

## **NEW PATENT-PENDING TECHNOLOGY SET TO CHANGE THE OIL AND GAS INDUSTRY.**

LITTLE RIVER, SC – (BUSINESS WIRE) – PCT LTD (PCTL OTC Pink). PCT Ltd. and Nano Gas™ Technologies are pleased to announce a joint patent-pending technology that has been designed to provide an eco-friendly solution for the oil and gas industry. Testing has been ongoing for many months using PCT Ltd.'s Catholyte only with excellent results reported by an international independent lab located in Houston, Texas. The water to oil ratio (WOR) started out as 99/1 before Catholyte was pumped into the wells. Testing was done using various parameters which increased the WOR to 60/40 on some of the wells. Nano Gas™ nanobubbles were added, and a 20% increase was seen at WOR 48/52. Ongoing testing continues, and PCTL/NANO GAS™ feels another 20% may be attainable.

PCTL/NANO GAS™ new product line is called Nanolyte. The fluids come in two versions: Nano-Catholyte™ and Nano-Hydrolyte™.

Nano-Hydrolyte™, a biocide, and Nano-Catholyte™- a nanobubble infused alkaline oil recover fluid with both surface chemistry and wedge effect mechanism for improved oil recover. Both are 100% eco-friendly, green solutions for the oil industry including EOR, fracturing and downhole bacteria control including H2S remediation.

Nano-Catholyte™ is a combination of Catholyte-free produced by PCTL which reduces the surface tension in the treatment fluid and interfacial tension with the oil within the formation. This coupled with the mechanical effects of the nanobubble (diffusion, wedge effect and fragmentation of oil to reduce viscosity) allowing for the release of oil in the formation as well as penetration throughout the micro sized natural fractures through the formation thus separating the oil from the water and allowing it to flow from the formation to the wellbore where it can be produced, processed and ultimately sold. Nano-Catholyte™ makes oil recovery more efficient and subsequently more profitable for operators with no toxic effects to the environment.

Another adaptation will be developing Nano-Hydrolyte™ which is a combination of Hydrolyte produced by PCTL, an eco-friendly hospital biocide that kills 99.999% of pathogens, and Nano Gas™ bubbles which penetrate the smallest fractions and permeability in the formation. Nano-Hydrolyte™ makes for a potent biocide for downhole bacteria control, H2S (sour wells) remediation and disinfection of hydraulic fracturing water facilities.

Maverick Energy Services in Oklahoma has used energy-intensive, steam-assisted gravity drainage (SAGD) to extract heavy oil from their wells in Grassy Creek, MO. Grassy Creek has eleven million barrels of oil in tertiary reserves. When oil prices went down, producing oil with steam was too expensive. Now, Maverick is beginning enhanced oil recovery (EOR) by using Nano-Catholyte™ at a fraction of the cost. Doug Humphreys said: "I've never seen oil cuts like this from the Grassy Creek oil field." Doug also stated with Nano-Catholyte™ Maverick can attain a substantial savings per barrel of produced oil. Maverick is now expanding field testing to his light oil wells in Holdenville, OK and looks forward to adding Nano-Catholyte™ to their service offerings to clients.

SAGD is a popular enhanced oil recovery method in Canada and for all heavy oil. Canada has been struggling with more than one trillion liters of the toxic wastewater tailings ponds resulting from SAGD and other heavy oil recovery processes. Dr. David Holcomb of Pentagon Technical Services Inc. who holds six oil and gas patents and has led research and development efforts for several large oilfield service and chemical corporations said: “Nano-Hydrolyte™ could change enhanced oil recovery around the world and eliminate toxic oil sands tailings.” Because Nano-Hydrolyte™ is 100% eco-green downhole bacteria control, H<sub>2</sub>S remediation and toxic wastewater disinfection can be accomplished in an environmentally safe way.” Nano-Hydrolyte™ is 100% eco-green and is effective on several types of downhole corrosion causing bacteria mitigation such as sulfate reducing, which allows effective H<sub>2</sub>S remediation. As a result, toxic wastewater disinfection can be accomplished in an environmentally safe way.

PCTL and Nano Gas™ have partnered to provide a mobile process to enhance oil recovery through Maverick Energy Services to improve oil industry sustainability. Len Bland, CEO of Nano Gas™ Technologies, said: “We’re excited to partner with PCTL and Maverick Energy Services to provide the worldwide oil industry with environmentally effective Nano-Catholyte™ and Nano-Hydrolyte™.

Gary Grieco, President/CEO of PCTL, stated “By incorporating Nano Gas technology, we found a process that greatly enhanced our already successful specialty product Catholyte. Once we received third-party verification of the unique properties of our fluids, we began field testing. The results have been so positive that we filed a patent-pending with the U.S. Patent Office.”

“We are about to embark upon final field tests,” continues Grieco, “which should be completed by the middle of December. Once completed, we will begin Beta testing with a number of oil production companies that have already expressed their desire to use the process on some of their production.”

For more information visit:

<https://www.para-con.com/index.php> @PCTL\_  
<https://www.nanogastecnologies.com/> @NanoGasTech  
<https://www.okmaverick.com/home>

### **About PCT LTD:**

PCT LTD ("PCTL") focuses its business on acquiring, developing, and providing sustainable, environmentally safe disinfecting, cleaning, and tracking technologies. The company acquires and holds rights to innovative products and technologies, which are commercialized through its wholly owned operating subsidiary, Paradigm Convergence Technologies Corporation (PCT Corp). The Company established entry into its target markets with commercially viable products in the United States and now continues to gain market share in the U.S. and U.K.

### **About Nano Gas Technologies:**

Nano Gas Technologies, Inc. (Nano Gas™), a Deerfield, IL company, uses nature to improve the environment with tiny bubbles. Nano Gas™ nanobubbles of gas in liquid enhance oil recovery, clean oil industry wastewater, and improve plant and animal growth. Nano Gas's™ unique technology does not clog up because it uses no membranes. The technology scales up for high volume treatment because Nano Gas™ puts so much gas in solution in a single pass that it delivers higher dissolve oxygen even after diluting fifteen times. This platform technology has applications in sewage treatment and algae production for biofuel as well. Nano Gas™ has eighteen patents with thirty more pending.

### **Forward-Looking Statements:**

This press release contains "forward-looking statements" as defined in Section 27A of the Securities Act of 1933, as amended, and Section 21B of the Securities Exchange Act of 1934, as amended. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, goals, assumptions or future events or performance are not statements of historical fact and may be "forward-looking statements."

Such statements are based on expectations, estimates and projections at the time the statements are made that involve a number of risks and uncertainties, which could cause actual results or events to differ materially from those presently anticipated. Such statements involve risks and uncertainties, including but not limited to: PCTL's ability to raise sufficient funds to satisfy its working capital requirements; the ability of PCTL to execute its business plan; the anticipated results of business contracts with regard to revenue; and any other effects resulting from the information disclosed above; risks and effects of legal and administrative proceedings and government regulation; future financial and operational results; competition; general economic conditions; and the ability to manage and continue growth. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual outcomes may vary materially from those indicated. Important factors that could cause actual results to differ materially from the forward-looking statements PCTL makes in this press release include market conditions and those set forth in reports or documents it files from time to time with the SEC. PCTL undertakes no obligation to revise or update such statements to reflect current events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

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