EarthOptics, Pattern Ag Merge to Digitize Soil Health for Climate and Agriculture

Company to target the global opportunity in soil digitization for agricultural lands

- EarthOptics and Pattern Ag have merged to create a category-leading company focused on digitizing soil health for advanced crop management and climate sustainability, providing a comprehensive "digital twin" of soil, including physical, chemical, and biological properties.

- The newly formed company, operating under the EarthOptics name, will lead Predictive Agronomy. It will offer farmers high-resolution data on soil properties, pest detection, fertilization, and industry-first tillage prescriptions to optimize crop management and input decisions.

- The merger combines EarthOptics soil sensing technology with Predictive Agronomy from Pattern Ag and their metagenomic database, enabling exponential growth in data generation and predictive forecasting, driving farm profitability and productivity.

ARLINGTON, VA and EMERYVILLE, CA – August 28, 2024 – EarthOptics and Pattern Ag have merged, creating a category leader in soil digitization to power advanced crop management and climate sustainability.

The newly combined soil intelligence company will operate under the name EarthOptics and be the authoritative source of soil insights and the leader in Predictive Agronomy. Its comprehensive data will enable farmers and advisors to know their soil's exact physical, chemical, and biological properties, helping them plan their most impactful input and management decisions to maximize profitability and sustainability goals.

The combination pairs Pattern Ag's cutting-edge lab-based analysis with proprietary field-based sensing technologies from EarthOptics to create a high-resolution digital twin of the soil, giving farmers insights into pests and pathogens, biofertility, nutrients, soil compaction, carbon levels, moisture, and more.

"This merger will give farmers the most comprehensive snapshot of the soil under their feet," says Lars Dyrud, current EarthOptics CEO and the CEO of the merged companies. "Historically, soil measurement insights have been limited in scope and imprecise. We now have the technology to tell farmers what's in their soil with a high level of precision, and with the addition of Pattern analytics, we can offer them insights into what to plant and how to manage their most impactful decisions throughout the growing season."

"As the leader in Predictive Agronomy, our insights help farmers know their risks and opportunities before they plant in order to create the optimal plan for next season," says Rob Hranac, CEO of Pattern Ag. "By pairing this with EarthOptics field-based technologies, we can increase the breadth of soil insights into exciting new categories while amplifying the resolution of most analytics by 100 times or more".

The new combined company will aim to make it easy to turn soil insights into farm profitability and productivity. With this merger, one soil sample will generate more data and predictive power across physical, chemical, and biological soil properties. By integrating methods and technologies, the newly expanded company will deliver more data and agronomic insight to customers while rapidly scaling operations. "Together, the new company will shape the future of soil agronomy, delivering unprecedented value and insights to farmers worldwide," Dyrud says.

About EarthOptics

At EarthOptics, we see soil. Differently. EarthOptics f/k/a GroundTruth Ag, Inc., was founded in 2018 and has offices in Raleigh, North Carolina; Arlington and Blacksburg, Virginia; Minneapolis, Minnesota; and Fayetteville, Arkansas. EarthOptics is an agricultural technology company developing next-generation soil-sensing technologies that give growers revolutionary insights into the physical characteristics of their soil. EarthOptics beat out three finalists and more than 100 international agtech startup entries to win the AGCO Innovation A Challenge Award during the 2021 World Agri-Tech Innovation Summit. We

believe that below-ground precision and innovation in the soil space is long overdue. Our ultimate goal is to deliver point-of-care soil health insights – related to physical, chemical, and biological attributes of soil – in real-time. To achieve this goal, we have assembled a team with diverse backgrounds in engineering, software development, geospatial analytics, data science, machine learning, and logistics and operations. To learn more, visit www.EarthOptics.com

About PatternAg, Inc.

Founded in 2018, Pattern Ag leverages advances in genomics, data science, and microbiology to help farmers improve the productivity and profitability of their land while lowering their environmental impact. By applying genomic analysis to soil, we unlock a wide range of predictive insights that help farmers optimize their spend on seed, crop protection, and fertility inputs. Combining these insights with the latest in digital sensing, data science, and machine learning, we are ushering in the era of predictive agriculture, powering on-farm decision-making for millions of acres and billions of dollars in crop spend. To learn more, visit www.Pattern.ag