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ASX/MEDIA RELEASE

FIRST ARGENTINA SAMPLING FINDS GOLD

De Grey Mining is pleased to announce that samples collected in April 2010 during due diligence investigations of properties in Argentina have returned very encouraging gold, silver and pathfinder element assays.

Field checking of a target area on the Sierra Morena property located siliceous breccias that outcrop discontinuously over approximately one kilometre strike. Rock chip samples returned up to **0.49g/t Au and 13g/t Ag**. A single rock chip sample from a second area of poorly exposed quartz veining, 700 metres distant from the breccia outcrops, returned **0.20g/t Au and 20g/t Ag**.

At the La Evelina property, a single sample from a ferruginous fault structure assayed **0.13g/t Au** along with elevated levels of pathfinder elements. Aerial photography indicates that the structure extends at least 2km to the west.

Brief field checks of remote sensing features have also lead to discoveries of epithermal veins at the Bajo Grande and Tres Cerros properties. Limited sampling did not return elevated gold or silver values but the targets require more complete investigation.

It is emphasized that the sampling undertaken represents only initial field checks of selected target features on only some of the properties in which De Grey now has an interest. As such, the Company regards the results as significant.

For further information:

Gary Brabham De Grey Mining Limited Ph: +61 8 9285 7500 In April 2010 De Grey's geologists undertook a limited program of field reconnaissance and sampling as part of due diligence investigations of the tenements subsequently optioned from Minera Sudamericana S.A. Assays have now been received for that sampling.

Samples from siliceous breccias that outcrop discontinuously over approximately 1km strike at Sierra Morena property (Figure 1) confirmed gold-silver anomalism with values up to 0.49g/t Au and 13g/t Ag. Also, a single sample from an area of sub-cropping quartz veins 700m to the northeast of the breccia outcrops returned grades of 0.20g/t Au and 20g/t Ag (Figure 2).

The elevated gold and silver values, along with elevated arsenic and antimony levels, are regarded as clear indicators of fertile epithermal systems at Sierra Morena.

A single sample collected from a ferruginous fault structure in felsic volcanic tuff at the La Evelina property was also strongly anomalous in gold (0.13g/t) and epithermal pathfinder elements arsenic (1,205ppm) and antimony (537ppm). Aerial photography indicates that the structure continues for at least 2km to the west of the sample location.

Field checking of remote sensing features has also lead to the recent discovery of epithermal veins at the Bajo Grande (Figure 3) and Tres Cerros properties but as yet no gold or silver anomalism has been returned from limited surface rock sampling. The vein systems remain targets for follow-up exploration.

Considering the limited field work undertaken to date, De Grey regards the results as very encouraging.



Figure 1: Epithermal quartz breccia at Sierra Morena



Figure 2: Sierra Morena sample locations and assays



Figure 3: A 2m wide quartz vein with a strike length of 800m at Bajo Grande Project, discovered during follow-up of remote sensing imagery in April 2010

De Grey's Santa Cruz Projects

De Grey has acquired, by applications over vacant ground and through option and joint venture agreements with other parties, a portfolio of 14 projects over a total area of 2,193km² (Figure 4) in Santa Cruz Province, Argentina.

All of the areas have seen little or no previous exploration and represent early stage exploration opportunities in the Deseado Massif, a region highly prospective for low-sulphidation epithermal gold-silver deposits.

The majority of projects were originally acquired following target generation using regional aeromagnetic data to identify structural corridors thought to be important controls on the location of the epithermal gold-silver mineralisation. Further targets were selected on the basis of alteration anomalies interpreted from the processing and analysis of Aster multi-spectral satellite data. Such signatures can reflect hydrothermal alteration associated with gold-silver mineralisation in epithermal systems. These alteration targets provide De Grey with areas for immediate field investigation.



Figure 4: Locations of De Grey's projects, Santa Cruz, Argentina

TABLE 1 – SANTA CRUZ, ARGENTINA
RECONNAISSANCE ROCK SAMPLING RESULTS

Project	Sample	East	North	Gold, g/t	Silver, g/t	Antimony, ppm	Arsenic, ppm	Geology Comments
La Evelina	SC002	2,480,362	4,650,480	0.13	0	537	1,205	Iron oxide rich breccia zone in felsic volcaniclastic along prominent WNW structure
Sierra Morena	SC003	2,424,933	4,688,000	0.28	1	13	311	Silicified red felsic volcanic breccia outcrop over a 2m x 10m area
	SC004	2,424,425	4,688,266	0.49	0	21	95	Quartz veinlets in red siliceous alteration of felsic volcanic
	SC006	2,424,246	4,688,552	0.32	13	82	1,183	Strongly silicified breccia with cellular networks and cavities
	SC007	2,424,058	4,688,612	0.14	2	63	566	Silica-haematite breccia zone within felsic volcanic
	SC008	2,424,784	4,689,078	0.20	20	75	2,351	Quartz veinlets in tuffaceous ignimbrite

Note: Coordinates are Gauss Kruger, Campo Inchauspe datum, Argentina Zone2. Samples are surface rock samples. Analysis is by Acme Analytical Laboratories Ltd using Aqua Regia digest and ICP-MS analysis

The information in this report that relates to exploration results is based on information compiled by Mr David Hammond, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hammond has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 JORC Code Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Hammond consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.