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| **SMDI #:** | 0985 |
| **Showing Name:** |  |
| **Disposition:** | S-108239 |
| **Location:** | Kulyk Lake - east shore |
| **NTS Area:** | 74A11 |
| **TRM:** | 88-22-2 |
| **UTM13-Northing (NAD83/Zn13):** | 6275810 |
| **UTM13-Easting (NAD83/Zn13):** | 470779 |
| **Commodity:** | REE |
| **Associated Commodities:** | Th ; U |
| **Type:** | Outcrop grab |

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| **Mineral Resource Assessment:** | Occurrence |
| **Mineral Deposit Type:** | Polymetallic Vein-Shear Hosted |
| **Geological Domain:** | Wollaston |
| **Revised On:** | 7/10/2014 |

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| The Kulyk Lake Uranium Showing is located on the east shore of Kulyk Lake and approximately 1800 ft (548.6 m) north of the old Eldorado Showing or SMDI 0980.       The surrounding country rock, as mapped by G. Ray in 1981, consists of Wollaston Group unit 3 or a series of pelitic and semipelitic gneisses and schists which contain >25% mafic minerals (biotite and hornblende). Locally, the pelites and semipelites contain minor interbedded impure quartzite, meta-arkose, and calcareous metasediments.       The showing consists of several fractures containing brown to red monazite [(Ce,La,Nb,Th)(PO4,SiO4), possible davidite [(Fe,U,Ca,Zr,Th)6(Ti,Fe,V,Cr)15(O,OH)36] and possible uranothorianite.  The main fracture strikes 012°oblique to the local gneissosity, dips vertically and has an exposed length of 50 ft (15.1 m) and an exposed width of 1.5 ft (0.46 m).   The fractures are parallel to, and enclosed by the surrounding Wollaston Group metasedimentary gneisses. A narrow zone of deep pink to red coarse grained granite encloses the mineralized fractures. The showing is a fracture filling "ore-vein"       Assays of channel samples over 2 to 5 ft widths gave 0.03 to 0.221% U3O8 and 0.49 to 1.28% ThO2. A 2007 outcrop grab sample JBKJR001 (AF 74A11-0052) (470445 E, 6275408 N) assayed 410 ppm U from a K feldspar-rich pink granite with 1-3% black, resinous, radioactive oxide. A 2009 prospecting and rock sampling program (AF 74A11-0053) returned the following results. The original trenches that contained the rare earth element mineralization were located (6275810 N, 470779 E) by GPS and the UTM coordinates on this file have been changed to reflect this.  Three samples of the trench mineralization were taken.  Grab sample AGKJR001: 22.36% TREE, 4580 ppm Th, 525 ppm U, 22.6% P2O5. REE analysis included 98,000 ppm Ce, 489 ppm Dy, 428 ppm Er, 569 ppm Eu, 1810 Gd, 56 ppm Ho, 67,500 ppm La, 38,700 ppm Nd, 10,100 ppm Pr, 3550 ppm Sm, 196 ppm Tb, 2120 ppm Y, 52 ppm Yb.  Grab sample AGKJR002: 16.2% TREE, 6530 ppm Th, 217 ppm U, 19.6% P2O5. REE analysis included 73,700 ppm Ce, 332 ppm Dy, 306 ppm Er, 388 ppm Eu, 1260 ppm Gd, 21 ppm Ho, 48,200 ppm La, 26,800 ppm Nd, 6870 ppm Pr, 2440 ppm Sm, 135 ppm Tb, 1500 ppm Y, 48 ppm Yb.  Sample AGKJR003 (0.7 m channel): 6.96% TREE, 1930 ppm Th, 84 ppm U, 11.3% P2O5. REE analysis included 31,700 ppm Ce, 183 ppm Dy, 136 ppm Er, 174 ppm Eu, 610 ppm Gd, 32 ppm Ho, 17,100 ppm La, 14,700 ppm Nd, 1910 ppm Pr, 1110 ppm Sm, 66 ppm Tb, 826 ppm Y, 31 ppm Yb.  Normand (2014) summarizes the Kulyk Lake monazite occurrence from McKeough et al. (2010, 2011a,b) and McKeough and Lentz (2011) who describe it as a small, < 5 cm wide and 15 m long vein/dyke with aplitic margins emplaced near the centre of an undeformed, < 4 m wide granitic pegmatite intruded into calc-silicate paragneiss. The mineralization is described as > 50% subhedral to euhedral monazite (0.5-3.0 mm), 30% apatite, 15% Fe-Ti oxides, < 1% zircon and trace feldspar. Other rock samples from the 2009 program within this area include the following.  Grab sample BWKJR003 (6275410 N, 470339 E) of a psammopelite with an analysis of 1500 ppm U. A 0.3 m channel sample JBKJR018 (6275312 N, 470446 E) of a pegmatite with an analysis of 196 ppm Th.  A one-metre channel sample JBKJR019 (6275408 N, 470329 E) of semipelitic gneiss with an analysis of 2680 ppm U. A 1 metre channel sample JBKJR020 (6275386 N, 470339 E) of aplite with an analysis of 1210 ppm U.  A 2010 program of trenching and rock sampling (AF 74A11-0054) with the following results. The REE occurrence was extensively trenched and channel sampled (24) and referred to in the report as the Fanta Trench. The mineralization occurs as discrete veins and stockworks of ilmenite-monazite-apatite hosted by aplite and pink pegmatite associated with two structures: 1) a discrete N-NE trending vein set up to 2 m wide that hosts the impressive massive REE-Th veins; and 2) a W to NW-trending, cleavage set that hosts smaller but more frequent mineralized veins and veinlets. Occasional high-grade pockets, 10s of cms to 1 m in diameter occur at the intersections of the two structures. The distribution of channel samples was designed to test both structurally controlled types.  The main set of samples (DFKJR004 to 022) were taken parallel to the main N-NE structure, approx. 1 m west of it, to evaluate the mineralization in the W to NW cross structures. The remaining samples (DFKJR023 to 027) were taken perpendicular to the main N-NE mineralized structure.  The best intervals in the N-NE sampling were as follows:  151310 ppm TREE+Y, 6790 ppm Th/0.35 m; 34410 ppm TREE+Y, 1910 ppm Th/0.7 m; 67660 ppm TREE+Y, 3360 ppm Th/0.95 m; 168500 ppm TREE+Y, 8760 ppm Th/0.7 m; 10440 ppm TREE+Y, 695 ppm Th/0.8 m; and 106630 ppm TREE+Y, 6070 ppm Th/0.5 m.  Weighted averages for the full sample sections were:  samples DFKJR004 to 008: 24341 ppm TREE+Y/3.35 m;  samples DFKJR009 to 013: 43790 ppm TREE+Y/4.25 m;  samples DFKJR014 to 018: 2179 ppm TREE+Y/5.1 m; and s  amples DFKJR019 to 022: 14719 ppm TREE+Y/3.7 m.  Total weighted value over the entire length was 20318 ppm TREE+Y/16.4 m. The samples across the main trend (DFKJR023 to 027) yielded best values of 208380 ppm TREE+Y, 12700 ppm Th/0.7 m; and 384700 ppm TREE+Y, 20500 ppm Th/0.6 m; with a weighted average value of 100872 ppm TREE+Y/3.75 m. Normand (2014) provides a description of the geology and mineralogy of the monazite-rich vein/dyke within a granitic pegmatite. |

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| In 1969, International Nuclear Corporation Ltd. conducted an airborne electromagnetic, magnetic, and radiometric survey over its Permit No. 1.  This was followed by ground prospecting during which the radioactive occurrence was located on the east shore of Kulyk Lake, about 1800 ft (548.6 m) northeast of the old Eldorado Showing.  Channel samples returned the assays listed above. |

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| **Assessment**  74A12-0005;-0006; 74A11-0052;-0053;-0054  **Literature**  Mawdsley, J.B. (1957): Geology of the Middle Foster Lake Area: DMR Rept. No. 26; p39. Ray, G.E. (1981): Bedrock Geology and Geochemistry, Daly Lake (West) Area and Part of Middle Foster Lake Area: Sask. Geol. Surv. Rept. No. 208; p25-26. Ray, G.E. (1983): Compilation Bedrock Geology Map Series: Foster Lake, NTS Area 74A: Sask. Geol. Surv. Rept. No. 228. Scott, B.P. (1986): Metallogenic Map Series: Foster Lake Area, NTS Area 74A: Sask. Geol. Surv. Rept. No. 252; 15p. Normand, C. (2014): Rare Earths in Saskatchewan: Mineralization Types, Settings, and Distributions; Saskatchewan Ministry of the Economy, Sask. Geological Survey, Report 264, 105p. |