Form 51-102F3
Material Change Report

Name and Address of Company

Kivalliq Energy Corporation (the "Company" or "Kivalliq")
1440 – 625 Howe Street
Vancouver, BC V6C 2T6

Date of Material Change

October 13th and 20th, 2010

News Release

The Company issued two news releases, one October 13th and one October 20th, 2010. All were disseminated them through the facilities of CCN Matthews, filed with SEDAR, posted on the Company's website (www.kivalliqenergy.com), as well as www.kitco.com, and emailed to the Company's internal database of interested persons.

Summary of Material Changes

The Company announced new assays from the its 2010 Phase II drill program in 19 holes at the Lac Cinquante Uranium Deposit located in Nunavut, Canada.

The Company also announced the appointment of the Officers of the Company. Mr. John Robins is now Chairman. Mr. James Paterson is now Chief Financial Officer as well as remaining a director. Mr. Jeff Ward, previously Vice President, Exploration is now President. The Company also granted 2,870,000 options to directors, officers and employees of the Company.

Full Description of Material Change

The Company announced new assay results of 19 holes from the ongoing drill program at the Lac Cinquante Uranium Deposit, located within the 225,000 acre Angilak Property in Nunavut, Canada.

"The addition of a second rig in August significantly reduced program costs, on a per metre basis, while doubling our drilling production rate," stated Jeff Ward, P. Geo., Kivalliq's Vice President, Exploration. "The drilling hit rate and assay results continue to demonstrate the robust nature of uranium mineralization at Lac Cinquante."

New Assay Highlights from Lac Cinquante Main Zone:

Drill Hole ID	%U_3O_8	True Width (Estimate)
10-LC-039	1.05	3.20
10-LC-050	1.10	1.68
10-LC-051	2.23	1.08
10-LC-053	1.23	0.84
10-LC-055	1.55	1.98

Since commencing the 2010 drill programs, Kivalliq has received, reviewed and released assay results from 45 holes. Assay results from more than 50 additional holes will be released, pending receipt and review, prior to the end of the year.

Phases 1 & 2 of the 2010 program have consisted of new camp construction, property-wide prospecting, environmental baseline studies, and aggressive resource definition and exploratory drilling. The fourth quarter of 2010 will be dedicated to technical and resource modeling analysis with the goal of establishing a NI 43-101 mineral resource by early 2011.

All Phase 2 drill holes reported herein were inclined to the northeast with an azimuth of 26 degrees (with the exception of 10-LC-029 drilled at 36 degrees), intersecting the Lac Cinquante main zone between 30 and 160 metres depth. See table of results below, and visit www.kivalliqenergy.com for an updated drill plan map, drill sections and drill collar information.

Table 1: 2010 Phase 2 Assay Results – Lac Cinquante Drill Program

DDH	From (m)	To (m)	Interval (m)	%U3O8*	Est True Width**	Description
10-LC-028	129.48	129.78	0.30	1.72	0.21	Main Zone
10-LC-029	96.63	96.97	0.34	0.19	0.33	Main Zone
10-LC-030	71.33	71.64	0.31	0.09	0.28	Main Zone
10-LC-031	100.80	101.35	0.55	1.89	0.35	Main Zone
10-LC-032	133.75	134.15	0.40	0.01	0.19	Main Zone
10-LC-033	160.25	162.10	1.85	0.14	0.75	Main Zone
10-LC-034	85.80	86.20	0.40	0.53	0.37	Main Zone
10-LC-035	44.80	46.54	1.74	2.11	1.23	Qtz/cb bx vein
10-LC-035	110.20	111.40	1.20	0.12	0.85	Main Zone
10-LC-036	144.20	145.25	1.05	0.06	0.57	Main Zone
10-LC-037	74.94	76.80	1.86	0.10	1.70	Main Zone
10-LC-038	107.75	110.65	2.90	0.32	1.70	Main Zone
10-LC-039	139.58	146.42	6.84	1.05	3.20	Main Zone
10-LC-050	51.10	52.95	1.85	1.10	1.68	Main Zone
10-LC-051	86.66	88.70	2.04	2.23	1.08	Main Zone
10-LC-052	39.00	40.30	1.30	0.23	1.21	Main Zone
10-LC-053	66.25	67.77	1.52	1.23	0.84	Main Zone
10-LC-054	55.90	57.10	1.20	1.16	0.60	Main Zone
10-LC-055	74.10	76.80	2.70	1.55	1.98	Main Zone
10-LC-056	164.3	164.92	0.62	0.26	0.52	Main Zone

*All samples subject to ICP 1 Analysis by SRC in Saskatoon, SK. ICP1 results >1000 ppm uranium subject to SRC U3O8 Assay. Full mineralized intervals may include ICP U analysis in ppm converted to U3O8%. Conversion to U3O8% = ppm x 0.01179%

** Estimates for true widths of mineralized zones based on the attitude of Main Zone geology and the angle of hole intercepts

QA/QC

Samples from the 2010 Phase 2 drilling program comprised half split NQ drill core. All samples were analyzed for U_3O_8 and a multi-element suite by Saskatchewan Research Council (SRC) Geoanalytical Laboratories. The SRC facility operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E), General Requirements for the Competence of Mineral Testing and Calibration laboratories and is accredited by the Standards Council of Canada. The samples are first analyzed by SRC's ICP-OES multi-element Uranium exploration ICP1 method. The method analyzes for multi-elements including Ag, Mo, Cu, Pb, Zn and a suite of rare earth elements. ICP results U>1000 parts per million (ppm) are analyzed using SRC's ISO/IEC 17025:2005-accredited U_3O_8 Assay method. Laboratory quality control (QC) includes a repeat analysis on every 20th sample. Repeat samples had good reproducibility. Kivalliq's QC included the insertion of blanks into the sample inventory at the project site prior to shipment in sealed containers. All blank results were within expectations.

Disclosure of a technical nature contained in this release has been reviewed and approved by Jeff Ward, P.Geo., Kivalliq's Vice President Exploration, the Qualified Person for the purposes of National Instrument 43-101.

Appointment of Team Members to Key Roles

The Company announced the appointment of current team members to key management and board roles. The Company's board and executive is focused on establishing a 43-101 compliant mineral resource at the Lac Cinquante Uranium Deposit by Q1, 2011, and demonstrating the potential for the Angilak Property to host additional U_3O resources through an aggressive exploration program in 2011.

John Robins has been appointed to Chairman of the Company's board of directors, and Dr. Robert Carpenter will remain a director. Jim Paterson will continue to serve on the board of directors and immediately assume the role of Chief Executive Officer. Jeff Ward, has been promoted to President after successfully serving as the Company's Vice-President, Exploration, for the past two years.

"We are excited to have the complementary skill-sets of Jim Paterson and Jeff Ward working in unison to advance Lac Cinquante and increase the Company's value," stated John Robins, P.Geo, Kivalliq's new Chairman. "Jim's corporate experience and proven ability to build market awareness for companies in the resource sector, combined with Jeff's expertise in managing large scale exploration and logistical projects in Canada's north, are exactly what Kivalliq needs to take the Company through the next stage of its development."

Newly appointed CEO, Jim Paterson, B.Comm., has been an active member of the Board of Directors of Kivalliq Energy Corp. since the Company's inception. He has over 13 years of corporate experience with several North American mineral exploration and development companies. Mr. Paterson founded, was President & CEO, and currently serves as a Director of Corsa Capital Ltd. (CSO: TSX-V) – a company which recently announced its intention to acquire and capitalize coal assets in the USA. Jim is also a Director of Kaminak Gold Corporation and Niblack Development Corporation, both resource companies listed on the TSX Venture Exchange.

Kivalliq's new President, Jeff Ward, BSc, P.Geo, obtained a Bachelors of Science degree in Geology from the University of Western Ontario and is a registered professional geologist in British Columbia and Alberta. He has over 25 years experience exploring for base metals, precious metals and diamonds with companies such as Corona Corporation, Ashton Mining of Canada Inc., and Stornoway Diamond Corporation. Mr. Ward's experience ranges from reconnaissance to advanced-stage projects throughout Canada's north. As Regional Project Manager, he directed exploration programs in the Northwest

Territories, Nunavut and Alberta for over ten years and was responsible for program design, supervision, compliance, joint venture management and stakeholder relations.

Stock Options Grant

Stock options have been granted to directors, officers and key employees of Kivalliq, in accordance with the terms and conditions of the stock option plan of the Company, entitling them to purchase 2,870,000 shares at the price of $0.50 per common share expiring October 19, 2015.

About Kivalliq Energy Corporation

Kivalliq Energy Corporation is a uranium exploration and development company, and the first company in Canada to sign a comprehensive agreement with the Inuit of Nunavut to explore for uranium on Inuit Owned Lands in Nunavut.

The Lac Cinquante Deposit is Canada's highest grade uranium deposit outside of the Athabasca Basin. Kivalliq's core asset, the 225,000 acre Angilak Property hosts the historic Lac Cinquante uranium deposit, and over 150 other uranium occurrences. Since acquiring the project in 2008 the Company has invested approximately $9 million on the property conducting systematic exploration which has included ground and airborne geophysics, geological mapping /sampling and over 15,000 meters of drilling since 2009.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

** The quoted disclosure of historical resource estimates for the Lac Cinquante Uranium Deposit was prepared by Aberford Resources Ltd in 1982, Abermin Corporation in 1986, and referenced by other subsequent sources. It was prepared prior to the implementation of National Instrument 43-101 (NI 43-101) and should not be relied upon since it does not comply with NI 43-101 Standards of Disclosure for Mineral Projects. A Qualified Person has not classified the historical estimates as current mineral resources or reserves, and therefore, Kivalliq is not treating them as such. Kivalliq has not completed any work to verify these estimates, but ongoing exploration programs are designed to evaluate the economic potential of the deposit and environs. It is uncertain if further exploration will result in the deposit being classified a mineral resource or reserve. However, the historical uranium resource estimate is relevant because: it is indicative of a mineralized zone worthy of follow-up exploration as it is based on drilling and surface exploration carried out by what is believed to be knowledgeable explorers in accordance with acceptable industry practices at the time of the estimate. Historic estimates were originally classified as "indicated" and "inferred" reserves, plus a third "possible" category; however, the equivalent categories acceptable under NI 43-101 are not known at this time.

Certain disclosures in this release, including management's assessment of plans and projects and intentions with respect to listings of securities, use of proceeds and future exploration programs, constitute forward-looking statements that are subject to numerous risks, uncertainties and other factors relating to Kivalliq's operations as a mineral exploration company that may cause future results to differ materially from those expressed or implied in such forward-looking statements, including risks as to the completion of the plans and projects. Readers are cautioned not to place undue reliance on forward-looking statements. Kivalliq expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events, or otherwise.

Omitted Information

No information has been omitted on the basis that it is confidential information

Executive Officer

Jeff Ward, President Telephone: 604-646-4527.

DATED at Vancouver, BC, this the 21st day of October, 2010.