

## **PRESS RELEASE**

TSX Venture: MAT

### **Matamec announces the discovery of new rare earth-yttrium showings in the Kipawa alkaline complex**

**Montreal, December 24, 2008 - Matamec Explorations Inc. ("Matamec")** is pleased to announce the discovery of new rare earth ("REE") showings on its 100% Zeus property in Temiscamingue. The property covers 14 371 hectares and is located in the Kipawa alkaline complex.

Mining Engineering magazine mentions in its "Industrial Minerals Review" June 2008 edition that consumption of REE, especially in automotive catalysts, fluid cracking catalysts, permanent magnets, trichromatic fluorescent lightning and magnetostrictive alloys, is expected to continue to have strong growth. Increased consumption of REE bearing nickel-metal hybride (NiMH) rechargeable batteries has continued as gasoline prices climbed. Novel applications incorporating REE, such as magnetic refrigeration, fuel cells and specialty high-strength low-weight alloys are expected to continue to be discovered and developed.

Since June 2007, Matamec has conducted six short exploration campaigns on this property, four of them from May to November 2008. These campaigns had two important objectives : 1) complete preparatory work on the Sheffield zone in expectation of a 43-101 REE-yttrium-zirconium resource calculation, and 2) bring property-wide exploration to the fore and seek out REE-yttrium, uranium and gold mineralization similar to those found by Globex Mining (please see their press release and MD&A dated June 19 and November 5, 2008) and Aurizon Mines (as outlined in their press releases and MD&A dated June 12-13 and November 6 2008).

On the Zeus property, known REE, yttrium and zirconium mineralization is hosted by eudialyte, mosandrite and britholithe encased in the black and white syenites of the Kipawa complex. Mineralization concentrates at the 1.3 km long Sheffield zone, which has extensions and segments that have remained slightly drilled or completely un-drilled. 1991 historical resources for the zone outline 1.26 Mt at 0.15% yttrium, 0.96% zirconium for the West zone, and 1.01 Mt at 0.14% yttrium, 1.17% zirconium for the East zone (a qualified person has not done sufficient work to classify the historical estimate as current mineral resources, the issuer is not treating the historical estimate as current mineral resources and the historical estimate should not be relied upon). It should be noted that REE content was not systematically measured in drill holes at the time since the main element considered was yttrium. REE applications have drastically increased since then as well, particularly in relation to heavy REE (Tb to Lu).

In June 2008, Matamec acquired several confidential documents, including a heliborne Radiometric-Mag-VLF geophysical survey that covered the entire property. This survey influenced the targeted exploration campaigns for 2008, which led to the discovery of four REE-yttrium showings on the Zeus property, namely the TH, Coulevre, Falaises and Surprise showings. The best values were obtained from grab samples coming from the Coulevre and TH

showings, respectively with greater than 11.34% and 7.2% total REE, combined with 0.93% and 2.16% yttrium (see table below for all values presently available for these showings).

Showing	Sample ID	La	Ce	Pr	Nd	Sm	Eu	Gd	Light REEs (%)	Tb	Dy	Ho	Er	Tm	Yb	Lu	Heavy REEs (%)	TR totale (%)	Y	Zr	Th
TH	DO81700	10100	24500	3030	12900	3500	437	3790	5.83	738	4880	1045	3300	478	2930	330	1.37	7.20	21600	1820	1915
TH	DO81889	5560	11950	1270	4930	856	90	754	2.54	107	549	112	309	44	250	30	0.14	2.68	2650	10500	1725
TH	DO81682	1665	4270	576	2640	905	121	987	1.12	212	1510	277	792	107	544	60	0.35	1.47	6120	29700	1940
TH	DO81676	2040	4520	508	1950	436	46	384	0.99	70	436	86	258	36	203	25	0.11	1.10	1510	29600	4550
TH	DO81890	1420	2850	312	1225	280	33	260	0.64	44	242	47	123	17	97	11	0.06	0.70	1150	5970	493
TH	DO81699	1005	2430	290	1235	353	48	382	0.57	76	457	92	233	31	151	16	0.11	0.68	2020	5440	358
TH	DO81683	963	1825	208	803	185	21	179	0.42	33	210	42	118	15	77	9	0.05	0.47	961	7810	652
TH	DO81688	596	1340	156	639	179	22	183	0.31	39	263	54	165	23	124	14	0.07	0.38	1125	21500	424
TH	DO81692	376	873	89	315	63	6	61	0.18	10	57	12	31	4	23	3	0.01	0.19	235	4070	114
TH	DO81685	360	682	71	229	30	2	25	0.14	3	16	3	11	2	15	3	0.01	0.15	63	1920	47
TH	DO81686	70	170	21	88	25	4	28	0.04	7	47	10	31	5	26	3	0.01	0.05	292	552	27
Surprise	756424	987	2520	373	1630	747	79	1165	0.75	360	2640	776	2760	553	3220	567	1.09	1.84	21600	1100	2150
Surprise	756412	977	2250	256	854	192	31	222	0.48	61	525	145	568	109	649	80	0.21	0.69	4030	11900	2050
Couleuvre	756426	26900	>50000	>5000	19350	3140	321	3160	>10.79	421	2220	439	1355	170	843	98	0.55	>11.34	9350	345	3460
Couleuvre	756413	13700	29700	3360	11300	1945	215	1860	6.21	283	1400	304	917	124	629	73	0.37	6.58	6550	9850	2230
Couleuvre	756410	5490	9750	1070	3730	658	69	617	2.14	95	517	106	317	42	212	25	0.13	2.27	2670	1660	323
Couleuvre	756433	1840	3680	388	1185	180	16	151	0.73	19	87	20	56	11	69	14	0.03	0.76	415	11100	387
Couleuvre	756434	1055	2050	266	787	113	10	96	0.44	13	57	12	31	4	21	3	0.01	0.45	236	1130	220
Couleuvre	756427	503	1130	136	478	89	9	82	0.24	13	75	15	44	6	33	5	0.02	0.26	378	1640	118
Falaises	756444	2170	3930	428	1535	242	23	216	0.85	28	123	25	65	10	50	7	0.03	0.89	551	4190	691
Falaises	756404	1790	3550	365	1140	166	16	167	0.72	22	134	30	93	13	66	7	0.04	0.76	859	3580	280
Falaises	756414	1690	3330	327	987	122	12	112	0.66	12	53	11	36	5	26	3	0.01	0.67	369	1240	143
Falaises	756415	1090	2340	258	869	146	16	136	0.49	22	135	28	87	12	58	6	0.03	0.52	686	1430	152
Falaises	756401	747	1560	156	502	83	9	80	0.31	11	57	11	31	4	26	4	0.01	0.33	308	2940	454
Falaises	756407	820	1245	133	433	81	10	81	0.28	13	73	15	43	6	30	3	0.02	0.30	489	854	96

The TH showing is located in the north section of the property, in the same area as the Eagle showing of Aurizon Mines. The TH showing lies at the centre of a 200m east-west by 700m north-south soil anomaly which is presently open both to the north and to the south. The Surprise showing is located in the east section of the property and is hosted in biotite and amphibole-rich rocks with large quantities of associated garnet. Of lesser importance but potentially leading to mineralization of greater volume, the Couleuvre and Falaises showings are located in the heart of the property and are associated respectively with an intermediate sill and with marbles. Matamec will also start a mineralogical study aimed at identifying the ore-minerals present in each of these new showings.

In other areas, a property-wide 43-101 technical report is nearing completion. In addition, a 43-101 compliant resource calculation began on November 11<sup>th</sup> 2008 with the channel sampling of four trenches (208 m gathered) in the Sheffield zone under the supervision of SGS-Geostat. Both of these activities are ongoing and will be completed over the course of 2009.

The geological data in this press release was prepared by Aline Leclerc, geologist and Matamec's Vice-President Exploration, a Qualified Person as defined by NI 43-101.

## About Matamec

**Matamec** is exploring for significant gold deposits in the Timmins mining camp in Ontario focusing on its two main targets, namely the Matheson JV with Goldcorp and the Montclerg properties. In Québec, the Company is exploring for precious and base metals, REE and uranium deposits on Lespérance, Sakami, Valmont, Vulcain and Zeus.

*The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this press release.*

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