

DIAGEM INC.

**TECHNICAL REPORT ON THE JUÍNA DIAMOND PROJECT,
JUÍNA, MATO GROSSO, BRAZIL**

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SUMMARY

The Juína Diamond Project is located in northwest Mato Grosso State in the central west part of Brazil at latitude 11° 35' south and longitude 59° 00' west. The project lies on the southern edge of the Amazon basin in the municipality of Juína. The city of Juína is located approximately 550 km to the north-west of the state capital of Cuiabá, and 1400 km from the national capital Brasília. The Juína Diamond Project is in one of the most productive historical alluvial diamond province in Brazil. Diagem Inc. ("Diagem") has been active in the area since 1996 and has accumulated mineral properties totalling in excess of 261,000 ha covering much of the prospective ground in the district.

The Juína Diamond Project consists of thirty-one exploration licenses and one mining concession combining for a total of 261,700 ha over a 100 km wide area. Diagem also filed five applications for additional exploration licenses totalling 33,200 ha. Diagem holds a 100% ownership interest in all its properties through two wholly owned subsidiaries and a 51% interest in a joint venture on Property 1000. Diagem currently has three exploration licenses (108, 213 and 1000) in the process of being converted to mining concessions pending the review of the applications by the DNPM and the completion of an Environmental Impact Study. The final report for the Chapadão project on property 370/98 was approved in February 2008 and the authorization to perform additional work on the property received in March 2008. A final exploration report was filed for properties 370/96 and 211 in 2007. Once the final reports are approved Diagem may decide to proceed with the application for a mining concession on each of the properties. On April 25, 2008, the Brazilian Institute for the Environment and Renewable Natural Resources (IBAMA) imposed an embargo at the Chapadão project on Property 370/98. As a result, no work can currently be conducted on the whole property. Two similar restrictions have been in place on a portion of Property 213 and the entire property 1000 since 2003 and 2002 respectively.

The Juína Diamond Project lies on the southwestern edge of the Amazonian Craton which comprises a series of accretionary belts last consolidated in the Grenville era. The Juína Kimberlite Field is located within the Proterozoic Rondônia – Juruena geotectonic province which displays a dominant WNW–ESE to E–W regional structural trend. The project area is underlain by Proterozoic crystalline basement rocks of the Roosevelt – Juruena Domain composed essentially of metamorphosed granite and gneisses exposed in the northern half of the area. To the south of the project area, the intracratonic Parecis Basin is filled with a thick sequence of Paleozoic to Cretaceous sediments. Polymictic intraformational conglomerate within the Permo-Carboniferous Fazenda da Casa Branca Formation and the Cretaceous Parecis Group locally carry kimberlite indicator minerals and diamonds. Kimberlites were emplaced in the area during the Cretaceous along a NW-SE trending continental scale lineament (125° AZ lineament).

The Juína Kimberlite Field currently contain thirty-three relatively well known and defined kimberlite occurrences of which twenty-one are located within Diagem mineral rights. Current exploration suggests the potential for 10 to 20 additional bodies mostly on Property 370/08 (Chapadão project) and Property 079. Their sizes range from less than 1 ha to 60 ha for the largest with a mean of approximately 5 ha. Their general geometry based on Collier-04 appears to form a champagne glass. The majority of the known kimberlites appear to have been relatively well preserved with most exhibiting a crater facies, thereby suggesting that little erosion has taken place since their intrusion. At the Chapadão, air fall deposits characteristic of tuff ring surrounding kimberlite craters is suggested by the presence of a diamond bearing unit that has been preserved by younger Tertiary deposits. Secondary diamond deposits are present throughout most of the area in river flats, terraces and as buried paleoplacer. Due to intense historical mining their extents are now relatively restricted but can constitute small resources with diamond grades of economic interest.

The chemistry of diamond inclusions and the associated mineral paragenesis from the Juína area indicate a "superdeep" origin suggesting that the diamonds derived from the transition zone or deeper from the lower mantle at depths of at least 410 km. The impact on the exploration is that "classical" indicator minerals associated with these diamonds may not conform to traditional models and conventional minerals such as pyrope garnet and high-Cr chromite may be in minority or absent. Chrome spinel inclusions from the Juína area are low in Cr and Mg, and high in Ti while Mg-ilmenite (picroilmenite) composition is relatively low in chromium. According to the traditional model, the poor chromium content in chromites and the moderate level of resorption predicted by ilmenite chemistry would suggest a low diamond grade and a small diamond size. Testing of the kimberlite bodies by Rio Tinto indicates that most are diamond-bearing with estimated grade ranging between 4 to 40 cph.

DeBeers from 1975 to 1987 and Rio Tinto from 1992 to 1997 explored the region combining for the discovery of twenty-six kimberlite bodies. Rio Tinto drilled to various extents eighteen of the kimberlite bodies and bulk tested five of them. The main discovery of Rio Tinto was the Colier-04 kimberlite, located on Property 214, which returned grade

from RC drilling and trenching ranging from 6.48 to 67.62 cpht (+1.0 mm diamonds). Based on these results Rio Tinto calculated a resource estimate for Collier-04 of 13.9 million tonnes at a grade of 0.40 ct/t.

Between 1996 and 2005, Diagem has explored a large portion of the Juína Diamond Project with secondary deposits as the main objective. Since 2005, systematic exploration for kimberlites throughout the area has demonstrated that previously undiscovered diamondiferous kimberlites or deposits exist within the Juína Kimberlite Field. The discovery by Diagem, between 2005 and 2008, of several kimberlite bodies and smaller occurrences within the Acuri, Collier-04 and Aripuanã-03 clusters, and the discovery of the Chapadão and Serra do Lobo clusters which indicate the potential to host together 10 to 20 kimberlite bodies has demonstrated that a methodical approach consisting of heavy mineral sampling, geophysical surveying and surface bulk sampling or drilling is an effective approach to locate kimberlitic bodies in this region.

These newly discovered kimberlite occurrences confirm that there are more sources to the extensive and widespread production from the alluvial diamond deposits and validate that the Juína Diamond Project is a prospective area to find a significant primary diamond discovery and/or deposit. Age dating of the kimberlites circumscribes their emplacement as late Cretaceous. Chemical and mineralogical studies on alluvial and "kimberlitic" diamonds suggest that the source of some of the alluvial diamonds has yet to be discovered and their origin is potentially older than the Cretaceous. A large number of properties of the Juína Diamond Project are at an early stage of exploration and no exploration has been done yet on more than half of the vast 261,000 ha of mineral rights held by Diagem.

Eleven of the twenty-one kimberlites located within Diagem's mineral rights have been identified as diamondiferous while the diamond content of the remaining bodies was not evaluated. Only eight of the twenty one pipes are reported to have been diamond drilled. A number of those diamond bearing bodies such as the Acuri-01, Acuri-02 and Aripuanã-01 have not been drilled. The grade for the Acuri kimberlites has been established with small samples collected for micro-diamond recovery which are not representative of the kimberlite bodies. They certainly do not reflect the relatively coarse diamond population (0.34 ct per stone) and estimated grade (0.22 ct/m³) for the Chicória diamond resource immediately downstream.

Systematic bulk sampling at the Collier-04 project resulted in the definition of an indicated resource of 870,000 m³ grading 0.25 ct/m³ for the near surface weathered portion of the kimberlite down to 12 m. Grade results obtained by Diagem from kimberlite bulk testing nearly doubled the historical grade of 0.40 ct/t based on the recovery of +1.0 mm diamonds obtained by Rio Tinto. This further confirms that the true potential of most of the known pipes has not been adequately evaluated.

Among the new discoveries, the Chapadão project represents currently the most important potential of the project area. Indicator mineral chemistry and petrographic studies confirmed the kimberlitic origin of the diamond-bearing pyroclastic tuff unit interpreted to represent air fall kimberlite tuff ring deposits. The unit has been delineated over an area of 100 ha and appears open in all directions. Limited bulk sampling of the unit within that area shows grade ranging up to 1.2 ct/m³. Ground magnetic and EM surveys have defined at least eleven anomalies with characteristics that are consistent with kimberlites which may represent single or multiple kimberlite intrusion. Preliminary diamond drilling confirmed crater facies kimberlite on five of the anomalies tested but the absence of kimberlitic feeders and the source of the magnetic anomalies remain to be explained. The project is still in early phase and detailed diamond drilling and bulk sampling must be pursued. The possibility of a much larger kimberlite structure than the current model should not be ignored.

Results of heavy mineral sampling on other properties suggest that additional kimberlitic bodies remain to be discovered within the project area. Stream gravel and prospecting pits has been very effective in discovering kimberlites. This is the case at the Serra do Lobo, where 15 kimberlite indicator anomalies forming the Franck cluster have been identified. Restricted access to a large part of the property has prevented a continued exploration effort. Preliminary tests proved the presence of diamonds at 4 localities and mineralogical analysis confirm picrolimenite on 8 anomalies suggesting the presence of as much kimberlite bodies within a 2 km radius.

The advancement of the Collier-04 project to the feasibility stage is dependent upon several variables. Large scale bulk testing results already provided support to the resource estimate returning an average grade of 0.37 ct/m³. Small but high grade zones probably related to different kimberlitic phases (intrusions) must be tested on the same scale to determine additional geological and economic parameters. Diamonds in the fraction between 1.0 and 1.7 mm display a higher frequency of gem quality stones. Their economically efficient recovery and the impact on the average value of the diamonds have to be studied. The improvement of the final diamond recovery at the sorting facility in particular to recover non or low-fluorescent diamonds have to be finalized. Should the current project prove feasible, deepening