

Dear Valued Customer,

A&L Western Ag Laboratories was acquired by Matrix Sciences International Inc. in 2021. Matrix has assembled a network of laboratories that provide testing from planting to food processing. In an effort to maximize efficiency and take advantage of superior facilities the analysis of A&L samples was then moved to Matrix associate laboratories beginning March 1st, 2022. Matrix laboratories respects the over forty-four years of service and loyal relationships developed and maintained by A&L since 1979. As this effort evolves, I'm writing to review our transition and to inform you of a few important changes to be implemented as we begin 2023.

There will be changes to the soil test packages. First, we have changed the soil test package codes. The new codes are in the 100 block, but they still retain the old number associated with the previous A&L test. (etc. 101, 103 & 110). The S-101 (formerly S-1BN) will no longer include sulfate-sulfur (SO₄-S), and we have discontinued the A&L S-2N package. Included in the move of A&L soil samples was the implementation of the Saturated Paste Extraction (SPE) method, which is a more labor-intensive process, but it's broadly accepted to mimic the soil-water-plant interface and therefore water soluble or plant available nutrients including Sulfate, Calcium, Magnesium, Sodium, Potassium, Chloride, Bicarbonate and Boron. The Electrical Conductivity (EC) is also measured off the SPE. The lowest entry test into our Saturated Paste Extract Method is now the S-103 (formerly S-3C). However, the most comprehensive analysis is the S-110 (formerly S-10C).

The Ammonium Acetate Exchangeable Hydrogen will no longer be reported nor considered in the percent base saturation calculations. Previously, A&L reported Ammonium Acetate Exchangeable Hydrogen. However, Exchangeable Hydrogen is nearly impossible to measure and is mostly a theoretical concept, therefore it was estimated using algorithms from pH measurements. A&L reported Exchangeable Hydrogen in meq/100grams and it was discovered that the A&L algorithm was over-emphasizing the Exchangeable Hydrogen values and therefore skewing the percent base saturation calculations, in some cases drastically. Neither the Agricultural Proficiency Program (ALP) nor the North American Proficiency Testing Program (NAPT), which is administered by the Soil Science Society of America (SSSA) have methodology nor accept values for Ammonium Acetate Exchangeable Hydrogen in their proficiency programs.

We also plan to return the analysis of manure, compost, lagoon, and harvested crop samples to our laboratory in Tulare, CA. With this change, the Lagoon and Harvest Crop packages will have a code change. The former L-1 and L-4 packages have been combined to be offered as one package, the L-8. The F4A package will become H-1 and the F27 the H-3. Those packages will stay the same. The Tulare location is the same location that A&L soil, plant tissue and water samples are analyzed. These samples were being tested at our Delaware location in 2022 to assist Tulare in the transition of the increased sample volume from the soil, plant tissue and water samples from all A&L customers. This will result in a change in report style for manure, compost, lagoon, and harvested crop samples as the reports will become vertical for these products. We believe we will improve our turn-around time on these products with this change.

The Portland and Modesto offices will continue to be available for client relations and sample receiving. Both facilities are equipped to process and prep samples that are then shipped to associate labs for analysis. The Tulare lab operation has provided agricultural analysis since 1997 in California's

San Joaquin Valley. The Delaware lab has provided agricultural analysis since 2010 to the Mid-Atlantic and East coast regions.

Fertilizer, heavy metals, and NIR feed analysis will continue to be sent to our associate lab in Harrington, DE. We are working to develop sample packages to better serve our clients with these product types. We will no longer have the ability to analyze for individual elements moving forward.

We are also bringing our prices closer to the industry standard on the west coast. This will result in a fee increase. We are confident that the changes we are implementing will result in a better product and service. Volume and other past billing discounting will be honored.

Matrix Sciences has a great network of Agricultural Laboratories across the country. It is our goal to utilize this network to best serve our client's needs. For any further information regarding any additional services not listed, please inquire. Thank you for your continued loyal support.

The following changes will take effect on Monday March 20, 2023.

Best Regards,

Patrick O'Brien
Agronomist – General Manager