?

Well in a very stressful environment like this spring it was the small things that added up to make the difference.

Let's look at the facts:

Both fields are next to one another

Both fields were seeded the week of May16th

Both fields did not receive rain until June 21st

Both fields froze severely in the 2 leaf stage (black in some areas) 1st week of June.

Both fields received approximately 6 inches of rain from June 21st to July 25th for the growing season.

Average soil temperature at seeding time was 4.6 degrees Celsius. (Very cold)

Since both fields had very low initial soil temperatures emergence was as stressful as it can be. Although seeding into an average 1° degree soil temperatures would have been worse.

And now lets look at the differences:

Ultimate Yield™ Wheat	**Traditional Wheat**
• The Ultimate Yield™ field was seeded .75 inches deep excellent packing	• The regular field seed depth was seeded 2 inches deep fair packing
A real issue since many modern varieties average a coleoptile length of 1.5 inches	
• The Ultimate Yield™ field was seeded at 113 lbs as determined by 1000 kernel weight test. Targeting a 2.5 tiller average per plant and a goal of 600 heads per square yard.	• The regular field was bin run wheat 3rd generation and seeded at 90 lbs without a 1000 kernel weight check.
• Ultimate Yield™ received a balanced nutritional package of 3 forms of nitrogen an equivalent of 110 lbs per acre (including Super U nitrogen), 30 lbs of actual P_2O_5 plus soil build residual of 40 lbs p205, 20 lbs of sulphur, 20 lbs of potassium chloride, 3 lbs copper and 4 lbs zinc. Designed by the Ultimate Mapping Soil Fertility plan.	• The regular program field received a common blend of 34-17 at 140 lbs per acre. No soil test.
• The Ultimate Yield™ Field had a seed bed preparation score of 8/10 since it had a 4 year rotation of wheat, canola, wheat, pulse, wheat	• The regular program had a seed bed preparation score of 5/10 since the crop rotation was wheat, canola, wheat, and canola.
The Ultimate Yield™ field could have scored higher since seed bed preparation did not involve heavy harrowing the pulse stubble. As the straw residue was not adequately spread and chopped, the straw caused for uneven seed bed formation.	
• Ultimate Yield™ had an application of Touchdown & Express post emergence after seeding. Then later with Horizon, Mextrol, MCPA and a half rate of Stratego was applied in crop.	• Regular field was treated with Curtail and Horizon.
• Ultimate Yield™ Plant tissue testing determined a slight N imbalance and it was concluded that this was due to the slow conversion of anhydrous, and for urea to become available in time due to cold soil conditions. Phosphate was also suspect. The decision was made to foliar apply a booster of N and C3 plus copper plant nutrient package to help deal with the lack of rainfall and cold conditions plus frost damage to the wheat	
• Ultimate Yield™ received a full rate of Headline fungicide at flag to protect the leaves since conditions changed from dry and cold to wet and humid.	
• At time of printing yield analysis and NDVI images were indicating a yield potential of 33 to 37 bushels per acre for the regular program and 65 to 75 bushels per acre for the Ultimate Yield™ program.	

We will keep you posted as to the results of the programs and obviously the fear of frost looms greatly in everyone's minds since the crops are at least 2 weeks behind. We have been testing Ultimate Yield™ this year and have discovered a few glitches but now that the bugs are worked out we are ready to offer the full program to interested growers. The biggest glitch discovered was the fact that we didn't start soon enough. We need to start this fall to ensure thoroughness and time to help you plan for the 2010 growing season.

Rack is very proud to launch Ultimate Yield™ this fall, years of research into management decisions have allowed us to have confidence in an agronomic package we know is second to none.

Following the Ultimate Yield™ program and implementing a 5 year field plan allows the grower to soil build necessary nutrient levels so that higher yields can be targeted, plan rotations and seed bed preparation, plan weed control strategies combined with resistance management, reach yield goals regardless of spring conditions, and even prepare the farm for variable rate seeding of seed varieties and fertilizer.

It has become obvious that targeting higher yields, takes at least a year of planning and research. An example of this is soil phosphate levels. If soil phosphate levels are low to begin with then a long term plan needs to be developed to raise them. Soil phosphate levels can not necessarily be corrected in one application. This has been confirmed scientifically. Generally speaking much of a plants phosphate uptake comes from the phosphate applied in previous years.

If you have a 5 year yield goal improvement plan and want to grow better crops then Ultimate Yield™ can help reach those yield goals. We will help you rate each agronomic decision you make and its impact on final yield. Perhaps you feel a 70 bushel target yield for hard red is too risky and for some growers and soil types it is. Regardless of your yield goal and your budget Ultimate Yield™ is a seven step program to helping you reach your goals and allocating your budget to the best points. However, in the Ultimate Yield™ program that is being demonstrated here four of the management decisions really didn't cost a lot of money. Seed quality, seed bed preparation, seed depth, and time of seeding. That's right 4 of the seven factors are almost free! What are you doing to document and measure these?

Of course the other three factors are pest management, nutrition, and weather. Well the weather you can't do anything about. So let's focus on the other 6.

Every decision on the 6 factors has a consequence in determining yield for given weather. The wheat doesn't know that you have x amount of acres to seed by the end of May and are therefore seeding into very cold soil, so if you have to, how can you minimize the stress? The potential wheat yield will reward you or punish you depending on the decisions you make, of course sometimes for example this spring some areas could do nothing to correct the lack of soil moisture or the cold weather, this was certainly beyond your management control. Feel comfort in the fact that you did your best and can always try again next year.

The Ultimate Yield™ program will allow you to see how your agronomic and economic decisions on the 6 factors will affect the yields you are striving to reach.

How does Ultimate Yield™ work?

1) You will have more questions and can contact the Rack on line at **www.therackonline.com**, or fill out the attached application form and send it in
2) Ultimate Yield™ is not for everyone and therefore a Rack representative will assist you in deciding if the program fits your operation. A small application fee will be charged for an assessment should we come out, and be refunded should you choose to join.

   Acres will be limited for the 2010 growing season and there fore applicants will be selected at a first come first serve bases.
3) Should you choose to register for the program you will need to sign up by September.15th 2009
4) Once you have signed up, a questionnaire about goals and processes used on your farm will be completed so we can begin the process
5) Physical data will be collected about the soil types on your farm and within the fields
6) You will select a benchmark field to be used as a model for complete analysis

   The benchmark may also be used as a VRT starter package
7) The Rack field team will design a skeleton 5 year plan and present it for further discussion, and approval

   The plan will include weed resistance management, herbicide stacking issues combined with both short and long term fertility goals

   The plan will also include crop rotation issues, seed quality issues and goals as well as a detailed NDVI imagery, yield analysis if available, and a starter package to introduce and work with variable rate technology. Items which are good tools but must involve the farm manager
8) Implementation in spring will include a report and score sheets which will predict potential yield based on three forecasted classes of weather scenarios:

   Below average- (class 3) Average- (class 5) Above Average- (class 7)
9) Field scouting allows for 4 visits depending on client and needs. Throughout the growing season, field scouting will allow us to confirm and assess "field personalities" and anomalies. Issues we will identify on the benchmark field include site specific soil nutrient deficiencies, followed up with detailed Nutriscription plant tissue analysis, this allows for fine tuning with foliar nutrients
10) Harvest and post analysis of program
11) Option to sign up for a second year if you are happy
12) Fine tune 1st year results and modify program for year 2

LOCATIONS

Battlefords	937 1800
Biggar	948 1800
Luseland	372 4411
Outlook	867 8371
Perdue	237 1800
Rosetown	882 1800
Saskatoon	683 1800
Unity	228 1800
Wilkie	843 1800

Apply for the Ultimate Yield™ Program online!

www.therackonline.com

What will Ultimate Yield cost ?

Costs may vary with individual clients based on individual farm needs.

However the base package is $7.50 per acre. In order to properly implement the plan

All cultivated acres are required to be in the program.

To apply or have a Rack representative answer your questions, visit www.therackonline.com or send in the following application form to:

Rack Petroleum Ltd, Box 837, Biggar SK, S0K 0M0

Or fax it to 1 306 948 5091

Ultimate Yield™ August 4th 2009

Name:_____

Number of cultivated acres:_____

Average Target Yields

Hard red spring wheat:_____

Durum Wheat:_____

Malt Barley:_____

Canola:_____

Feed Barley:_____

Flax:_____

Peas:_____

Red Lentil:_____

Green Lentil:_____

Canary Seed:_____

Silage Corn:_____

Alfalfa Hay:_____

Current Crop Rotation (4yrs):_____

_____

_____

Do you keep detailed field history data now? Yes No

Where do you store the data:_____

_____

_____

Do you currently have a herbicide rotation plan:_____

_____

_____

Do you have variable rate capability on your seed tool?

Yes No

If Yes, type of controller:_____

_____

If No, do you plan to utilize VRT on Your farm in the next 5 years? Yes No

A Rack representative will contact you by phone to help you determine if the Ultimate Yield™ program is for your farm

Home Phone Number:_____ **Cell Phone:**_____

Email Address:_____ **Best time to contact you:**_____