



TSX-V: RES
December 16, 2009
Ref: 26-2009

Rare Element Reports Initial 2009 Rare-Earths Drilling Results

Vancouver B.C. - Rare Element Resources Ltd. (TSX-V:RES) is pleased to announce rare-earth-element (REE) assay results from the first five holes of the 2009 core drilling program completed on the Company's 100% owned Bear Lodge property located in northeastern Wyoming, USA. All five holes were drilled into the Bull Hill Southwest target, where an NI 43-101-compliant resource was estimated earlier in the year. A total of nineteen drill holes were completed during the fall program. Two shallow holes were started, but not completed, due to inclement weather. The two holes are slated for re-entry and completion during the planned 2010 drilling program. The five drill holes reported in this news release tested for an expansion of the resource along strike to the northwest and southeast, and up-dip, and will provide the Company with additional data for updating its NI 43-101 independent resource report, which is expected to be completed in the spring of 2010.

Highlights of the drill program include relatively thick intercepts in all five holes and higher grades in the following three drill holes:

RES 09-3 – 131 ft @ 6.78% REO,

RES 09-3A – 36 ft @ 9.24% REO plus 75 ft @ 6.93% REO,

RES 09-6 – 28.5 ft @ 11.83% REO.

Drilling Results

The host for all rare-earth mineralization in the Bear Lodge Mountains is a large alkaline-igneous complex that forms the core of the mountain range. Rare-earth mineralization encountered in the five drill holes is primarily contained within the near-surface oxidized equivalents (FMR) of carbonatite dikes that intrude a body of heterolithic intrusive breccia of the Bull Hill diatreme along the southwest flank of the hill. FMR is named for the combination of FeOx (iron oxides), MnOx (manganese oxides), and Rare-earth minerals that form the bulk of the near-surface weathered dike rock.

REE assay values are reported by convention as the combined oxide equivalents (REO) of the fifteen elements in the lanthanide series + yttrium. The oxide equivalents are approximately 15.6% higher than the combined metal assay values. The Bear Lodge project contains predominantly the "light" REE (lanthanum, cerium, praseodymium, neodymium, and samarium), and the first four of these in particular. The five holes were all drilled along a bearing of N 45° E from two different sites on the Bull Hill Southwest target. One site with two holes (RES 09-1 and 09-2) at different angles from the horizontal was placed at the southeastern limit of the 2009 planned drilling area. Another

site with three holes (RES 09-3, 09-3A, and 09-6) at different inclination angles is located on the northwestern limit of the 2009 drilling area. Because of the visual high-grade estimates and only moderate core recovery in the upper portion of drill-hole RES 09-3, drill hole RES 09-3A was drilled more carefully as an offset hole to ensure the maximum recovery of sample material from this zone. Assays from the REE-mineralized sections of the holes are summarized in the table below.

Drill-hole RES 09-1

(bearing N 45° E, inclination -70°, total depth 821 feet, Bull Hill Southwest target)

<u>Interval</u> (feet)	<u>Intercept</u> (feet)	<u>Estimated True Thickness</u> (feet)	<u>Mineralized Lithology</u>	<u>Total % REO</u>
50 - 120	70.0	47	FMR dike	3.90% REO
402.5-437.5	35.0	22	FMR dike	3.84% REO

Drill-hole RES 09-2

(bearing N 45° E, inclination -45°, total depth 685 ft, Bull Hill Southwest target)

20 - 60	40	35	FMR dike	3.65% REO
235 - 244	9	8	FMR dike	3.84% REO

Drill-hole RES 09-3

(bearing N 45° E, inclination -70°, total depth 912 ft, Bull Hill Southwest target)

9 - 140	131	82	FMR dike	6.78% REO
380 - 387	7	5	FMR dike	3.46% REO
650 - 675	25	20	Carbonatite dike	2.13% REO

Drill-hole RES 09-3A

(bearing N 45° E, inclination -75°, total depth 158 ft, Bull Hill Southwest target)

11 - 47	36	26	FMR dike	9.24% REO
76 - 151	75	55	FMR dike	6.93% REO

Drill-hole RES 09-6

(bearing N 45° E, inclination -45°, total depth 1003 ft, Bull Hill Southwest target)

10 - 38.5	28.5	22	FMR dike	11.83% REO
248 - 309	61	50	FMR dike	2.89% REO

Assaying of the rare-earth elements was conducted by Activation Laboratories (ActLabs) in their Ancaster, Ontario assay facility. The samples were prepared and subjected to lithium metaborate fusion, followed by ICP analysis and a mass spectroscopy finish. ActLabs is recognized as an internationally respected analytical laboratory with extensive experience in rare-earth-element analysis.

“We are pleased with the results of our 2009 rare-earth drilling program. With the favorable results at the limits of our drilling area, we recognize that the Bull Hill Southwest deposit may be larger than we anticipated and continues to have potential for expansion. At the same time we will continue to advance the metallurgical testing program in developing a commercial process to concentrate the rare-earth-bearing minerals,” states President Don Ranta.

Resource Estimate & Metallurgical Testing

An NI 43-101-compliant inferred mineral resource was estimated for the three oxidation zones during the spring of 2009. At a cutoff grade of 1.5% REO, the total inferred resource of the Bull Hill Southwest deposit is 9.8 million tons averaging 4.1% rare-earth oxide (REO) (see news release dated March 23, 2009). The near-surface part of the deposit is the oxide zone that has 4.5 million tons at 4.3% REO and comprises nearly half of the total resource. The goal of the 2009 drilling program was to expand this resource, with a focus on the oxide zone. Work is continuing to split, prepare, and assay core from the remaining drill holes from the 2009 program, and the company expects to receive all assays from the 2009 drill core by the end of January 2010.

The 2009 drilling focused on the oxide portion of the rare-earth mineralization, due to favorable metallurgical testing results, received earlier in the year, on oxide material (see news releases dated July 15 and September 29, 2009). The FMR mineralization is unusual in its physical properties and these properties allow a unique processing method. A combination of the loose and friable character of the FMR material and the fine-grained nature of the REE minerals is amenable to a metallurgical pre-concentration method of crushing, scrubbing, and screening to obtain 90% recovery of the REE with a 13% REO grade in the minus 25 micron (-500 mesh) fraction. This demonstrates a three-fold upgrading from the original 4.3% REO grade to 13.0% in a pre-concentration process. Further testing is expected to provide methods to upgrade the concentrate to more than 40% REO before separation of the individual rare-earth elements.

The Company will select samples from the 2009 core drilling program for further metallurgical study and testing. Drilling of the FMR mineralization was conducted from six different sections through the length of the Bull Hill Southwest deposits, and each section will have mineralized samples composited and metallurgically tested to determine variability through the deposit. Beneficiation tests will be conducted primarily on the oxidized FMR mineralization, and additional tests will also be conducted on transitional and unoxidized rare-earth mineralized carbonatite samples.

Rare Element Resources Ltd (TSX-V:RES) is a publicly traded mineral resource company focused on exploration and development of rare-earth elements and gold on the Bear Lodge property. Gold exploration in the Bear Lodge Mountains has been conducted for several decades with several companies significantly contributing to the database and understanding. Newmont’s recent exploration efforts are the most comprehensive and extensive of these programs. Newmont has the right to earn a 65% working interest in Rare Element Resources’ property, excluding any rights to the rare-earth elements but including rights to gold and other metals, by performing US\$5 million in property work expenditures over a five-year period. Newmont also has the right to earn an additional 15% working interest by completing a positive project feasibility study.

ON BEHALF OF THE BOARD
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Donald E. Ranta, PhD, PGeo, serves the Board of Directors of the Company as an internal, technically Qualified Person. Technical information in this news release has been reviewed by Dr. Ranta and has been prepared in accordance with Canadian regulatory requirements that are set out in National Instrument 43-101. This news release was prepared by Company management, which takes full responsibility for content. Neither 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.