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NEWS RELEASE

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Avalon Discovers New High Grade Sub-Zone in the Nechalacho Rare Earth Elements Deposit, Thor Lake, NWT

Toronto, ON – **Avalon Rare Metals Inc.** (TSX:AVL, OTCQX:AVARF) (“Avalon” or the “Company”) is pleased to provide an update on the winter drill program on its Nechalacho rare earth elements (“REE”) deposit in the Northwest Territories of Canada. The winter drill program concluded on April 20, 2010 with 11,398 metres completed in 43 holes and assay results have now been received from 22 of these holes. These results are highlighted by the discovery of a new high grade sub-zone at shallow depths in the Upper Zone, east of North Tardiff Lake and further heavy rare earth (“HREE”) rich intersections in the Basal Zone near Long Lake.

HIGHLIGHTS

- Three drill holes have intersected exceptional TREO¹ grades in the newly discovered “North Tardiff” sub-zone starting at bedrock surface with individual 2 metre samples running up to 19.84% TREO with 5.3% neodymium oxide within an 11 meter intercept averaging 10.78% TREO (7% HREO/TREO).
- Drill hole L10-220, a 65 degree angle hole located near Long Lake, averaged 1.77% TREO (13% HREO/TREO) over 142 metres including a Basal Zone intercept of 23.7 metres averaging 1.90% TREO with 26% HREO/TREO.
- Due to the recent identification of additional indicated resources adjacent to previously announced indicated resources in the Basal Zone, the prefeasibility study is undergoing modifications to its mine plan. Avalon anticipates that these modifications, coupled with pending results from ongoing hydrometallurgical process development work needed to finalize the plant design, will result in a short delay in the completion of the prefeasibility study until mid to late June 2010.

¹ Total Rare Earth Oxides (TREO) refers to the elements lanthanum to lutetium, plus yttrium, expressed as oxides. See Avalon’s website for conversion factors from elements to oxides. Heavy Rare Earth Oxides (HREO) refers to the elements europium to lutetium, plus yttrium, expressed as oxides as a percentage of the TREO. Light rare earths (LREO) refers to the elements lanthanum to samarium, expressed as oxides. HREO/TREO refers to the proportion of heavy rare earth oxides as a percentage of the total rare earth oxide content of the rock.

- In April, the Company formally initiated the permitting process by filing a detailed Project Description Report with the Mackenzie Valley Land and Water Board (“MVWLB”) in support of its application for Type A Land Use and Water licences.

2010 WINTER DRILL PROGRAM

Drilling commenced with one drill rig (Rig #1) as of January 17, 2010 and on February 21, 2010, a second drill (Rig #2) was added. By April 20, Rig #1 had completed 33 drill holes for a total of 7,970.3 metres and Rig #2 had completed 10 drill holes for a total of 3,472.9 metres, giving overall totals of 43 drill holes and 11,398.2 metres. All core was of large size HQ diameter to provide additional material for future metallurgical testwork.

Rig #1 carried out “in-fill” definition drilling to convert more of the Inferred Resources in the Basal Zone to the Indicated level of confidence, focusing on areas that are only accessible under frozen conditions. This included the west end of Long Lake, where broad intervals of HREE rich mineralization were encountered earlier in the winter program (see news release of [March 3, 2010](#)) and east of North Tardiff Lake where promising mineralization was encountered in 2009 (see Table 1 below for drill hole locations).

All the definition drill holes were designed to reduce the spacing between drill hole intercepts in the Basal Zone to an average of 50 metres, the minimum requirement to classify the resources as Indicated. Assay results from 22 holes, all drilled in the North Tardiff Lake area, are reported in this release, with all but one hole (L10-225), intersecting significant REE mineralization in the Basal Zone (see Table 2 below).

Assays from all the holes drilled on the west of Long Lake remain outstanding but are expected within the next four weeks. An updated drill plan, including all drill holes completed to date, has been posted on Avalon’s Thor Lake project website at:

http://www.avalonraremetals.com/projects/thor_lake/thor_lake_intro/.

Rig #2, which has greater depth capacity, initially tested for the extension of the Basal Zone immediately south of Long Lake, and then conducted condemnation drilling on proposed tailings sites.

The project was inspected by Indian and Northern Affairs Canada Land Use in April with no issues noted. The inspection report is posted on Avalon’s website on the CSR/Sustainability page under Thor Lake Project Land Use Inspection Reports at <http://www.avalonraremetals.com/sustainability/>

SIGNIFICANT ASSAY RESULTS

In addition to the expected significant intercepts Basal Zone, many of the holes drilled in the North Tardiff Lake area intersected interesting TREO values in the Upper Zone in association with zones of semi-massive bastnaesite mineralization. In particular, a high grade near surface zone was defined by a number of drill holes over an area of about 150 meters by 150 metres, to the east of North Tardiff Lake (see drill plan on website).

Some of the highest TREO assays encountered to date at the Nechalacho deposit drilling were received for **drill hole L10-212 where a near surface zone averaged 10.78% TREO with 7% HREO (0.72% HREO absolute) over 11 metres** contained with an interval of **4.98% TREO over 39.5 metres** starting from bedrock surface. Within this intercept an individual **1.6 metre sample returned 19.84% TREO, with 54 kilograms per tonne (kgs/t) Nd₂O₃, 59 kgs/t La₂O₃, 59 kgs/t Ce₂O₃ and 2.2 kgs/t Dy₂O₃**. This zone was also intersected in drill hole **L10-211 with 3.19% TREO over 35.8 metres** including 12 metres of 4.43% TREO and drill hole L10-213 with 2.3% TREO over 48.45 metres.

Note that these are angle holes and the intervals reported are drilled widths, and not necessarily true widths. Drill holes L10-211 and L10-212 were fanned out from site of L07-55, a vertical hole which contained 4.64% over 31.8 metres, and L10-213 was a 50 metre stepout to the east of L07-55. Further drilling is required this new high grade discovery in the North Tardiff Lake area. Commented VP, Exploration, Bill Mercer, "as a near-surface satellite deposit to the main Basal Zone resource, it is potentially very significant to the mine development plan as it offers the possibility of a low cost source of high grade mill feed to supplement the primary feed from the mining of the Basal Zone deposit."

Significant Basal Zone intercepts range between 1.81% TREO with 31% HREO over 5.3 metres in hole L10-215 to 2.14% TREO and 20% HREO over 90.2 metres in hole L10-224. Examples of individual elemental values include for the above mentioned interval in drill hole L10-224, the average values are **3.9 kgs/t Nd₂O₃, 0.09 kg/t Eu₂O₃, 0.10 kg/t Tb₂O₃ and 0.53 kg/t Dy₂O₃**, along with **4kgs/t Nb₂O₅ and 30.7 kgs/t ZrO₂** all over 90.2 metres.

Drill hole L10-212 intersected an interval of 2.8% TREO and 30% HREO over 8 metres within a 20 metre interval of 1.81% TREO and 25% HREO, **The 8 metre interval included 7.5 kgs/t Nb₂O₅, 0.7 kgs/t Ta₂O₅ and 51.5 kgs/t ZrO₂, as well as 4.6 kgs/t Nd₂O₃, 0.1 kgs/t Eu₂O₃, 0.19 kgs/t Tb₂O₃ and 1 kgs/t Dy₂O₃**.

Several holes produced essentially continuous mineralized intercepts through the Upper and Basal zones. For example, drill hole **L10-220, a 65 degree angle hole, intersected a continuous zone of mineralization over 142 meters averaging 1.78% TREO with 13% HREO** starting 25 metres below the collar. The 75 degree angle hole from the same setup, **L10-219, intersected 1.39% TREO with 14% HREO over 128.6 metres**.

Drill holes L10-221 and L10-227 were drilled with Rig #2 on the south side of Long Lake to test for the potential continuation of the Nechalacho deposit to the south and also to test for zones of structural weakness for geotechnical purposes related to mine planning. Long Lake had previously been thought to be a major fault structure that may have displaced the mineralized zone and created a zone of fracturing that could increase mine development costs. No fault structure was intersected in these holes. More importantly, the Basal Zone was intersected south of Long Lake in hole L10-221 at the predicted depth, and although only weakly mineralized in this hole, it proved that the deposit remains open for expansion to the south.

PREFEASIBILITY STUDY PROGRESS

Many important components of the pre-feasibility study are now completed. However, a recent review of the resource estimates by consultant Scott Wilson RPA is indicating potential for significant additions to the indicated resources in the Basal Zone. It was therefore recommended that the estimate of indicated resources be updated immediately as this will result in beneficial changes to the underground mine plan being developed for the prefeasibility study.

Also, laboratory testwork on the hydrometallurgical process flowsheet is still in progress and the current work is important to defining certain aspects of the plant design. Completing this work, combined with the changes to the mine plan from the updated resource estimate will delay the completion of the prefeasibility study until mid to late June, 2010.

ENVIRONMENTAL ASSESSMENT AND PERMITTING PROCESS

The first steps in the permitting process for the Nechalacho REE deposit, have been initiated. On April 23, 2010, Avalon filed a detailed Project Description Report (“PDR”) with the Mackenzie Valley Land and Water Board (“MVLWB”) as the first step in its application for a Type A Land Use Permit and Type A Water License.

“The filing of the PDR with the MVLWB is an important milestone for Avalon,” commented President & CEO Don Bubar. “Along with the completion of the prefeasibility study, these two major milestones demonstrate the maturation of the Nechalacho project and Avalon from a prospector to a mine developer and ultimately to producer.”

The full Executive Summary from the PDR is posted on our website under Environment and Permitting at http://www.avalonraremetals.com/projects/thor_lake/environment/.

On May 4, 2010, the MVLWB notified Avalon that the application had been accepted and that the MVLWB would be proceeding with a pre-screening process, anticipated to take 30 days, at which time the applications will be transferred to the Mackenzie Valley Environmental Impact Review Board (“MVEIRB”).

The Environmental Assessment (“EA”) process is a detailed review of potential environmental and socioeconomic impacts the Thor Lake Project may impose. Avalon will be required to ensure that there are no significant impacts including the implementation of detailed mitigation measures. The EA process can take anywhere from 1.5 to 2.5 years to complete after which the report goes to the Federal Minister of Indian and Northern Affairs (“INAC”) for review and approval. Once approved, the file refers back to the MVLWB to conduct a final review and set the conditions of the land use permit and water license. Project construction can begin after final issuance of the required permits and posting of the required security bond. Concurrently during the permitting process, surface leases will be obtained through INAC.

The MVLWB’s website provides a Public Registry where progress can be tracked on applications at: www.mvlwb.ca/mv/registry.aspx. Detailed information on the MVLWB Permits and Water Licenses can be found on their website at: www.mvlwb.com/html/lupandwl.htm.

COMMUNITY ENGAGEMENT ACTIVITIES

Avalon management, led by David Swisher, VP Operations and Bill Mercer VP Exploration, were involved in a strategic workshop organised by the government of the NWT and INAC in March on the subject of mining development and business opportunities in the NWT. This event was held at the new Chief Drygeese community centre in Dettah, the Yellowknives Dene community near Yellowknife. Dr. Mercer also was the content expert for a translation workshop of key mining and metallurgical terms associated with rare earth projects, organised by the MVLWB, with involvement of translators from First Nations communities, working in the Dogrib, Chipewyan and Slavey languages.

Regular community engagement continues to be a priority to keep the Company’s Aboriginal partners informed about development progress and identify business opportunities for aboriginal-owned service companies. For example, the contract for the airstrip construction, to commence in mid June, has been awarded to Deton Cho Logistics, a business arm of the Yellowknives Dene First Nation.

SAMPLING PROTOCOL

All drill core from the 2010 program was split on site, sampled on two metre intervals and for the first two months, shipped to the ALS Chemex facility in Vancouver, BC, and then in March-April, shipped to the ALS Chemex facility in Yellowknife, for sample preparation. Analytical standards were prepared from crushed rejects of historical Lake Zone samples, then analysed at five separate laboratories to determine reproducible values. These standards were then routinely inserted into the sample batches to monitor core analyses. Barren diabase drill core is inserted as blanks. Selected duplicates are also analyzed at an alternative independent laboratory. The results reported to date were produced by ALS Chemex and achieved acceptable standard values for the main REE of economic interest (Nd, Tb and Dy).

All samples are analysed at ALS Chemex in Vancouver by lithium metaborate/tetraborate fusion and dilute nitric acid digestion, followed by whole rock and 45 element multi-element ICP analysis, being ALS sample method ME-MS81. All samples contained within intercepts above the 1.6% cut-off criteria and any additional samples exceeding analytical limits or of geological significance are rerun using similar ALS method ME-MS81H for higher concentration levels. ME-MS81H is a similar method but with greater dilution in the analytical procedure. Every tenth sample has a duplicate pulp prepared which, with inserted standards and blanks, is sent to Acme Analytical in Vancouver for check analyses. Results are monitored for key elements, and in cases of QAQC issues, re-analysis is requested.

Details of the factors used to calculate rare earth oxides are posted on the Company website along with complete analytical data. Drilling operations were performed by Foraco Drilling Ltd. of Yellowknife, NWT under the supervision of J.C. Pedersen, P.Geo. Bruce Hudgins, P.Geo., maintains the geological database and monitors QA/QC on the laboratory analyses. The Company's Vice-President, Exploration, William Mercer, Ph.D., P.Geo. (Ont), P. Geol (NWT) provided overall direction on the project. The qualified persons for the purposes of this news release are William Mercer and D.S. Bubar, P. Geo., President.

About Avalon Rare Metals Inc. (TSX:AVL, OTCQX:AVARF)

Avalon Rare Metals Inc. is a mineral exploration and development company focused on rare metals deposits in Canada. Its flagship project, the 100%-owned Nechalacho Deposit, Thor Lake, NWT, is emerging as one of the largest undeveloped rare earth elements resources in the world. Its exceptional enrichment in the more valuable 'heavy' rare earth elements, which are key to enabling advances in green energy technology and other growing high-tech applications, is one of the few potential sources of these critical elements outside of China, currently the source of 95% of world supply. Avalon is well funded, has no debt and its work programs are progressing steadily. Social responsibility and environmental stewardship are corporate cornerstones. Avalon's performance on community engagement in the north earned it the 2010 PDAC Environmental and Social Responsibility Award.

Shares Outstanding: 78,990,670. Cash resources: approximately \$14 million.

To find out more about Avalon Rare Metals Inc., please visit our website at www.avalonraremetals.com. For questions and feedback, please e-mail the Company at office@avalonraremetals.com or phone William Mercer, Ph.D., P.Geo., VP Exploration, at 416-364-4938. For general discussion and commentary on the rare metals, please visit www.raremetalblog.com.

This news release contains forward-looking information and is subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information. Forward-looking information is based on the opinions and estimates of management at the date the information is given, and is subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information. The forward-looking information contained herein is given as of the date hereof and the Company assumes no responsibility to update or revise such information to reflect new events or circumstances, except as required by law.

Table 1: Drill Hole Locations

Drill Hole No.	General Location	Easting (NAD83)	Northing (NAD83)	Elevation (meters)	Hole Depth (meters)	Dip (meters)	Azimuth (degrees)
L10-209	South of N Tardiff	417135.12	6886273.03	241.03	199.92	-74.87	90
L10-210	South of N Tardiff	417135.12	6886273.03	241.03	243.46	-65.63	90
L10-211	East of N Tardiff	417233.16	6886414.36	241.64	199.00	-75.50	0
L10-212	East of N Tardiff	417234.51	6886410.80	241.56	221.00	-75.20	270
L10-213	East of N Tardiff	417287.04	6886407.17	241.12	227.40	-88.75	0
L10-214	East of N Tardiff	417245.88	6886363.38	241.37	202.85	-89.66	0
L10-215	East of N Tardiff	417288.57	6886309.56	240.98	227.10	-75.49	270
L10-216	East of N Tardiff	417287.81	6886309.81	240.97	232.71	-76.02	180
L10-217	East of N Tardiff	417289.17	6886305.85	240.94	223.97	-74.98	90
L10-218	East of N Tardiff	417288.71	6886308.04	240.88	203.10	-75.86	0
L10-219	South of N Tardiff	417134.04	6886213.51	241.44	183.20	-75.01	180
L10-220	South of N Tardiff	417133.90	6886213.78	241.49	200.30	-65.99	180
L10-221	Long Lake east	416789.02	6885789.77	260.66	452.00	-88.28	0
L10-222	East of N Tardiff	417524.62	6886306.27	241.97	275.05	-74.71	90
L10-223	East of N Tardiff	417529.99	6886251.58	241.30	212.90	-88.53	0
L10-224	East of N Tardiff	417283.97	6886504.50	241.62	196.60	-80.35	180
L10-225	East of N Tardiff	417289.71	6886502.35	241.52	201.65	-75.43	90
L10-226	East of N Tardiff	417294.07	6886505.08	241.62	221.40	-74.77	0
L10-227	Long Lake east	416788.96	6885790.68	260.69	376.00	-59.05	0
L10-228	East of N Tardiff	417278.76	6886499.33	241.59	206.00	-75.23	270

NOTES for Table 1: Drill Hole Locations

- Note 1: All drill collar locations surveyed by NWT licensed surveyor.
- Note 2: All downhole surveys completed using Deviflex downhole equipment.
- Note 3: Drill holes L10-207, 208 were previously report (NR 10-05) but included here for completeness.

Table 2: Assay results drill holes L10-209 to L10-228

Drill Hole	Zone	From metres	To metres	Width metres	TREO %	HREO/ TREO
L10-209	Upper Zone	30.00	36.00	6.00	1.95	6%
L10-209	Upper Zone	52.00	62.00	10.00	1.94	9%
L10-209	Basal Zone	140.85	169.00	28.15	1.68	24%
L10-209	including	147.00	163.00	16.00	2.01	26%
L10-210	Upper Zone	59.00	70.00	11.00	1.79	9%
L10-210	Upper Zone	138.00	142.50	4.50	1.84	20%
L10-210	Basal Zone	154.00	187.00	33.00	1.70	25%
L10-210	including	164.00	182.00	18.00	2.16	26%
L10-211	Upper Zone	14.20	50.00	35.80	3.19	7%
L10-211	including	22.00	34.00	12.00	4.43	7%
L10-211	Upper Zone	107.95	114.00	6.05	2.07	12%
L10-211	Basal Zone	126.00	133.00	7.00	1.41	23%
L10-212	Upper Zone	14.05	45.00	30.95	4.98	7%
L10-212	including	18.00	29.00	11.00	10.78	7%
L10-212	Basal Zone	131.00	151.00	20.00	1.81	25%
L10-212	including	139.00	147.00	8.00	2.82	30%
L10-213	Upper Zone	20.00	68.45	48.45	2.30	6%
L10-213	Upper Zone	98.00	104.00	6.00	2.19	9%
L10-213	Basal Zone	114.00	149.00	35.00	1.31	20%
L10-213	including	125.50	147.00	21.50	1.43	21%
L10-214	Upper Zone	75.00	87.05	12.05	2.03	8%
L10-214	Basal Zone	141.40	161.00	19.60	1.77	26%
L10-214	including	148.00	161.00	13.00	2.10	27%
L10-215	Upper Zone	36.00	58.00	22.00	1.88	10%
L10-215	Upper Zone	80.40	98.80	18.40	2.35	11%
L10-215	Basal Zone	179.70	185.00	5.30	1.81	31%
L10-216	Upper Zone	52.00	62.25	10.25	1.72	13%
L10-216	Upper Zone	84.00	99.10	15.10	1.70	8%
L10-216	Basal Zone	152.00	158.00	6.00	1.63	39%
L10-217	Upper Zone	19.00	27.00	8.00	3.08	6%
L10-217	Basal Zone	174.00	193.75	19.75	1.41	25%
L10-218	Upper Zone	36.00	52.00	16.00	2.17	6%
L10-218	Upper Zone	91.00	103.15	12.15	1.82	10%
L10-218	Basal Zone	170.40	183.10	12.70	1.27	42%

(table continued next page)

Drill Hole	Zone		From metres	To metres	Width metres	TREO %	HREO/TREO
L10-219	Whole zone		18.00	146.60	128.60	1.41	14%
L10-219	Upper Zone		31.00	49.00	18.00	2.18	16%
L10-219	Upper Zone		78.45	85.85	7.40	2.48	9%
L10-219	Basal Zone		124.10	146.60	22.50	2.03	19%
L10-220	Whole zone		25.00	167.00	142.00	1.77	13%
L10-220	Basal Zone		143.30	167.00	23.70	1.90	26%
L10-221	Basal Zone		181.00	194.00	13.00	0.93	9%
L10-222	Upper Zone		7.00	52.00	45.00	1.71	6%
L10-222	Basal Zone		113.00	150.00	37.00	1.39	11%
L10-223	Upper Zone		22.00	46.90	24.90	1.93	7%
L10-223	Basal Zone		97.70	173.20	75.50	1.55	13%
L10-223		including	126.00	142.00	16.00	2.32	14%
L10-224	Basal Zone		64.50	154.70	90.20	2.14	20%
L10-224		including	76.55	154.70	78.15	2.26	21%
L10-225	Upper Zone		46.00	98.95	52.95	1.70	10%
L10-225	Upper Zone		84.40	98.95	14.55	2.69	12%
L10-226	Basal Zone		82.90	129.90	47.00	2.03	16%
L10-227	Basal Zone		183.00	191.00	8.00	1.80	15%
L10-227	Basal Zone		215.00	233.00	18.00	1.63	29%
L10-228	Upper Zone		80.30	123.00	42.70	2.43	17%
L10-228	Basal Zone		137.80	152.25	14.45	2.32	33%

NOTES for Table 2: Assay results drill holes L10-209 to L10-228

1. Widths represent drilled widths. Mineralization dips are close to horizontal, so drilled widths for vertical holes are generally close to true widths and for angle holes about 3% more than true width, with a range from 0% to 10% depending on hole deviation.
2. HREO represents total heavy rare earth oxides as proportion of contained TREO, comprising yttrium plus europium to lutetium. Conversion factors from elements to oxides as per NI 43-101 report.
3. TREO represents total rare earth oxides, which comprises HREO plus lanthanum to samarium as oxides. Conversion factors from elements to oxides as per NI 43-101 report.
4. In general a cutoff grade is applied for complete zone intercepts at 1.6% TREO or higher for minimum width of 5 metres. In some cases (211, 213, 217, 218, 221, 222) lower cutoffs were applied for geological completeness.

- End -