

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

February 7th, 2011

News Release

The Company issued a news release February 7th, 2011 and disseminated it through the facilities of CCN Matthews, filed with SEDAR, posted on the Company’s website (www.kaminak.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 the release of the first NI 43-101 compliant Mineral Resource estimate for the Lac Cinquante uranium deposit, located within Kivalliq’s 225,000 acre Angilak Property in Nunavut, Canada. The Company has received a summary report from Robert Sim of SIM Geological Inc. that describes an Inferred Mineral Resource Estimate of 810,000 tonnes grading 0.79% U₃O₈, totalling 14.15 million lbs U₃O₈ (17.5 lbs U₃O₈/tonne) at a 0.2%U₃O₈ cut-off grade.

Full Description of Material Change

The Company is pleased to announce the release of the first NI 43-101 compliant Mineral Resource estimate for the Lac Cinquante uranium deposit, located within Kivalliq’s 225,000 acre Angilak Property in Nunavut, Canada. The Company has received a summary report from Robert Sim of SIM Geological Inc. that describes an Inferred Mineral Resource Estimate of 810,000 tonnes grading 0.79% U₃O₈, totalling 14.15 million lbs U₃O₈ (17.5 lbs U₃O₈/tonne) at a 0.2%U₃O₈ cut-off grade.

“The release of the first 43-101 compliant mineral resource estimate for the Lac Cinquante uranium deposit is a major milestone for the Company. It provides Kivalliq with a strong base from which to build additional uranium resources in 2011, through further drilling at Lac Cinquante and at other high-priority target zones within the Angilak Property,” stated Kivalliq CEO Jim Paterson. “With a grade of 0.79% U₃O₈, Lac Cinquante is the highest grade compliant uranium resource in Canada, outside of the Athabasca Basin. In addition to uranium, Lac Cinquante contains significant quantities of silver, molybdenum and copper as outlined in the resource estimate. These additional metals, and a uranium spot price now exceeding US\$70 per pound, are contributing factors to the potential economics of this project.”

Mineral Resource Estimate

The Mineral Resource estimate for Lac Cinquante was prepared under the direction of Robert Sim P.Geo., of SIM Geological Inc. A resource model was generated using drill sample assay results from Kivalliq’s 2009 and 2010 field seasons (up to October 31, 2010), and interpretation of a geological model relating to spatial distribution of uranium. At a base case cut-off grade of 0.2% U₃O₈, an Inferred Mineral Resource

is estimated at 810,000 tonnes averaging 0.79% U₃O₈, containing 14.15 million pounds U₃O₈. For evaluation purposes, three additional metals: silver (g/t), molybdenum (%) and copper (%) have also been estimated within the resource model.

The Mineral Resources contained within the Lac Cinquante uranium deposit is presented with a series of U₃O₈ cut-off thresholds for comparison purposes in Table 1 below; the base case cut-off grade of 0.2%U₃O₈ is highlighted in this table. Kivalliq feels that this is a conservative but appropriate approach at this stage of the project's development.

Conference Call

Kivalliq Energy Corp. will host a web- based conference at **1:15 pm PST on Monday, February 7, 2011**. Please use the following link: <http://www.investorcalendar.com/IC/CEPage.asp?ID=163374>.

Participant dial-in number(s): 416-340-2216 / 866-226-1792

Please mention "Kivalliq"

Instant replay dial-in number(s): 905-694-9451 / 800-408-3053 **Pass code:** 5840426

Table 1 – Inferred Mineral Resource Estimate for the Lac Cinquante Deposit (February 2011)

Cut-off U₃O₈ (%)	Tonnage (T x 1000)	U₃O₈ (%)	Ag (g/t)	Mo (%)	Cu (%)	U₃O₈ (Mlbs)	Ag (oz x 1000)	Mo (Mlbs)	Cu (Mlbs)
0.05	1,119	0.61	10.4	0.18	0.15	15.03	374.5	4.54	3.60
0.1	1,029	0.66	10.7	0.19	0.13	14.89	355.4	4.37	2.90
0.15	926	0.71	11.3	0.21	0.12	14.59	336.0	4.20	2.37
*0.2	810	0.79	12.3	0.23	0.11	14.15	319.3	4.05	1.98
0.25	747	0.84	12.8	0.24	0.11	13.84	306.3	3.90	1.73
0.3	687	0.89	13.0	0.25	0.10	13.48	288.2	3.72	1.56
0.35	625	0.95	13.2	0.25	0.10	13.03	265.4	3.48	1.41
0.4	577	0.99	13.3	0.26	0.10	12.63	246.1	3.25	1.28
0.45	527	1.05	13.4	0.26	0.10	12.17	227.6	3.06	1.17
0.5	493	1.09	13.5	0.27	0.10	11.81	213.7	2.92	1.09

Notes

*Base case cut-off of 0.2%U₃O₈ is highlighted in the table.

-Mineral Resources are not Mineral Reserves. Mineral Resources do not have demonstrated economic viability, and may never be converted into Reserves.

-Contained metal values may not add due to rounding.

The resource model was generated using a total of 122 diamond core holes, totaling 18,260 metres drilled by Kivalliq on the Angilak Property since 2009. This drilling is comprised of 16 NQ core holes totaling 1,748 metres in 2009, and 106 NQ core holes totaling 16,512 metres in 2010. The resource model is constrained within a 3-dimensional domain representing the mineralized portion of the host mafic tuff. Drill hole samples are composited to the full width of the zone and true thicknesses are determined for each drill hole intercept. Blocks in the model measure 5x5x5 metres in size. Block grade estimates are made through ordinary kriging using length-weighted composited drill hole intervals. Only the portion of those model blocks within the mineralized tuff domain are included in the final mineral resource estimate. Tonnages are calculated using a constant bulk density of 2.8t/m³. Model blocks are included in the inferred category if they form reasonably continuous zones of mineralization within a maximum distance of 50 metres from a drill hole intercept.

The Lac Cinquante is considered to be an early stage project, therefore little is known about its potential mining or metallurgical characteristics. However, the resource is considered to exhibit reasonable

prospects for economic extraction, and the base case cut-off threshold of 0.2% U_3O_8 is considered appropriate based on its location and other assumptions derived from deposits of similar type and scale. A technical report will be filed on SEDAR within 45 days.

Potential for Resource Expansion

Lac Cinquante remains open along strike to the east, west and at depth, demonstrating excellent potential to increase the size of the resource at this deposit. In addition, two holes drilled in 2010 encountered significant uranium, but were not included in this initial estimate due to their distance from the resource drilling. Step-out drill hole 10-LC-013, intersected 0.21% U_3O_8 over 1.96 metres, approximately 500 metres west of the resource drilling. Hole 10-NE-001 tested a target within the “Blaze Zone” 1.8 kilometres west of Lac Cinquante, yielding two distinct intervals of 0.83 % U_3O_8 over 1.4 metres and 0.66 % U_3O_8 over 2.4 metres. Both holes clearly indicate that additional uranium resources may be found outside the current Lac Cinquante deposit area.

Geology of the Lac Cinquante Uranium Deposit

The Lac Cinquante uranium deposit is structurally and stratigraphically controlled within a graphite-chlorite tuffaceous metasediment interlayered in Archean basement metavolcanics. Mineralization consists of disseminated pitchblende with sulphides and as fracture controlled, brecciated, hematite-pitchblende-quartz -carbonate veins within the tuff. Uranium and sulphides occur in widths up to 7.9 metres within a host unit up to 11.4 metres wide. The deposit strikes southeast at 110 to 120 degrees and dips south, variably between -45 and -80 degrees. Mineralization occurs as southwest plunging shoots within the plane of the tuff unit, which has been traced by drilling to a vertical depth of approximately 270 metres and along a strike length of 1300 metres. Lac Cinquante is described as a basement hosted, vein-hydrothermal type, unconformity associated uranium deposit.

QA/QC

The information in this release related to the mineral resource estimate has been approved by Robert Sim, P.Geo of SIM Geological Inc., who is an independent Qualified Person as defined under National Instrument 43-101. Jeff Ward, P.Geo, President of Kivalliq and a Qualified Person for the Company has reviewed and approved the information contained in this release.

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.

With an NI 43-101 compliant Inferred Mineral Resource of 810,000 tonnes grading 0.79% U_3O_8 , totalling 14.15 million lbs U_3O_8 (17.5 lbs U_3O_8 /tonne) at a 0.2% U_3O_8 cut-off grade, the Lac Cinquante Deposit is Canada’s highest grade compliant uranium deposit, outside of the Athabasca Basin. Kivalliq’s flagship project, the 225,000 acre Angilak Property in Nunavut, hosts the high-grade Lac Cinquante deposit, along with nine additional high priority target areas. Since acquiring the Angilak Property in 2008, the Company has invested approximately \$12 million conducting systematic exploration, including ground and airborne geophysics, geological mapping, prospecting and 18,350 meters of drilling.

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 8th day of February, 2011.