Keys to

Agronomy

VOL 3

In this issue:

PRODUCER SPOTLIGHT

Troy McGann

Lamb County

"If you love what you do, you will never work a day in your life!"

A family man who enjoys firing up his smoker (ask him about his smoked apple crisp, it sounds amazing), trying new recipes, and hanging out on the back patio with his wife, Tina, and two kids, Hadley and Hudson. Troy McGann, a fourth generational farmer in Lamb & Hale Counties, who just completed his 6th crop season started out by helping on the farm driving a grain cart for his grandfather which turned into a full time, every summer job and now career. Troy's grandfather and uncle made a deal that if he graduated from college with his bachelors degree, they would help him start his own farming operation. Being a younger farmer, Troy's biggest fear is letting down the generations before him and the generations after him inspire him to continue farming, even on the hard days. A major hurdle each year Troy and many farmers face is the lack of rainfall. Troy's operation is broken up into 2/3 dryland and 1/3 irrigated; success hinges on the amount of rain he receives each year. Cotton, the main crop on the McGann farm, is Troy's favorite. He enjoys watching the different stages of growth that the plant goes through in the growing season from the crest coming to life to the bolls maturing and opening up and seeing the white fiber. Other crops you might see on the McGann farms are corn, milo, sunflower, and wheat for cover crops. For the 2023 year, you might even see sunflowers for oilseed production. Although not a new crop to Troy as he planted confectionary sunflowers in 2020 and had good luck with them, he is able to plant them early to split his irrigation with cotton to better focus the water during the high demand time; something he plans on doing with this years sunflower crop.

A young farmer himself, Troy wants other young farmers to always be willing to learn from the farmers that came before you. Since they are still farming and being successful, they must know what they are talking about! Being able to adapt is important as equipment, technology and production is evolving.

Contact Me!

Got an idea, question, or comment?

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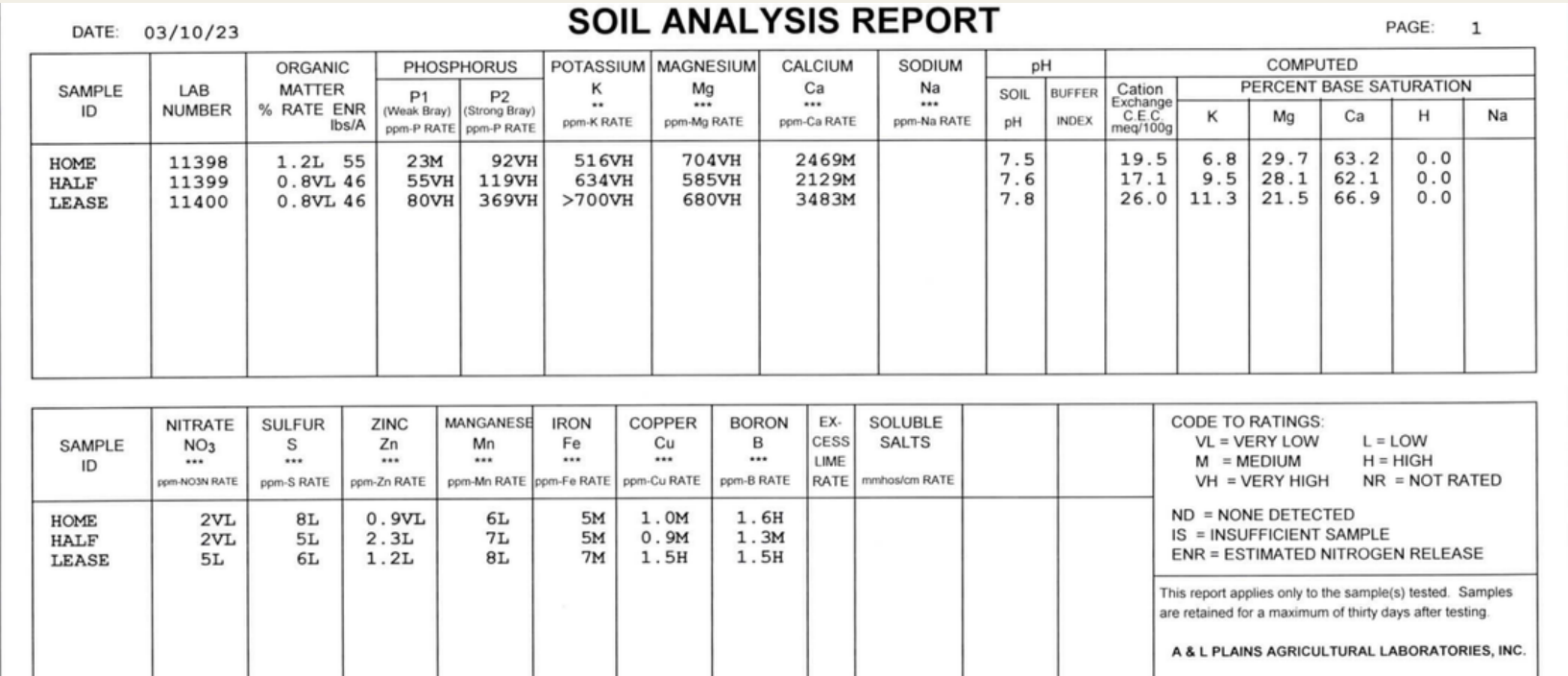
Texas A&M AgriLife Extension

READING A SOIL ANALYSIS

After taking a quality soil sample and sending it to a lab, you get the report back and your eyes can get crossed and your head might start pounding. Let's take soil analysis and its components step by step. Over the next 9 newsletters, I will break down not only the analysis but each macro nutrient and some micro nutrients. In July, look for a "Basics of Soil Nutrients" clinic to dive deeper and understand your soil and the nutrients that are required to grow your crops. A few key points to keep in mind when receiving your soil analysis report:

- recommendations are made to meet your desired yield goals for the intended crop to be grown. This information you submit with the sample
- no soil analysis is perfect but it can provide insight into potentially improving crop nutrient management and detect deficiencies
- results are reported in ppm (parts per million) with the exception of nitrogen
- multiplying ppm by 2 will give you pounds per acre
- soil analysis give a measurement of soil nutrients that are expected to be plant-available, not the amount of nutrients in the soil



DATE: 03/10/23

SOIL ANALYSIS REPORT

PAGE: 1

SAMPLE ID	LAB NUMBER	ORGANIC MATTER % RATE ENR lbs/A	PHOSPHORUS P1 (Weak Bray) ppm-P RATE	PHOSPHORUS P2 (Strong Bray) ppm-P RATE	POTASSIUM K ** ppm-K RATE	MAGNESIUM Mg *** ppm-Mg RATE	CALCIUM Ca *** ppm-Ca RATE	SODIUM Na *** ppm-Na RATE	pH SOIL pH	pH BUFFER INDEX	COMPUTED Cation Exchange C.E.C. meq/100g	COMPUTED PERCENT BASE SATURATION K	Mg	Ca	H	Na
HOME	11398	1.2L 55	23M	92VH	516VH	704VH	2469M		7.5		19.5	6.8	29.7	63.2	0.0	
HALF	11399	0.8VL 46	55VH	119VH	634VH	585VH	2129M		7.6		17.1	9.5	28.1	62.1	0.0	
LEASE	11400	0.8VL 46	80VH	369VH	>700VH	680VH	3483M		7.8		26.0	11.3	21.5	66.9	0.0	

SAMPLE ID	NITRATE NO_3 *** ppm-NO3N RATE	SULFUR S *** ppm-S RATE	ZINC Zn *** ppm-Zn RATE	MANGANESE Mn *** ppm-Mn RATE	IRON Fe *** ppm-Fe RATE	COPPER Cu *** ppm-Cu RATE	BORON B *** ppm-B RATE	EX-CESS LIME RATE	SOLUBLE SALTS mmhos/cm RATE		
HOME	2VL	8L	0.9VL	6L	5M	1.0M	1.6H				
HALF	2VL	5L	2.3L	7L	5M	0.9M	1.3M				
LEASE	5L	6L	1.2L	8L	7M	1.5H	1.5H				

CODE TO RATINGS:
VL = VERY LOW L = LOW
M = MEDIUM H = HIGH
VH = VERY HIGH NR = NOT RATED

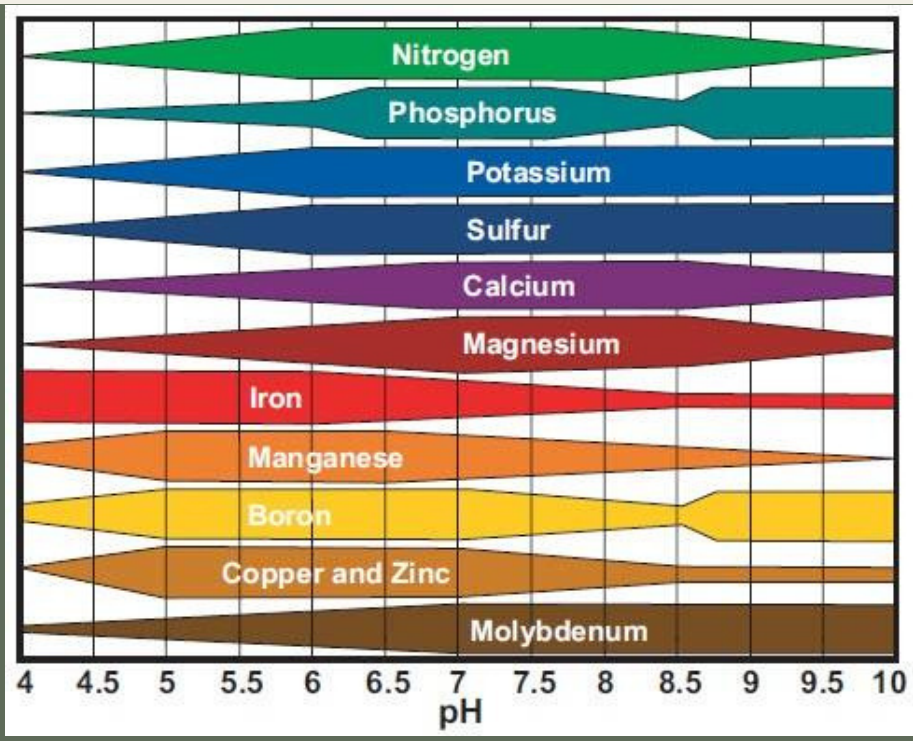
ND = NONE DETECTED
IS = INSUFFICIENT SAMPLE
ENR = ESTIMATED NITROGEN RELEASE

This report applies only to the sample(s) tested. Samples are retained for a maximum of thirty days after testing.

A & L PLAINS AGRICULTURAL LABORATORIES, INC.

SOIL PH

- Soil pH is the measure of hydrogen ion activity in the soil and is represented on a scale from 0-14
- Soil pH can vary from region to region and even field to field



In the field:

Nutrient uptake is effected by soil pH (see chart). A pH of 6.0-7.0 is ideal for nutrient uptake/availability. Even with the proper amount of nutrients provided to the plants via fertilizer, the soil pH will determine if the plants will be able to utilize them. This is why soil testing is so important. Remember, that fertilizers, rainfall, and irrigation can all shift your pH over time. Soil pH can be increased with the addition of lime and decreased by adding sulfur; both must be incorporated and monitored closely.

On the analysis:

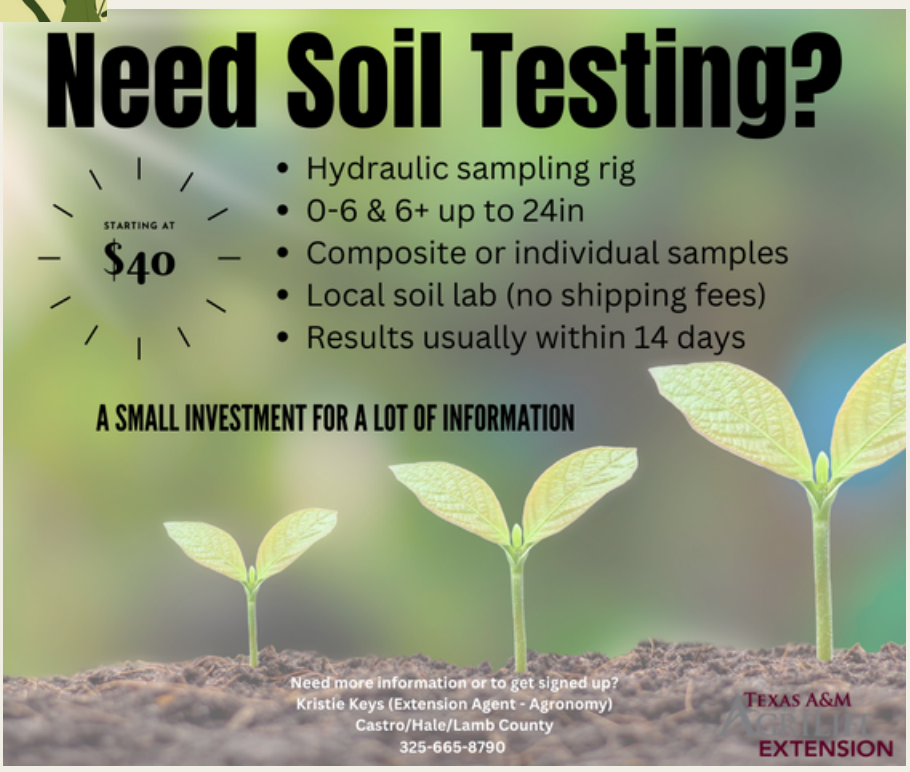
Soil pH is a chemical way to of estimating nutrients available to the plant. A pH of 6.9 or below is considered acidic whereas a pH of 7.1 and above indicates alkaline soils. For soils with a pH lower than 6.4, a buffer pH will also be included on your analysis. This number will tell you amount of lime needed to correct or reduce acidity. The higher the buffer number, the greater change will occur with smaller amounts of lime (an inverse reaction).

UPCOMING

Do You Need...

- **Private Applicator Training**
- **Auxin**
- **Paraquat**

Call Castro County Extension office.



Would you do me a favor?

I'm anonymously collecting information on soil sampling and would appreciate anyone who wanted to take a quick survey, 8 questions max! Copy and paste the link below.
https://forms.gle/6JFkPC3RFmXodRZk9

https://castro.agrilife.org/agronomy/

https://www.facebook.com/castrohalelambagronomy/

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