

**Technical Report on the Diamond Potential of
the Ellendale East Diamond Project of
Caldera Resources Incorporated,
West Kimberley Region, Western Australia**

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Table of Contents

1. Summary	1
2. Terms of Reference.....	2
3. Reliance on other Experts	2
4. Property Description and Location.....	3
4.1 Tenure	4
4.2 Access, Climate, Local Resources, Infrastructure and Physiography	5
5. Historical Overview	6
6. Relevant information regarding Lamproite Pipes in and immediately adjacent to tenement E04/1437.....	8
7. Geological Setting.....	9
7.1 Overview	9
7.2 Structural Geology.....	10
8. Mineralisation and Deposit Types	10
8.1 Diamond Bearing Ultramafic and Related Rocks.....	10
8.2 Diamond Indicator Minerals	11
8.3 Exploration.....	12
9. Verification of Mineral Chemistry Data	13
10. Geology of Ellendale East.....	13
10.1 Exploration, Drilling Activity and Sampling in the Ellendale East Project	15
10.2 Geochemistry of Drill Hole Samples.	19
10.3 Indicator Mineral and Microdiamond Sampling.....	20
10.4 Indicator Mineral Results	21
11. Discussion of Results.....	22
11.1 Resource Potential.....	22
11.2 Diamond Indicator Minerals.....	24
12. Mineral Processing and Metallurgical Testing.....	24
13. Mineral Resource and Mineral Reserve Estimates.....	24
14. Synopsis.....	24
14.1 Critical Factors for Diamond Potential in Ellendale East	24
14.2 Recommendations	25
14.3. Interpretation and Conclusions	28
15. References.....	29
16. Certificate of author.....	31

TABLES

Table 1 Summary of work undertaken by Caldera	16
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FIGURES

Figure 1. Landsat image showing the location of the Kimberley Craton	3
Figure 2. Department of Industry and Resources tenement plan	4
Figure 3. Location of lamproite pipes in the Ellendale Diamond Field	6
Figure 4. Location of exploration licence E04/1437	13
Figure 5. Location of aeromagnetic anomalies ELL 001 to 047	15
Figure 6. Location of magnetic anomalies detected on E04/1437	17
Figure 7. Chromite mineral chemistry	20
Figure 8 Section of a lamproitic inclusion	22

APPENDICES

Appendix 1. Programme of Work for Ellendale East	30
Appendix 2. Diamond Processing Facility at Blina Diamonds NL	

Technical Report on the Diamond Potential of the Ellendale East Diamond Project of Caldera Resources Incorporated, West Kimberley Region, Western Australia

1. Summary

Caldera Resources Incorporated based in Toronto, Canada retained the services of Dr Gregory Pooley during July 2008 to review all available data, carry out a field visit and prepare an independent technical report for their Ellendale East Property in the Kimberley area of Western Australia. Caldera Resources Pty Ltd. is a wholly owned subsidiary of Caldera Resources Inc., and is the operating company in Australia.

The property consists of one exploration licence of 21,517 hectares. In comparison with the known potential of the diamond bearing pipes in the Ellendale Diamond Field the Ellendale East Project is considered a well-advanced exploration project.

Dry season access to the property is via the Great Northern Highway. Ground access is mainly restricted to graded roads and tracks which are generally impassable during the monsoonal wet season. Scattered airstrips can be found throughout the region and are available for use by light planes. The use of helicopters for immediate access is normal for this region. The property is located 60 km from Fitzroy Crossing, which is the town centre for the area. The climate in the West Kimberley varies from semi-arid to monsoonal with distinct wet and dry seasons. The field season is partly restricted to the dry season (March to December).

The regional geology of the area is dominated by the Kimberley craton and surrounding mobile belts. The Kimberley craton consists of a thick series of nearly flat-lying sedimentary and volcanic rocks of the Proterozoic Kimberley Group which form the Kimberley Plateau. They are underlain by what is interpreted to be Archean basement of the Lamboo Complex (not exposed at the surface of the plateau). On the northeast, the craton margin is a faulted basin margin and on the northwest probably a major crustal downwarp. To the southeast, the Kimberley craton is bounded by the Halls Creek Mobile Zone (East Kimberley Region): a north-northeast trending zone approximately 400 km long and 100 km wide. The Halls Creek Mobile Zone is bounded by two long, regional transcurrent faults, and numerous anastomosing, northeast trending left lateral faults; secondary northeast-trending folds and reverse faults transect the belt. The zone is composed of early Proterozoic sediments, metamorphics and granites, the northern part of which is covered by the Paleozoic sediments of the Bonaparte Basin. To the southwest the Kimberley craton is bounded by the King Leopold Mobile Zone, the Lennard Shelf and the Fitzroy Trough (West Kimberley Region). The King Leopold Mobile Zone forms a mountainous belt that is abutted to the north by steeply folded and thrust faulted middle Proterozoic sedimentary and volcanic rocks of the lower part of the Kimberley succession and is underlain by crystalline basement. Vertical fault movements are characteristic of this zone. The King Leopold and Halls Creek mobile zones have experienced a long continuity of tectonic and depositional activity over time. Tertiary to Quaternary laterization was widespread throughout the Kimberley area.

Diamond deposits and occurrences in the region are hosted in olivine lamproites within the mobile zones and kimberlite pipes and dykes within the Kimberley Plateau. Exploration throughout the Kimberley area has included stream and loam sampling resulting in the recovery of diamond indicator minerals and diamonds, airborne and ground geophysical surveys (including magnetics, electromagnetics and gravity), drilling, trench sampling and open pit bulk sampling. There are two operating diamond mining centres in the Kimberley region both of which are located in the mobile belts immediately adjacent to the craton. The Argyle diamond mine is situated in the Halls Creek Mobile zone in the northeast of the region and the Ellendale diamond mines are located in the King Leopold Mobile zone in the southwest.

The Kimberley region of north Western Australia area represents a favourable area for the

presence of diamondiferous kimberlites and lamproites. This is based upon the presence of a favourable local basement and structural setting in conjunction with the presence of a number of unexplained alluvial diamond occurrences along with known diamondiferous kimberlites and lamproites including the Argyle and Ellendale diamond mines. The Ellendale East Project contains a number of tenement blocks that are considered prospective for the presence of diamondiferous lamproites based upon the presence of known lamproite occurrences, some of which yield high quality DIMs, the abundance of historical un-sourced DIMs and the presence of a number of unexplained geophysical anomalies. As a result, Ellendale East Project warrants further exploration with a number of the blocks warranting aggressive exploration.

Based upon the results to date, a focused bulk sampling exploration program is warranted for specific targets in the Ellendale East Project.

Phase 1 should consist of the submission of the necessary documents to the Department of Industry and Resources required for such a process and the specific location of bulk sampling sites on selected targets.

The estimated cost to complete the recommended **Phase 1** exploration is about \$A70,550:00 not including GST.

Phase 2 programme should consist of

- locating and preparing specific sites in the prepared areas to commence bulk sampling and additional RC drilling of selected anomalies,
- bulk sampling and stock piling of ore material,
- dispatch and processing of no less than 500 tonnes of ore material at the Blina diamond processing facility nearby,
- dispatch to and processing of no less than 10 tonnes of ore material at a diamond processing laboratory in Perth and
- preparation and completion of statutory reporting requirements.

The estimated cost to complete the recommended **Phase 2** bulk sampling and RC drill program is approximately \$A740,900:00 not including GST.

The approximate cost to complete the Phase 1 and Phase 2 bulk sampling programme is \$A811,450:00 not including GST.

2. Terms of Reference

Caldera Resources Incorporated based in Toronto, Canada retained the services of Dr Gregory Pooley during July 2008 to review all available data, perform a property visit and to prepare an independent technical report for the East Kimberley Project in Western Australia. This technical report is based upon property visits conducted during 2007 and 2008 by Dr Gregory Pooley PhD MBA, an independent and Qualified Person as defined in National Instrument 43-101. It is written to comply with standards set out in National Instrument 43-101 for the Canadian Securities Administration. Due to the property's close proximity to the operating diamond mines of the Kimberley Diamond Company Ltd in the Ellendale Diamond Field, Dr Pooley also examined these operating diamond mines and several adjacent diamond bearing lamproite pipes in order to establish their nature, particularly of the tuffaceous haloes associated with the diamond bearing lamproitic pipes. A study was also made of the buried diamond bearing alluvial deposits and channels that emanate from such pipes.

3. Reliance on other Experts

The report is a compilation of proprietary and publicly available data as well as information obtained during the property visit. The author, in writing this report, uses sources of