

NXT ENERGY ANNOUNCES THE PRESENTATION OF A NEW JOINT TECHNICAL PAPER - RESULTS OF SFD® SURVEY SHOW SIGNIFICANT CORRELATION WITH SEISMIC DATA

Highlights

- New Joint Technical Paper presented to industry by Pakistan Petroleum Ltd.
- Integration study results show significant correlation between SFD® anomalies and prospective areas evaluated using 2D seismic data
- Confirmation of successful risk management by combining SFD® and Seismic to explore in frontier areas
- Survey demonstrates that SFD® technology is capable of detecting geological structures that could act as fluid traps
- Joint Technical Paper attracting new clients and opportunities in the region

CALGARY, ALBERTA, December 2, 2013 - NXT Energy Solutions Inc. ("NXT Energy" or the "Company") (TSX-V:SFD; OTC:NSFDF) announces that the results of another of its SFD® aerial surveys has been formally presented by one of its major exploration clients, showing strong correlations with seismic data.In December 2012.NXT flew an aerial SFD® survey for Pakistan Petroleum Ltd. ("PPL", one of the national oil companies ("NOCs") of Pakistan) The survey was flown in the Balochistan basin which represents a pure frontier area and which has previously had no existing seismic or other geophysical data coverage. As part of its exploration program, with the SFD® survey, PPL also acquired extensive 2D seismic data over a large portion of the lands which were part of the SFD® survey.

Subsequent to the aerial survey, an integration of the interpreted seismic data with the SFD® anomalies was undertaken by PPL in mid 2013. The results of the correlations seismically identified anomalies which were formally presented as a Joint Technical Paper (the "PPL Paper") on November 26, 2013 by PPL at the Pakistan Annual Technical Conference ("ATC") held in Islamabad. The ATC is Pakistan's premiere annual forum for the showcasing of new technologies and exploration concepts being applied.

George Liszicasz, President and CEO of NXT Energy noted, "We are proud that PPL, like PEMEX, is another NOC who are showcasing the highlights of our SFD® survey project results. The cooperation on the part of government officials was exceptional and we have found the geoscientists at PPL and other E&P companies who are active in the region to be very knowledgeable and supportive."

Selected highlight excerpts from the PPL Paper, which is available for download and review on NXT's website: www.nxtenergy.com are:

- "The study presents a case where integration of the SFD survey and 2D seismic has helped in mitigating the risk associated with trap failure."
- "NXT has identified and ranked a total of twenty one SFD® lead areas; FIVE primary, TWELVE secondary and FOUR tertiary in the Kharan Forearc Basin, which required seismic to map the traps."
- "The integration results show significant correlation between SFD® anomalies and prospective area evaluated using seismic and geological data sets.
- "The results demonstrate that SFD® technology is capable of detecting geological structural elements

in Kharan Forearc Basin area that could act as fluid traps."

- "SFD® does recognize the major traps and also provides indications of faults".
- "The SFD® data is very useful in high-grading the areas when used in conjunction with regional geology and geophysics to minimize the risk associated with the trapping of reservoir".
- "While SFD® is a very powerful reconnaissance tool for wide area exploration it is not limited to this application. Once the other datasets including seismic results, are integrated with the SFD® results, it becomes a verifying tool and may be used to high-grade the prospective trap areas.
- "The use of SFD® as an independent tool can help reduce the exploration risk."

Mr. Liszicasz added further "exploration, especially in new frontiers, also about risk reduction. We surveyed a large, unexplored frontier area, where the closest well drilled is 500 km away, and delivered our SFD® recommendations within four months. Our client's study demonstrated key concepts of SFD®, its application in various geological settings, and most importantly, its correlations with seismic data sets. The creation and presentation of technical case studies aids us in showcasing growing industry use of SFD® as an integral, value-added tool in large-scale frontier exploration programs. The results of our PPL survey are generating new interest from additional NOCs who are active in the South Asia region".

The Company also advises that at its Annual General Meeting ("AGM") of shareholders which was held on October 17, 2013, all matters which were presented for voting were approved. This included matters related to amendments of both the Company's Articles and its By-laws, as were specified in the Information Circular for the AGM.

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.

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