



Frontieras Reaches Significant Milestone for Delivering Transformative Technology to the Energy Sector

Latest Report from JōB Industrial Validates “Yields” from Frontieras’ Patented Technology Process and Positions the Company to Initiate Capital Raise and Break Ground on First Plant

Scottsdale, AZ - January 19, 2022 – Frontieras North America, a subsidiary of Frontier Applied Sciences, today announced the validated yields of FASForm™, its patented clean Solid Carbon Fractionation hydrocarbon processing technology. Working closely with the esteemed engineering company JōB Industrial Services, Inc., Frontieras has validated the FASForm product yields as liquids, high-value carbon (coke) product and hydrogen-rich gas. The results indicate a profitable technology that is not reliant on government subsidies, as well as an environmentally cleaner energy product which is poised to change the North American coal, oil and steel industries.

Frontieras’ technology unlocks a new source of valuable petroleum products from unconventional sources such as coal, lignite, oil sands and waste plastic. Specifically, the report validated FASForm’s ability to delineate high-quality, market-ready products suitable for sale as transportation fuels or chemical feed stocks. With this data and the validation of its previously designed and engineered process, which was confirmed utilizing FAS’ Process Demonstration Unit, Frontieras can move forward with a commercial capital raise to fund the development of its first large scale commercial plant that is expected to process 2.7 million tons of coal per year. “JōB Industrial Services is actively engaged in working with the Frontieras team to both test and bring this transformative technology to market,” said Jason Job, CEO at JōB Industrial. “Engaging with Frontieras along every step of the way has allowed us to validate the engineering and the yields that are produced with FASForm’s Solid

Carbon Fractionation. Through our latest testing, we were able to demonstrate that the yields were higher than expected for solids, liquids and gases and that the technology is financially viable.”

FASForm expands the application of hydrocarbons as an energy source and changes the conversation surrounding coal. FASForm deploys a phased refining process for coal and other solids that uses continuous heat and pressure to reform, refine and liberate the constituents of solid carbonaceous materials that contain volatile compounds. Specifically, FASForm separates out components to produce and separate valuable gas products such as hydrogen and methane, as well as high-value liquid products such as naphtha, jet fuel and diesel. In addition, FASForm produces an upgraded solid carbon product superior to current metallurgical coke since it is moisture free, devoid of volatiles and nearly sulfur-free. FASForm’s unique refining process, recognized as Solid Carbon Fractionation (SCF), delivers several competitive and environmental benefits, including:

- **Economic Viability:** FASForm’s higher yields allow Frontieras to be highly profitable and in great demand because of its cleaner and more efficient product offering. Frontieras plans to develop a large-scale production unit that does not rely on government subsidies that will bring economic growth and job opportunities to its targeted states.
- **Market Impact:** FASForm’s production of higher yields allows supporting industries to compete with the delivery of a superior product. Frontieras allows for other industries to benefit from the more cost-effective energy source to produce stronger and more affordable offerings.
- **Positive Environmental Impact:** When processing coal, FASForm removes nearly all sulfur, mercury and arsenic, as well as the moisture, which upgrades the thermal value of the final carbon product. This lowers the carbon footprint and allows a reduction in CO₂ emissions. Additionally, rather than ending up in landfills, waste plastics can be co-fed and converted fully to oil products.

“Today’s announcement builds on Frontieras’ earlier engagement with JōB to validate the engineering associated with the processing technology,” said Matthew McKean, CEO and Co-Founder of Frontieras. “The speed at which Frontieras has been able to move from a development stage, that included the creation of a product test unit, to now the validation of processed yields, is a testament to Frontieras’ use of advanced technology to streamline the process. Frontieras will provide an abundant and affordable supply of energy with a clean carbon footprint that is highly profitable.”

With these results, Frontieras is poised to file for Regulation D and continue Phase III engineering progress. Frontieras’ filing of the Regulation D provides for

accredited investors the opportunity to invest in Frontieras. The capital raise will play a key role in accelerating the purchase of the designated lot and the development of Frontieras' first large scale commercial FASForm plant. To learn more about Frontieras, visit us at Frontieras.com.

About Frontieras

Frontieras North America, a subsidiary of Frontier Applied Sciences (FAS) is a privately held entity formed in 2010 as a private company. FAS holds patents on 5 continents that cover more than 3.3 billion people in 9 countries including the United States and Canada. Frontieras' FASForm streamlines the processing of solid hydrocarbonaceous materials and maximizes the energy output in each of its three forms: solids, liquids, and gas. FASForm is extremely efficient, and products can be delivered to market at or below market comparable prices without relying upon any government subsidies or carbon credits.