



PRESS RELEASE

TSX Venture: MAT

Matamec Announces an Increase in All NI 43-101 Resource Categories of 300% in the Kipawa Deposit

Montreal, June 3, 2010 - Matamec Explorations Inc. ("Matamec") (TSX-V: MAT) is proud to announce that it has received from the independent firm SGS Canada Inc. – geological department of Geostat ("SGS Geostat") the main assay tables from the new NI 43-101 resource calculation on the Kipawa Deposit, on the Zeus property.

More specifically described later in this release, SGS Geostat calculated that the Kipawa Deposit contains resources of rare earths-yttrium ("TREO") and of zirconium oxides ("ZrO₂"). The resource has been considered under two scenarios: 1) a resource of rare earths-yttrium with zirconium as a by-product, or 2) a resource of zirconium with rare earths-yttrium as a by-product.

Scenario 1: TREO Resources with ZrO₂ by-product					
Cut-off grade %	Classification	Tonnes	TREO* %	ZrO ₂ %	(H+Y)**/TREO* %
TREO > 0.50	Indicated	2,510,000	0.63	0.88	32
TREO > 0.50	Inferred	4,730,000	0.66	0.97	33
Y₂O₃ > 0.10	Indicated	3,350,000	0.58	0.89	33
Y ₂ O ₃ > 0.10	Inferred	6,480,000	0.60	0.99	34

Scenario 2 : ZrO₂ resources with TREO by-product						
Cut-off grade %	Classification	Geologic zones	Tonnes	ZrO ₂ %	TREO* %	(H+Y)**/TREO* %
ZrO₂ > 0,50	Indicated	TREO enriched	6,560,000	0.90	0.46	32
ZrO₂ > 0,50	Indicated	ZrO₂ zones	14,460,000	1.02	0.12	28
ZrO₂ > 0,50	Indicated	Total	21,020,000	0.99	0.23	32
ZrO ₂ > 0,50	Inferred	TREO enriched	10,310,000	0.99	0.51	34
ZrO ₂ > 0,50	Inferred	ZrO ₂ zones	7,730,000	1.03	0.12	36
ZrO ₂ > 0,50	Inferred	Total	18,040,000	1.01	0.34	34

*: TREO contains all rare earth oxides and Y₂O₃

** : H+Y: Heavy rare earth oxides (HREO) and Y₂O₃

NOTE: Scenario 1 contains material from Scenario 2 and vice versa. We cannot add the tonnage of the two scenarios.

PRESS RELEASE HIGHLIGHTS

- SGS Geostat modelled the entire mineralized syenite body within the Kipawa complex, and in which it has defined two types of mineralized zones;
- SGS Geostat estimates that the Kipawa Deposit is continuous over a distance of 1.45 kilometres, is 200 metres wide and is 50 metres deep;
- Two types of mineralization are observed in the Kipawa Deposit:
 - 1) The first type of mineralization is composed of 3 zones enriched in rare earths and yttrium ("TREO") named "Eudialyte zone", "Mosandrite zone" and "Britholite zone". These areas contain zirconium (ZrO₂);
 - 2) The second type of mineralization is composed of zirconium with lower levels of rare earths and yttrium. These areas are interspersed with areas enriched in rare earths and yttrium.
- The Kipawa deposit is located in an area that is easily accessible by road. It is near infrastructures and a well-trained workforce;
- The Kipawa deposit is presently considered open both laterally and at depth;
- The drilling holes completed by Matamec strongly suggest that there is a very good spatial continuity in the Kipawa deposit, both in terms of different lithologies and enriched mineralization in rare earths-yttrium;
- In eight of nine sections examined within the Central Zone, the down-dip drill holes are better mineralized than those up-dip, strongly suggesting potential to encounter still better mineralization down dip from the currently defined deposit. Only one section hosts the opposite tendency.

The Zeus property is located near infrastructure and easily accessible by a network of logging roads. It is located 160 kilometres south of Rouyn-Noranda and 65 kilometres east of the town of Temiscaming. The property is 100% owned by Matamec and it has 260 designated claims covering over 15,300 hectares in the Kipawa alkaline complex. It includes the Kipawa deposit (also known as the Sheffield area).

Before the new NI 43-101 resource calculation from SGS Geostat, the Kipawa deposit presented historical resources (non NI 43-101) yttrium and zirconium in the *West Zone* (1.26 Mt @ Y₂O₃ 0.15% and 0.96% ZrO₂), in the *Central Zone* (no resource calculated) and the *East Zone* (1.009 Mt @ 0.14% and 1.17% Y₂O₃ ZrO₂). Thanks to its favourable location along a hill, an open pit was already planned for this deposit in the historic resource calculation of 1990.

MODELLING OF NI 43-101 RESOURCES BY SGS GEOSTAT

For the NI 43-101 resource calculation, SGS Geostat used the method of inverse distance squared. The resource blocks have dimensions of 10m x 10m x 5m. The drill grid considered for indicated resources is 50m. Extrapolated resources over 30m and calculated rare earth values on historic drill holes are considered inferred. The database used consists of 12 discontinuous trenches (in 55 continuous parts) and 65 assays (34 drilled in 1988-1990 by Unocal Canada Ltd., and 31 drilled in 2009 by Matamec) totalling 4,416.19 meters drilled. A total of 3133 analyzed intervals were used for the calculation.

SGS Geostat modelled the entire mineralized syenite body within the Kipawa deposit of about 1.45 m x 200m x 50m, in which it has defined two types of mineralized zones.

SGS Geostat calculated that the Kipawa deposit contains resources of rare earths-yttrium oxides ("TREO") and zirconium oxide (ZrO_2). The resource has been calculated under two scenarios: either a resource of rare earth yttrium with a zirconium by-product, a resource of zirconium with a rare earths-yttrium by-product.

MINERALIZED ZONES DEFINITION FOR RESOURCE MODELLING

Scenario 1

The first scenario consists of three TREO-enriched areas named "Eudialyte zone", "Mosandrite zone" and "Britholite zone" which always contain zirconium. These mineralized zones are modelled using geological interpretation, mineralogy and rare earth - yttrium values.

- At a cutoff grade of 0.50% TREO SGS Geostat calculated for these three areas indicated resources of 2.51 million t, grading 0.63% TREO with 0.88% ZrO_2 oxides et inferred resources of 4.73 million t grading 0.66% TREO with 0.97% ZrO_2 . In addition, the ratio of HREO $Y_2O_3 + /$ TREO is 32% in indicated resources and 33% in the inferred resources (see Table 1).
- The first scenario also consists of three TREO areas with a cutoff grade superior to 0.10% Y_2O_3 , SGS Geostat calculated for these three areas indicated resource of 3.35 million t at a grade of 0.58% TREO with 0.89% ZrO_2 and inferred resource of 6.48 million t at a grade of 0.60% TREO with 0.99% ZrO_2 . In addition, the ratio of HREO $Y_2O_3 + /$ TREO is 33% in indicated resources and 34% in the inferred resources (see Table 2).

Scenario 2

The second scenario is composed of ZrO_2 with the TREO as by-product. Both TREO-rich zones and ZrO_2 zones are considered. These areas are interspersed with areas enriched in TREO. These zones at a cutoff grade of 0.50% ZrO_2 are:

- For the TREO enriched zones, SGS Geostat calculated indicated resources of 6.56 million t with a grade of 0.90% ZrO_2 and 0.46% TREO and inferred resources of 10.31 million t with a grade of 0.99% ZrO_2 – 0.51% TREO. In addition, the ratio of HREO $Y_2O_3 + /$ TREO is 32% in indicated resources and 34% in the inferred resources;

- For the ZrO₂ zones, SGS Geostat calculated indicated resources of 14.46 million t with a grade of 1.02% ZrO₂ and 0.12% TREO and inferred resources of 7.73 million t with a grade of 1.03% ZrO₂ – 0.12% TREO. In addition, the ratio of HREO Y₂O₃ + / TREO is 28% in indicated resources and 36% in the inferred resources;
- Both types of mineralization combined give a total tonnage of resources in ZrO₂-TREO in the indicated category of 21.02 million t with a grade of 0.99% ZrO₂ with 0.23% TREO and in the inferred category of 18.04 million t with a grade of 1.01% ZrO₂ with 0.34% TREO. In addition, the ratio of HREO Y₂O₃ + / TREO is 32% in indicated resources and 34% in the inferred resources (see table 3);

RESOURCES IN METRIC TONES

Scenario 1

For the first scenario, at a cutoff grade of 0.50% TREO we find 15,800 t of TREO including 1,600 t of HREO, 3,500 t of Y₂O₃ and 22,100 t of ZrO₂ in the indicated resources, as well as 31,200 t of TREO including 3,400 t of HREO, 7,100 t of Y₂O₃ and 45,900 t of ZrO₂ (see table 1).

Scenario 2

For the first scenario, which uses a cutoff grade of 0.10% of Y₂O₃, there are 19,400 t of TREO including 2,000 t of HREO, 4,400 t of Y₂O₃ and 29,800 t of ZrO₂ in the indicated resources, as well as 38,900 t of TREO including 4,200 t of HREO, 9,100 t of Y₂O₃ and 64,200 t of ZrO₂ in inferred resources (see Table 2).

In the TREO enriched zones, 59,000 t of ZrO₂ and 30,200 t of TREO including 3,200 t of HREO and 6,600 of Y₂O₃ in indicated resources, as well as 102,100 t of ZrO₂ and 52,600 t of TREO including 5,700 t of HREO and 12,400 t of Y₂O₃ in inferred resources;

In the ZrO₂ zones, 147,500 t of ZrO₂ and 17,400 t of TREO including 1,900 t of HREO and 2,900 of Y₂O₃ in indicated resources, as well as 79,600 t of ZrO₂ and 9,300 t of TREO including 1,000 t of HREO and 2,300 t of Y₂O₃ in inferred resources;

In both zones combined, 208,100 t of ZrO₂ and 48,300 t of TREO including 5,000 t of HREO and 10,500 t of Y₂O₃ in indicated resources, as well as 182,200 t of ZrO₂ and 61,300 t of TREO including 6,700 t of HREO and 14,400 t of Y₂O₃ in inferred resources (see table 3);

The breakdown of resources is reflected in the following three tables. The resources are presented in two categories: indicated and inferred at cutoff grade. The table also include in percentage the grade in light rare earths oxide (LREO), medium rare earth oxides (MREO), heavy rare earth oxide (HREO), of the total of rare earths oxide with yttrium (TREO), of each individual rare earth, yttrium, zirconium, as well as the corresponding tonnages.

Table 1: SCENARIO 1 - TREO ENRICHED ZONES	
Indicated and Inferred NI 43-101 Resources at a cut-off of TREO >0.50%	
Zone	TREO ENRICHED ZONES

Tonnage		2,510,000		4,730,000	
Classification		Indicated %	Indicated t	Inferred %	Inferred t
La ₂ O ₃	Lanthanum	0.091	2,300	0.092	4,400
Ce ₂ O ₃	Cerium	0.19	4,800	0.19	9,000
Pr ₂ O ₃	Praseodymium	0.023	600	0.023	1,100
Nd ₂ O ₃	Neodymium	0.09	2,300	0.09	4,300
LREO*	Light rare earth oxides	0.39	9,800	0.39	18,400
Sm ₂ O ₃	Samarium	0.019	500	0.019	900
Eu ₂ O ₃	Europium	0.002	100	0.003	100
Gd ₂ O ₃	Gadolinium	0.019	500	0.020	900
MREO*	Medium rare earth oxides	0.040	1,000	0.042	2,000
Tb ₂ O ₃	Terbium	0.004	100	0.004	200
Dy ₂ O ₃	Dysprosium	0.023	600	0.025	1,200
Ho ₂ O ₃	Holmium	0.005	100	0.005	200
Er ₂ O ₃	Erbium	0.015	400	0.017	800
Tm ₂ O ₃	Thulium	0.002	100	0.003	100
Yb ₂ O ₃	Ytterbium	0.013	300	0.015	700
Lu ₂ O ₃	Lutetium	0.002	100	0.002	100
HREO*	Heavy rare earth oxides	0.063	1,600	0.071	3,400
Y ₂ O ₃	Yttrium	0.14	3,500	0.15	7,100
HREO + Y₂O₃		0.20	5,100	0.22	10,500
TREO*	Total rare earth oxides	0.63	15,800	0.66	31,200
Zr₂O₂	Zirconium	0.88	22,100	0.97	45,900

* LREO: Light (or Ceric) Rare Earth Oxides = La₂O₃ to Nd₂O₃
MREO : Medium Rare Earth Oxides = Sm₂O₃ to Gd₂O₃
HREO: Heavy (or Yttric) Rare Earth Oxides = Tb₂O₃ to Lu₂O₃
TREO: Total Rare Earth Oxides = LREO + MREO + HREO + Y₂O₃

N.B.: Subdivision used by Roskill Information Services Ltd. and Industrial Minerals Company of Australia Pty Ltd.

Table 2: SCENARIO 1 - TREO ENRICHED ZONES
Indicated and Inferred NI 43-101 Resources at a cut-off of Y2O3 >0.10%

Zone	TREO ENRICHED ZONE
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Tonnage	3,350,000		6,480,000	
Classification	Indicated %	Indicated t	Inferred %	Inferred t
La ₂ O ₃	0.082	2,700	0.084	5,400
Ce ₂ O ₃	0.17	5,700	0.17	11,000
Pr ₂ O ₃	0.021	700	0.021	1,400
Nd ₂ O ₃	0.08	2,700	0.08	5,200
LREO*	0.35	11,700	0.36	23,300
Sm ₂ O ₃	0.018	600	0.018	1,200
Eu ₂ O ₃	0.002	100	0.002	100
Gd ₂ O ₃	0.018	600	0.018	1,200
MREO*	0.038	1,300	0.039	2,500
Tb ₂ O ₃	0.003	100	0.003	200
Dy ₂ O ₃	0.021	700	0.005	1,500
Ho ₂ O ₃	0.005	200	0.016	300
Er ₂ O ₃	0.015	500	0.002	1,000
Tm ₂ O ₃	0.002	100	0.014	100
Yb ₂ O ₃	0.013	400	0.002	900
Lu ₂ O ₃	0.002	100	0.002	100
HREO*	0.061	2,000	0.065	4,200
Y ₂ O ₃	0.13	4,400	0.14	9,100
HREO + Y₂O₃	0.19	6,400	0.21	13,300
TREO*	0.58	19,400	0.60	38,900
Zr₂O₂	0.89	29,800	0.99	64,200
<p>* LREO: Light (or Ceric) Rare Earth Oxides = La₂O₃ to Nd₂O₃ MREO : Medium Rare Earth Oxides = Sm₂O₃ to Gd₂O₃ HREO: Heavy (or Yttric) Rare Earth Oxides = Tb₂O₃ to Lu₂O₃ TREO: Total Rare Earth Oxides = LREO + MREO + HREO + Y₂O₃</p>				
<p>N.B.: Subdivision used by Roskill Information Services Ltd. and Industrial Minerals Company of Australia Pty Ltd.</p>				

Table 3: SCENARIO 2 - ZrO₂ ZONES						
Indicated and Inferred NI 43-101 Resources at a cut-off of ZrO₂ >0.50%						
Zone	TREO ENRICHED ZONE		ZIRCONIUM ZONE		ALL ZONES	
Tonnage	6,560,000	10,310,000	14,460,000	7,730,000	21,020,000	18,040,000

Classification	Indicated		Inferred		Indicated		Inferred		Indicated		Inferred	
	%	t	%	t	%	t	%	t	%	t	%	t
La ₂ O ₃	0.065	4,300	0.071	7,300	0.018	2,600	0.018	1,400	0.032	6,700	0.048	8,700
Ce ₂ O ₃	0.13	8,500	0.15	15,500	0.04	5,800	0.04	3,100	0.07	14,700	0.10	18,000
Pr ₂ O ₃	0.017	1,100	0.018	1,900	0.004	600	0.005	400	0.008	1,700	0.012	2,200
Nd ₂ O ₃	0.06	3,900	0.07	7,200	0.02	2,900	0.02	1,500	0.03	6,300	0.05	9,000
LREO	0.28	18,400	0.30	30,900	0.07	10,100	0.08	6,200	0.14	29,400	0.21	37,900
Sm ₂ O ₃	0.014	900	0.015	1,500	0.004	600	0.004	300	0.007	1,500	0.010	1,800
Eu ₂ O ₃	0.002	100	0.002	200	0.000	-	0.000	-	0.001	210	0.001	200
Gd ₂ O ₃	0.014	900	0.015	1,500	0.003	400	0.004	300	0.007	1,500	0.010	1,800
MREO*	0.030	2,000	0.033	3,400	0.007	1,000	0.008	600	0.014	2,900	0.022	4,000
Tb ₂ O ₃	0.003	200	0.003	300	0.001	100	0.001	100	0.001	200	0.002	400
Dy ₂ O ₃	0.017	1,100	0.019	2,000	0.004	600	0.004	300	0.008	1,700	0.013	2,300
Ho ₂ O ₃	0.004	300	0.004	400	0.001	100	0.001	100	0.002	400	0.003	500
Er ₂ O ₃	0.012	800	0.013	1,300	0.003	400	0.003	200	0.006	1,300	0.009	1,600
Tm ₂ O ₃	0.002	100	0.002	200	0.000	-	0.001	100	0.001	200	0.001	200
Yb ₂ O ₃	0.011	700	0.012	1,200	0.004	600	0.004	300	0.006	1,300	0.009	1,600
Lu ₂ O ₃	0.0001	100	0.002	200	0.001	100	0.001	100	0.001	200	0.001	200
HREO*	0.049	3,200	0.055	5,700	0.013	1,900	0.013	1,000	0.024	5,000	0.037	6,700
Y ₂ O ₃	0.10	6,600	0.12	12,400	0.02	2,900	0.03	2,300	0.05	10,500	0.08	14,400
HREO + Y₂O₃	0.149	9,800	0.175	18,100	0.033	4,800	0.043	3,300	0.074	15,500	0.117	21,100
TREO*	0.46	30,200	0.51	52,600	0.12	17,400	0.12	9,300	0.23	48,300	0.34	61,300
Zr₂O₂	0.90	59,000	0.99	102,100	1.02	147,500	1.03	79,600	0.99	208,100	1.01	182,200

* LREO: Light (or Ceric) Rare Earth Oxides = La₂O₃ to Nd₂O₃
MREO : Medium Rare Earth Oxides = Sm₂O₃ to Gd₂O₃
HREO: Heavy (or Yttric) Rare Earth Oxides = Tb₂O₃ to Lu₂O₃
TREO: Total Rare Earth Oxides = LREO + MREO + HREO + Y₂O₃

N.B.: Subdivision used by Roskill Information Services Ltd. and Industrial Minerals Company of Australia Pty Ltd.

In conjunction with the campaign of 31 assay holes completed in November-December 2009 by Matamec, SGS Geostat was commissioned to produce a NI 43-101 resource calculation report. The full report including all tables will be available on SEDAR within 45 days.

Yann Camus (Eng.) engineer for the independent firm SGS Canada Inc. - geological group Geostat ("SGS Geostat ") is the qualified person under NI 43-101 standards, which supervised the preparation of the resource estimate. Aline Leclerc (geo) and Vice-President Exploration of Matamec, qualified person under NI 43-101 standards for the project Zeus, oversaw the preparation of the scientific and technical information. Together, they have verified the information in this press release.

Andre Gauthier, President of Matamec, commented: "We are very pleased with the new resource Calculations, which has increased the size of all NI 43-101 Resource Categories by 300 percent. The deposit is presently considered open both laterally and at depth giving excellent potential for additional mineralization. We are very encouraged by our progress on the Kipawa deposit and feel that Matamec shareholders can look forward to a positive year as Matamec continues to explore and develop this exceptional mineralized system".

About Matamec

Matamec explores for significant gold deposits in the Timmins mining camp in Ontario of which the Matheson Property (with Goldcorp as partner) is the main target. In Quebec, the

Company explores for precious and base metals on its Sakami, Valmont and Vulcain Properties. As well, Matamec is exploring for gold together with Northern Superior Resources Inc. on its Lespérance/Wachigabau Property.

Concurrently with the above mentioned exploration programs, Matamec's Quebec Tansim Property is also being explored for rare metals such as tantalum and lithium.

"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."

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