De Grey Mining Ltd

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The Bold Explorer

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ASX/MEDIA RELEASE

EXPLORATION UPDATE – SIERRA MORENA PROJECT, ARGENTINA

De Grey Mining Ltd (**De Grey** or the **Company**) is pleased to provide an update with results from recent rock chip sampling at the Sierra Morena project, Santa Cruz Province, Argentina.

Sampling in the vicinity of the Vein Breccia target has located numerous nearby vein and vein float occurrences. Rock samples returned up to **11.75g/t Au** and **96.2g/t Ag** accompanied by significant arsenic, lead and zinc over an area of approximately 750 metres by 800 metres.

Follow-up of the SM6 stream sediment geochemical anomaly in the central part of the project area has located a zone of strong argillic (clay) alteration exposed in a 700 metre by 500 metre window through transported cover. Samples from the altered area returned up **2.44g/t Ag**, along with anomalous pathfinders arsenic, antimony and mercury.

A number of epithermal quartz vein occurrences were also discovered in the area surrounding the argillic alteration zone and rock chip samples returned up to **14g/t Au** and **24.4g/t Ag**.

Sierra Morena is subject to a purchase option agreement with private company Minera Sudamericana S.A.

De Grey's Managing Director Gary Brabham commented: *"Discovering the SM6 alteration zone by following up systematic stream sediment sampling validates De Grey's exploration approach in the Deseado. The area needs detailed mapping to firm up drill targets but results to date certainly indicate that we have discovered a significant area of alteration and anomalous metals consistent with the upper parts of an epithermal system*".

For further information:

Gary Brabham
De Grey Mining Limited
Ph: +61 8 9285 7500

SIERRA MORENA SAMPLING RESULTS

In October and November sampling campaigns were undertaken during detailed mapping of the Vein Breccia target area and also during follow-up of stream sediment geochemical anomalies that resulted from the Company's work earlier in 2011.

Vein Breccia Target

Sampling in the vicinity of the Vein Breccia target has located numerous vein and vein float occurrences that appear to be developed in a duplex fault system. Rock samples returned up to 11.75g/t Au and 96.2g/t Ag accompanied by significant arsenic, lead and zinc over an area of approximately 750 metres by 800 metres (Figure 1). A significant portion of the area is overlain by transported cover that is possibly obscuring other mineralised structures. Detailed mapping of the area is presently being compiled with a view to firm up drill targets.

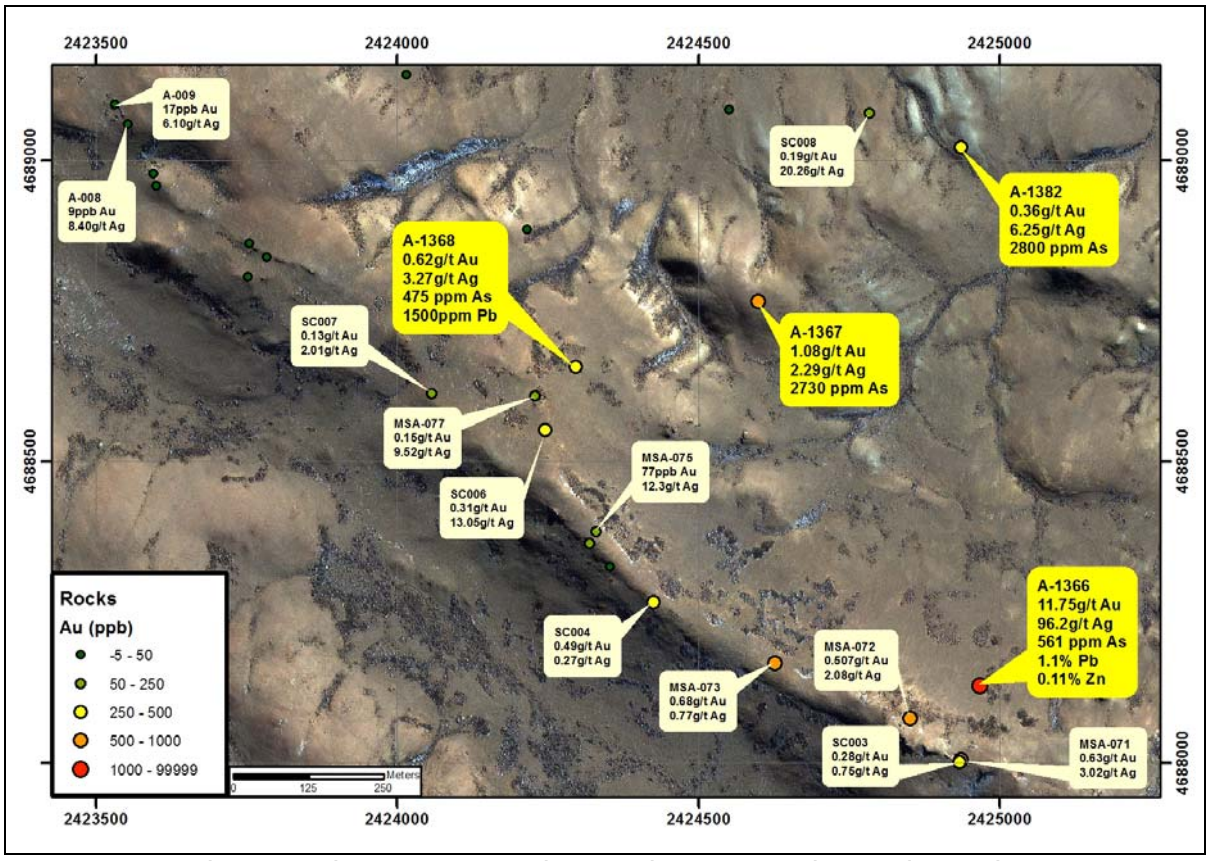

Figure 1: Sierra Morena Vein Breccia target, rock sample results

SM6 Target

Follow-up of the SM6 stream sediment geochemical anomaly in the central part of the project area has located exposures of a strong argillic alteration zone exposed in a 700 metre by 500 metre window through transported cover in an area of recessive weathering (Figure 2). It appears likely that the zone extends to the north beneath valley fill colluvium.

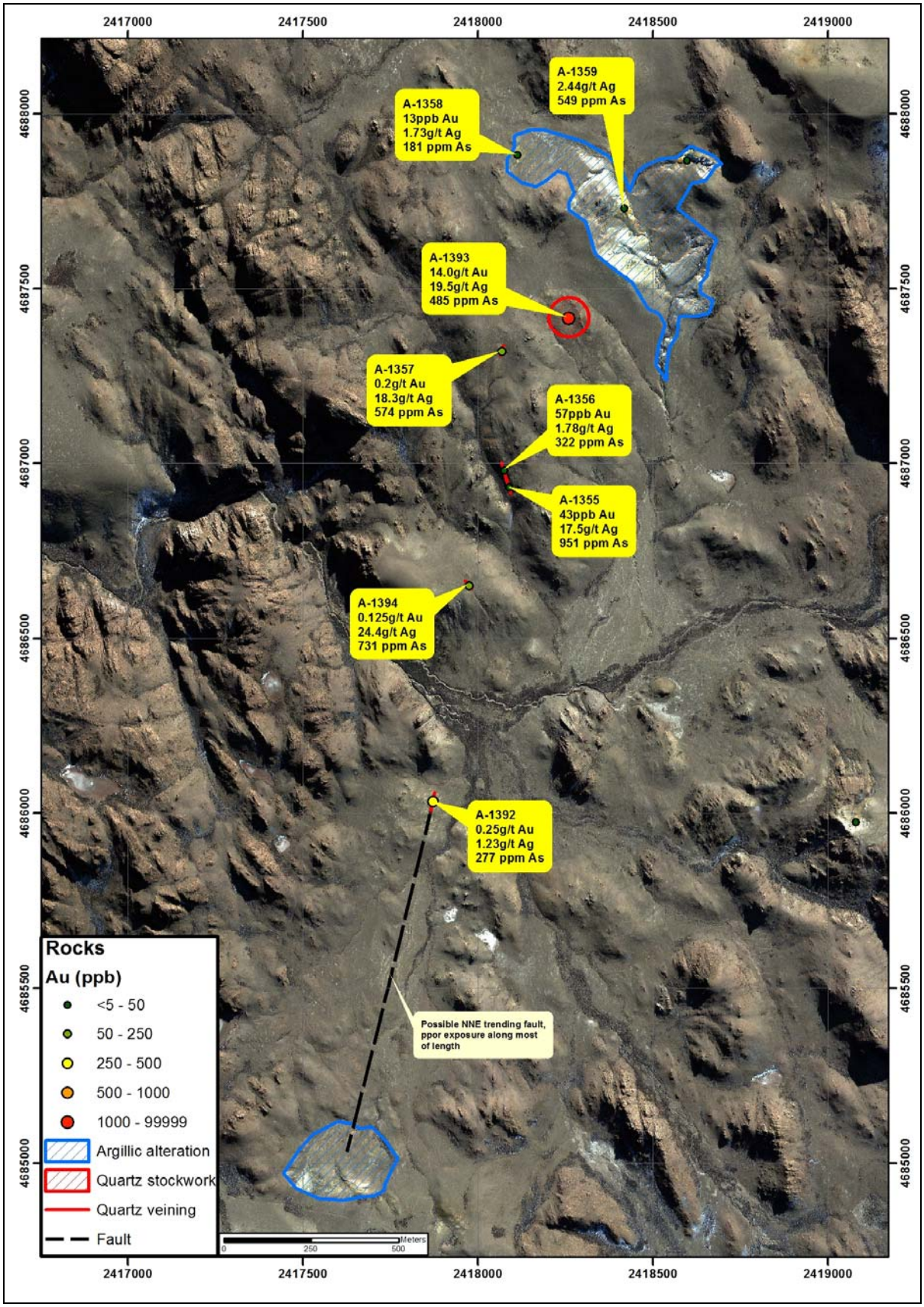

Figure 2: Sierra Morena SM6 target, rock sample results

Parts of the altered zone feature quartz veinlets and strong iron staining, thought to be after disseminated sulphides. First-pass samples from the altered area returned up to 2.44g/t Ag, along with anomalous pathfinder elements including arsenic,

antimony and mercury. The alteration and geochemical signature are consistent with the upper levels of an epithermal system.

A number of epithermal quartz vein occurrences and isolated, smaller zones of argillic alteration were also discovered in the area surrounding the main SM6 area. Rock chip samples returned up to 14g/t Au and 24.4g/t Ag.

The entire SM6 area is to be mapped and sampled in more detail to firm up drill targets.

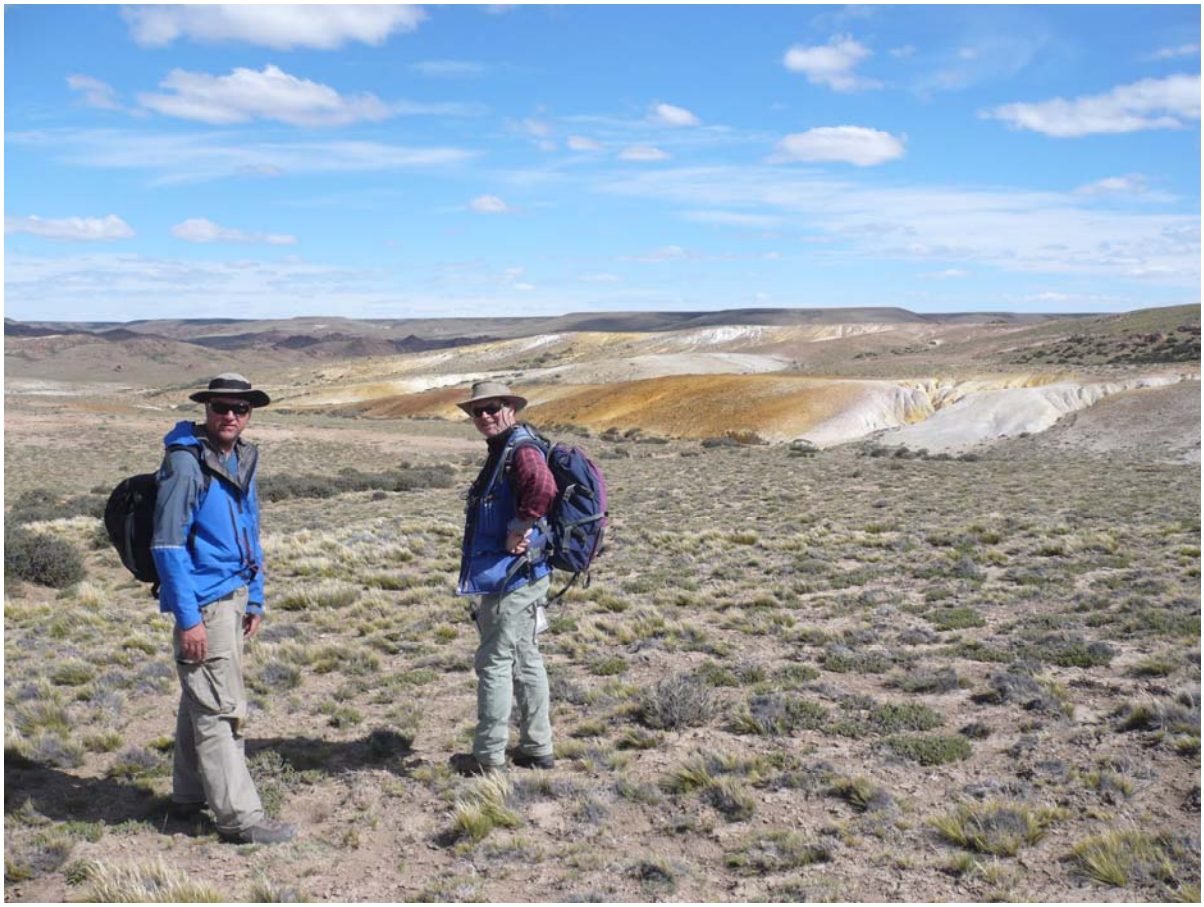

Figure 3: Argillic alteration exposure at SM6 target

Sample	East	North	Au (ppb)	Ag (ppm)	As (ppm)	Hg (ppm)	Mo (ppm)	Pb (ppm)	Sb (ppm)
A1355	2418088	4686933	43	**17.5**	951	0.028	54.1	21.3	25.3
A1356	2418074	4686981	57	1.78	322	0.324	3.40	8.4	3.07
A1357	2418068	4687321	204	**18.3**	574	0.181	74.2	38.5	6.33
A1358	2418113	4687884	13	1.73	181	0.49	15.0	18.7	6.21
A1359	2418418	4687732	<5	2.44	549	0.320	3.08	77.2	0.239
A1366	2424967	4688127	**11750**	**96.2**	561	12.55	566	11000	201
A1367	2424599	4688765	**1085**	2.29	2730	0.061	13.75	13.25	38.7
A1368	2424297	4688657	620	3.27	475	0.342	97.8	1500	19.95
A1382	2424936	4689021	361	6.25	2800	0.051	8.81	59.7	80.1
A1392	2417871	4686034	257	1.23	277	0.018	1.67	12.25	4.87
A1393	2418259	4687418	**14000**	**19.5**	485	5.28	3.96	444	39.4
A1394	2417974	4686653	125	**24.4**	731	0.35	45.1	89.6	12.45

Table 1: Sierra Morena – Significant Rock Chip Sample Results, Santa Cruz, Argentina

*Samples were analysed by ALS Minerals Laboratories, Mendoza, Argentina. ICP Mass Spectrometer analysis of 30g sample split from original 500gm (minimum) sample after Aqua Regia digestion for ultra-low determinations. Basic suite of elements consisted of 51 elements including those listed above. Note that some elements will report partial concentrations due to the presence of refractory minerals. Samples that returned >10000ppb Au (>10g/t Au) were re-assayed using 30g Fire Assay with gravimetric finish.

The information in this report that relates to exploration results is based on information compiled by Mr Glenn Martin, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Martin 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 Martin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.