

NXT ENERGY EXPANDS SCOPE OF US SURVEY FOR KEROGEN AND COMPLETES DATA ACQUISITION OPERATIONS

Highlights

- o Contract expanded by US \$0.35 million to a total value of US \$1.47 million
- o SFD® data acquisition operations have been completed in both Florida and Texas

CALGARY, ALBERTA, December 9, 2013 - NXT Energy Solutions Inc. ("NXT Energy" or the "Company") (TSX-V:SFD; OTC:NSFDF) announces that its recently announced SFD® survey contract with Kerogen Exploration LLC ("Kerogen") has been expanded by US \$0.35 million, to a total value of US \$1.47 million.

Kerogen is a private company financed by Riverstone Holdings LLC, a New York based private equity firm, and operates in Texas and Florida, holding 100,000 acres in Texas in the Permian Basin and 125,000 acres in the South Florida basin.

The contract includes separate SFD® surveys in Florida and Texas, both of which are now completed. The scope of the Florida survey was expanded during the recent SFD® data acquisition operations. Interpretation of the SFD® data is underway, with delivery of the Company's recommendations report on the two surveys planned to occur in January 2014.

George Liszicasz, NXT's President & CEO noted "We are pleased that Kerogen chose to expand the initial area covered by the Florida survey, and that our data acquisition operations went very smoothly in both states. This project demonstrates one of the value-added benefits of our SFD® survey system for our exploration industry clients – a rapid project process, from planning through execution and delivery. The timing and size of this pilot survey for Kerogen also fit very well with scheduled aircraft maintenance, which will now commence".

NXT Energy Solutions Inc. is a Calgary based company whose proprietary Stress Field Detection ("SFD®") survey system provides an effective and reliable method to reduce time, costs, and risks related to hydrocarbon exploration. The SFD® system utilizes quantum-scale sensors to detect gravity field perturbations in an airborne exploration survey method. SFD® can be used both onshore and offshore to remotely identify areas with exploration potential for traps and reservoirs, and enables our clients to focus their hydrocarbon exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD® is environmentally friendly and unaffected by ground security issues or difficult terrain, and is the registered trademark of NXT Energy Solutions Inc.

Forward-Looking Statements:

This news release may include forward-looking statements. When used in this document, words such as "intends", "plans", "anticipates", "expects" and "scheduled", are forward-looking statements. Forward-looking statements are subject to a wide range of risks and uncertainties, and although the Company believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will be realized. Any number of factors can cause actual results to differ materially from those in the forward-looking statements. Risk factors facing NXT are described in its most recent MD&A for the year ended December 31, 2012 which has been filed electronically by means of the System for Electronic Document

Analysis and Retrieval ("SEDAR") located at www.sedar.com. Such forward-looking statements are made as at the date of this news release, and the Company assumes no obligation to update or revise them, either publicly or otherwise, to reflect new events, information or circumstances, except as may be required under applicable securities law.

Specific forward-looking statements include the estimated timing of completion of the Kerogen survey report.

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