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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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 anastamosing, 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 information as listed in the 'References' section. The government reports were prepared by a person or persons holding post secondary geology, or related university degree(s), prior to the implementation of the standards relating to National Instrument 43-101. For those reports written by others whom are not qualified persons, the author must rely upon the professional measures used by the employees of the companies who completed the work. The information in those reports is assumed to be accurate, based on the data review and property visit conducted by the author. The reports which were used for background information on the property are reviewed and referenced in the history section below.

4. Property Description and Location

The property, which consists of one exploration licence of 21,517 hectares, is located in the West Kimberley region of north Western Australia, approximately 250 km east of the town of Broome and 60 km from Fitzroy Crossing which is the local town centre for this region (Figure 1). Details of the Ellendale East tenement are shown in Figure 2. The tenement is situated on the Lennard River 1:250,000 scale topographic map sheets. The property has not been legally surveyed which is a requirement for a mining lease only. The tenement lies approximately 25 km south east of the operating Ellendale diamond pipes No.4 and 9.

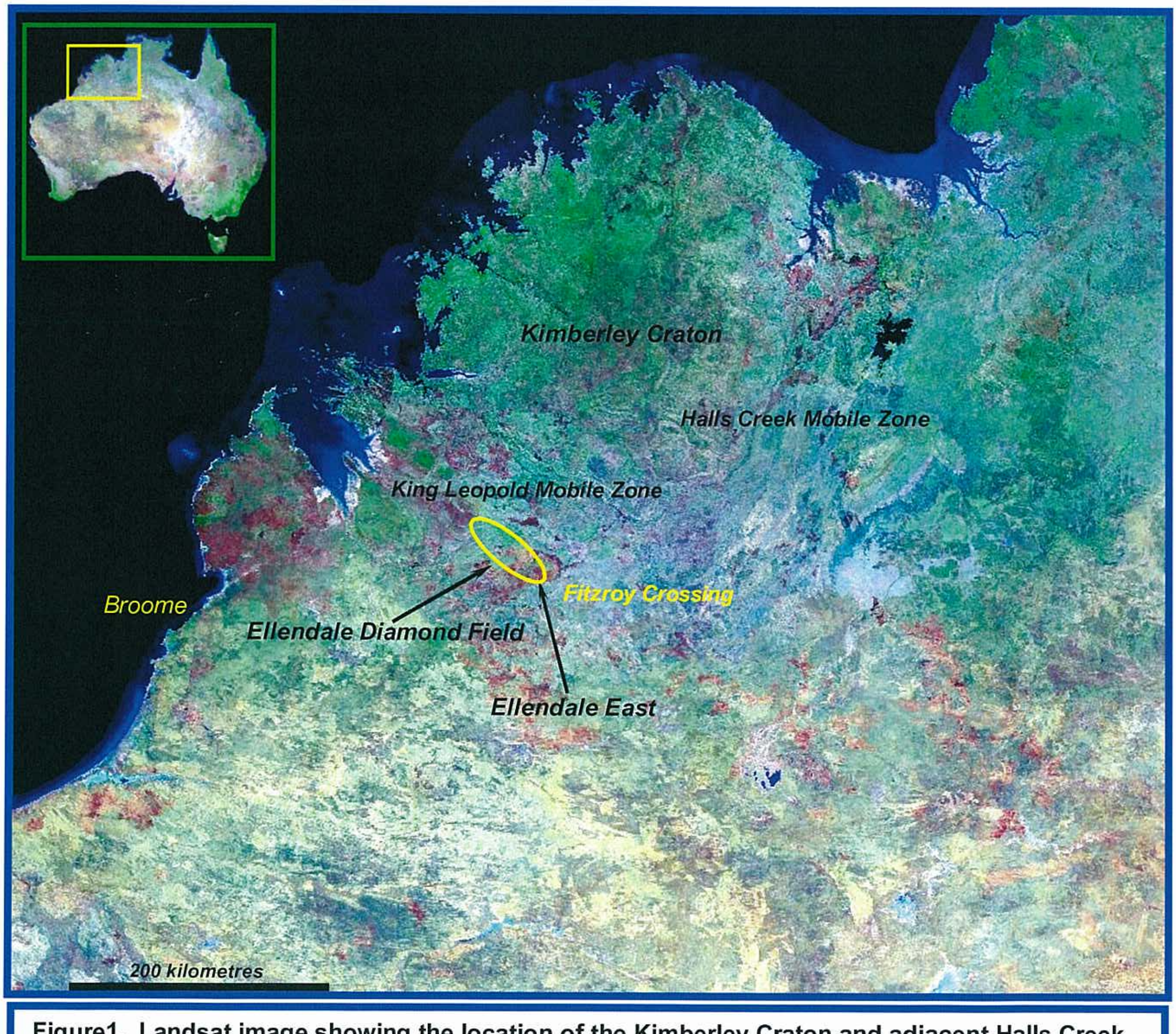


Figure1. Landsat image showing the location of the Kimberley Craton and adjacent Halls Creek and King Leopold Mobile Belts in northwestern Australia. The generalized location of the Ellendale Diamond Field and the approximate location of the Ellendale East tenement in the southwestern portion of this area is also shown.

4.1 Tenure

Exploration Licence 04/1437 was granted to Caldera Resources Inc. on 17th November 2004, and currently comprises 66 graticular blocks, covering an area of 191 square kilometres. The Tenement is located in the Ellendale Lamproite Field of the southwest Kimberley region (Figure 2)

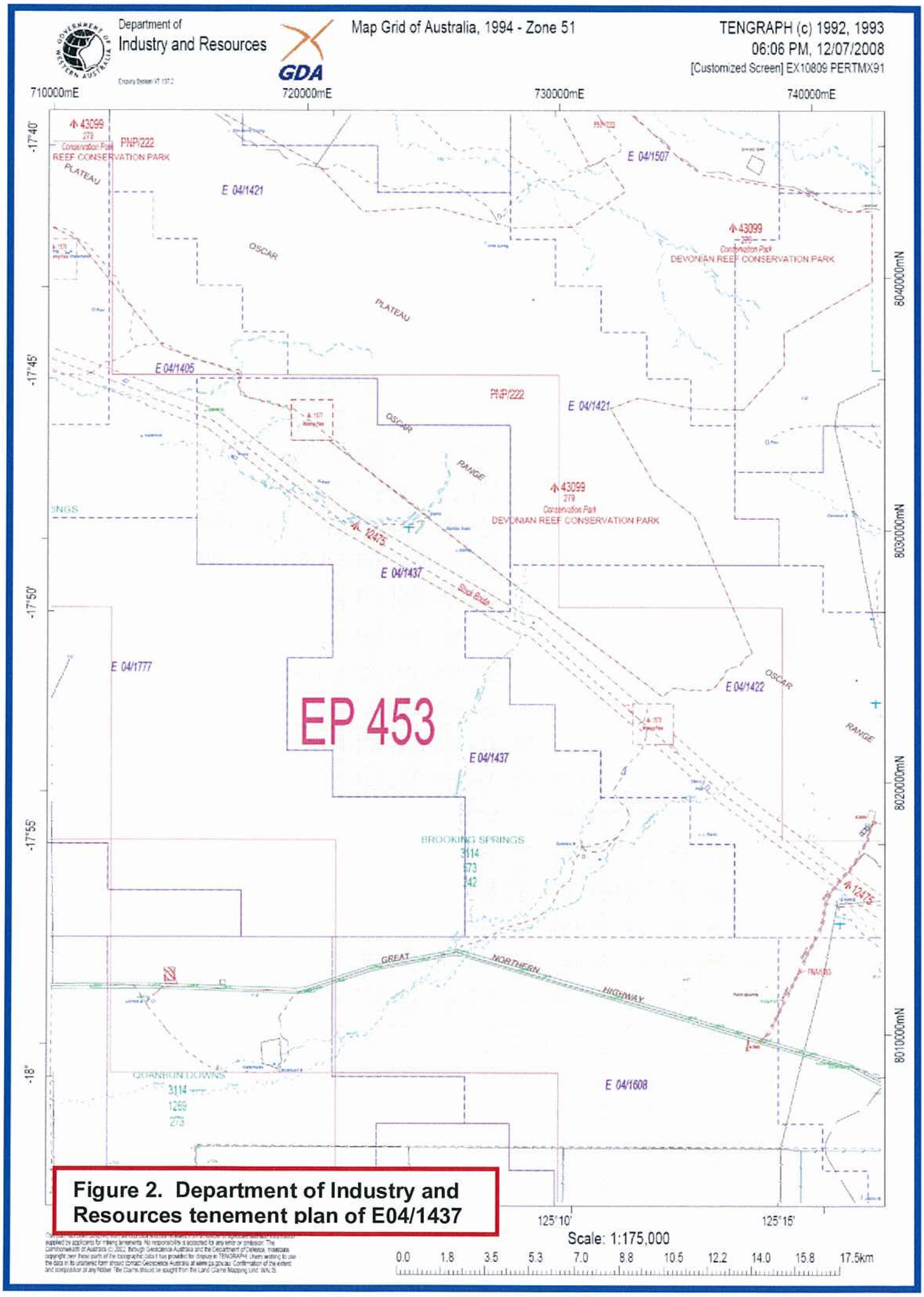


Figure 2. Department of Industry and Resources tenement plan of E04/1437

The Western Australian Department of Industry and Resources (DOIR) have three levels of tenements: Exploration Licence (EL), Prospecting Licence (PL) and Mining Lease (ML). Exploration Licences are acquired by paper staking and represent the easiest and most cost effective form of land acquisition. An EL is granted for 5 years and is extendable for a second 5 year term. After the third and fourth years of grant, the holder of an EL must reduce the size by 50%, unless an exemption from compulsory surrender is sought from DoIR. Caldera lodged a 50% surrender of EL04/1437 on 27th June 2008, effectively reducing the size of the EL from 66 to 33 graticular blocks. When the surrender has been officially registered, the EL will be in two parts, with surrendered blocks considered as having little or no exploration potential. In order to maintain an EL an expenditure of \$3.00 per hectare (\$300 per km^2 equal to almost \$7.50 per acre) or \$1,000 per EL block is required annually, with a minimum of \$20,000 per EL with 3 or more blocks. If the EL is extended to a second 5 year term, the required annual exploration expenditure would be \$50,000 per year in years 6 and 7 and \$100,000 per year in years 8 to 10. Mining can be conducted under an EL, but in general application is made to proceed to an ML in order to proceed to mining. Rent is due and payable to the Western Australia Government on an annual basis and is currently about \$0.30 per ha. Shire rates are also payable annually. Rents and Rates as well as 20% for administration costs are part of the allowable annual exploration expenditure. In general, Rents and Rates along with the allowable administration costs make up about 30% of the annual expenditure requirement in the case of ELs, thereby reducing the actual physical exploration expenditure required on an annual basis to about \$2.00 per ha. In general, most if not all of the tenement acquisition in the Kimberley is being conducted using ELs as this only requires a minimal application fee along with the first years rent.

At the time of writing this report the 50% compulsory surrender or tenement E04/1437 had been lodged with the Department of Industry and Resources but has not been officially registered nor gazetted. This means that all the tenement map plans at present show the exploration licence as the original application size. Appendix 3 shows a plan of the surrendered blocks and the proposed size of the exploration licence.

In most of the historic and highly active mining centre's in Western Australia, the main form of ground acquisition is PLs followed by MLs when proceeding to mining. PLs and MLs require physical staking of posts (pegging) followed by legal surveys prior to mining under an ML. A PL is granted for a 4 year period and is extendable for a second 4 year period with a maximum allowable size of 200 ha per permit. At the end of the 8 year period the PL must be converted into an ML or the land is relinquished. The annual expenditure requirement for a PL is \$40 per ha. An ML is granted for 21 years with a maximum size of 1,000 ha and is extendable for further 21 year periods. The annual exploration commitment for an ML is \$100 per ha, however, a release from the exploration expenditure commitment can be granted on an annual basis based on the presence of a mineral resource. The recently revised DOIR Mining Act regulations state that an ML can only granted for a property with a contained resource.

4.2 Access, Climate, Local Resources, Infrastructure and Physiography

The Great Northern Highway provides access to the area and the Windjana Gorge Roads provide additional access to the interior of the lease (Figure 2). Ground access within the area is mainly restricted to graded roads (shire maintained) and tracks (developed by stations or previous exploration companies) which are generally impassable during the monsoonal wet season. Scattered airstrips can be found throughout the region and are accessible by light planes. The use of helicopters is standard for both mining and exploration companies. Fitzroy Crossing, 60 kms away on the banks of the Fitzroy River has about people 1200 people mainly providing support for the grazing, mining and tourism industries. Compared with most of the Kimberley which is extremely remote, the property enjoys very good accessibility to both a major highway and the local town.

The climate in the West Kimberley area varies from semi-arid to monsoonal with distinct wet and dry seasons throughout. The field season is partly restricted to the dry season (March to December). Vegetation is of the tropical savannah type including grassy woodland areas and open eucalyptus forests with pockets of native flora. Day temperatures are high year round with the highest temperatures recorded between October and November (average 38°C) and the coldest months being from June to August (average 25°C). Average rainfall throughout the area is ~ 700 mm of which ~ 90% falls between November and March; July to September are commonly rainless (Ruddock, 2003; Hassan, 2004).

In the West Kimberley area the physiography is also highly variable. The Kimberley foreland province borders the Kimberley Plateau and consists of high quartzite ridges and narrow valleys of low (300m) bouldery hills. It is bordered by the Fitzroy Uplands, a zone of rugged hills, ranges and valley plains developed on mainly granitoid and metamorphic rocks ranging in relief from 100m -300m. The limestone cliffs of the Napier Range dominate topography in the Ellendale area and form the southern limit of the province (Jaques *et al.*, 1986; Griffin et al., 1993).

5. Historical Overview

Exploration for diamonds in Australia was initiated by the accidental discovery of diamonds in stream gravels at Nullagine (Western Australia) by gold prospectors in 1895. Over the next 50 years thousands of carats of diamonds were recovered from this and other alluvial deposits in various parts of the country. In the 1960's, the introduction of modern geologic exploration concepts and techniques led to the discovery of primary sources of diamond-bearing pipes (Janse, 1992). In 1969, discoveries of several alluvial diamonds in the West Kimberley region along the Lennard River (Ellendale area) prompted further diamond exploration in the area during the 1970's. A consortium of mining companies, collectively known as the Kalumburu Joint Venture (succeeded by the Ashton Joint Venture), began systematic diamond exploration throughout the Kimberley region with regional stream sediment sampling and photo interpretation (Smith, 1977). In early 1976, geologists found diamond indicator minerals (i.e. picroilmenite, chromite, chrome diopside, and pyrope garnet) in stream-gravel concentrates from the Lennard Shelf which indicated the presence of diamond-bearing host rocks. Subsequently, numerous diamondiferous olivine lamproites were found in the area; these along with the non-diamondiferous leucite lamproites comprise the Ellendale Lamproite field which currently consists of more than 100 known intrusions (see Figure 3). In August 1979, two diamonds were found in a gravel sample collected from Smoke Creek, in the East Kimberley, resulting in the discovery of alluvial deposits.

Subsequently, in October 1979, a large, high-grade diamondiferous olivine lamproite (the AK1 pipe) was discovered at the headwaters of Smoke Creek (Atkinson et al., 1984). Currently the Argyle (AK1 pipe) and Ellendale (Ellendale 9 and 4) deposits are the only producing mines. Several kimberlites in the North Kimberley Province, including the Seppelt and Ashmore pipes, have been bulk sampled with significant grade recovered however these continue to be uneconomical at current diamond prices. Careful geologic fieldwork, including the collection of over 15,000 stream and loam samples, combined with thousands of line kilometers of airborne and ground magnetic and electromagnetic surveys and subsequent testing for the presence of diamondiferous host rocks (including over 500 drill holes), has led to the discovery of hundreds of kimberlite and lamproite occurrences within and around the Kimberley craton.

In the West Kimberley region the Ellendale Diamond Mine has been in operation since 2002. Until recently it was 100% owned by the Kimberley Diamond Company NL. Currently two olivine lamproite pipes (Ellendale 9 and Ellendale 4) are being mined through open pit operations. Through to December 2006, 8 million tonnes of ore were processed resulting in the production of ~545,000 carats. Ellendale 9 has a resource of 29.3 Mt with a grade of 5.4 cpht. The diamond population is characterized by the presence of yellow diamonds, with highest value diamonds (US$370/carat) recovered from the Eastern lobe of Ellendale 9 (Kimberley Diamond Company, Annual Report 2007). Average price for diamonds sold in 2007 was US$134/carat. Exploration and re-evaluation of known lamproite pipes on the property is ongoing. Alluvial diamond deposits on the Ellendale property are being defined and mined by subsidiary company Blina Diamonds Ltd. (Kimberley Diamond Company, Annual Report 2007).

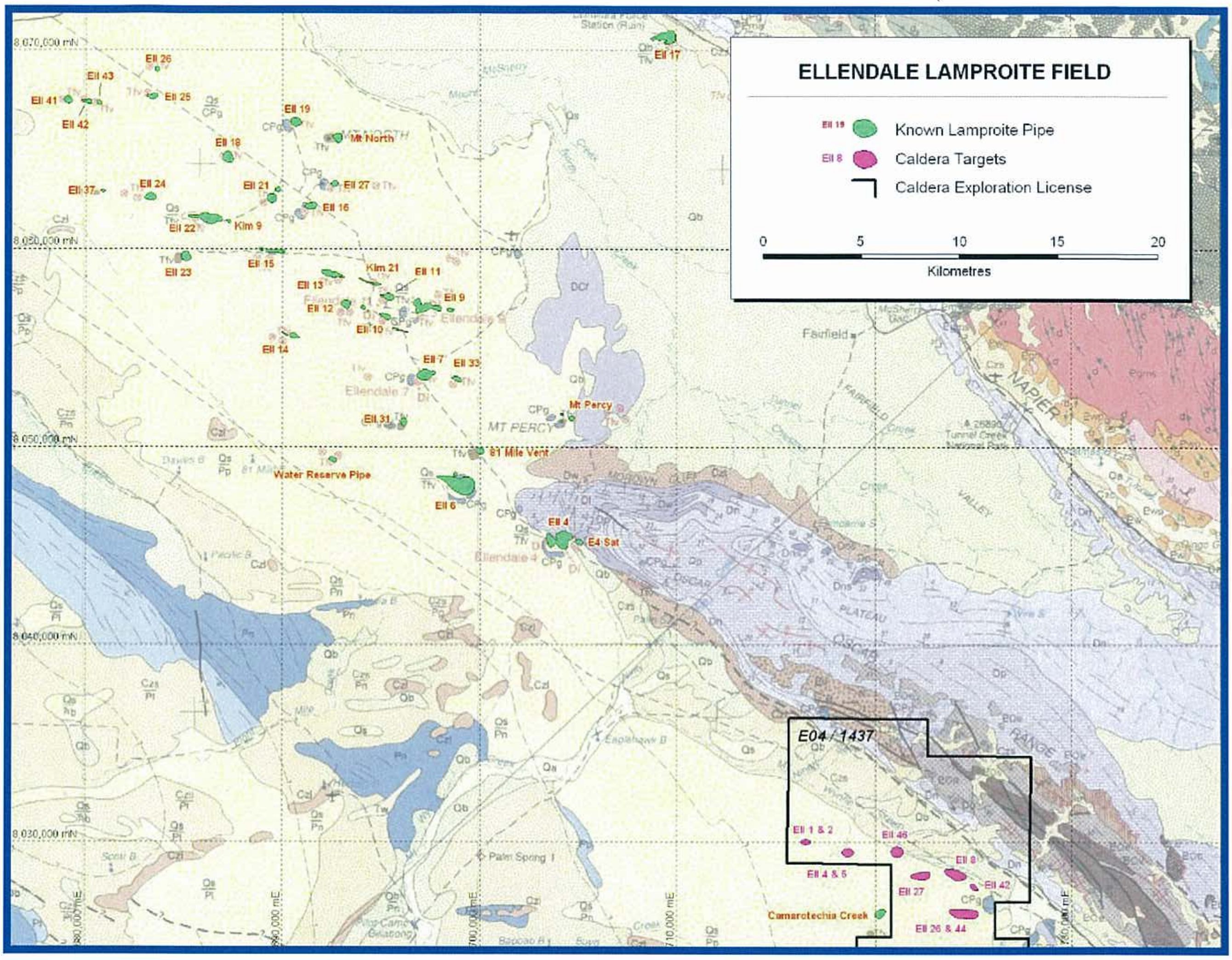


Figure 3. Location of many of the lamproite pipes in the Ellendale Diamond Field showing the major geological and structural features. Also shown are the main access routes, particularly from the proposed bulk sampling sites on E04/1437 to the processing facilities nearby to the northwest.

Bulk sampling of alluvial diamonds in gravels at the Ellendale 9 North (discovered in 2005) deposit by Blina Diamonds Ltd. yielded grades up to 52.69 cpht with an overall grade of about 20 cpht. A significant extension to diamondiferous palaeochannels in the terrace 5 alluvial system was defined by large-diameter drilling. Additionally, Blina Diamonds Ltd. discovered Ellendale 45, an olivine-rich lamproite northwest of Ellendale 9. The discovery of additional lamproite pipes in the Ellendale Diamond Field by Kimberley Diamond Company NL and Blina Diamonds Ltd. Is ongoing.

Nearby E04/1437 to the east-northeast are the Big Spring lamproites. These olivine lamproites were first located in 1971 (Derrick and Gellatly, 1972). Loam and local drainage sampling yielding abundant lamproitic chromites and traces of diamond led CRA Exploration (on behalf of the Ashton JV) to the discovery the 5 lamproites that comprise the Big Springs cluster. From 1976 to 1982 follow-up work on these pipes included ground magnetics, Turam, radiometrics, gravity, resistivity and electromagnetics, stream sampling, grid loaming, geochemistry, stream sediment geochemistry, auger and air core drilling and bulk sampling. The five bodies range from 1 to 10 ha. Bulk sampling of 650 tonnes of various materials from the pipes produced fifty stones weighing 0.55ct. CRA Exploration deemed the diamond content of the 5 pipes to be too low to be economic (Haebig, 1983). A leucite lamproite was discovered approximately 3 km to the west of the Big Springs cluster and is known as Big Spring West. Subsequent follow-up work firstly by the Ashton JV, followed by Stockdale Prospecting, revealed more lamproitic chromites further upstream in Cajuput Creek and some small diamonds in a small tributary creek. Neither group pursued this further. Three small plugs of leucite lamproite, which have not been mapped, occur in the Cajuput Creek area (Jaques et al., 1986).

In 1992 Bakarra Pty undertook a satellite imagery program of the Little Springs area. Macro-diamonds recovered from stream gravels indicated the presence of a diamondiferous diatreme (Allen, 1993). No subsequent reports were filed. Moonstone Diamond Corporation was active in the area in the 1990's. Their exploration program included sampling, minor drilling, airborne magnetics, ground magnetics, and air photo interpretation (Muggeridge, 1994). Follow-up of anomalies from the aeromagnetic data and airphoto interpretation, through sampling, ground magnetics and drilling produced negative results for kimberlite and lamproite (Muggeridge, 1992). In 1997 the property was sold to Diamond Rose NL who conducted mineralogical studies on the recovered indicators which indicated that sources other than Big Spring are present in the area. The area is considered to have continued exploration potential (Muggeridge and Temby, 1997). Fifteen lamproites intrusions have been discovered in this area and their emplacement appears to be controlled by a regional lineament which runs southeast. This lineament may be a concealed fault marking the edge of the King Leopold Mobile Zone (Jaques etal., 1986).

6. Relevant information regarding Lamproite Pipes in and immediately adjacent to tenement E04/1437

Immediately to the west of E04/1437 is the Camarotoechia Creek lamproite which is a small leucite lamproite vent of approx. 3.5 ha, located 17 km northwest of the Spielers Bore lamproite within E04/1437 (Jaques etal., 1986). The vent intrudes Permian quartzite and calcareous sandstone, both of which are exposed in small, low outcrops on the southern margin of the vent. The lamproite is overlain by 2 to 3 m of aeolian sand and 1 to 2 m of detrital pisolitic laterite (Gregory, 1980).

The vent is irregular in shape; its maximum dimensions are 325 x 200 m. The southern portion of the vent is occupied by a plug of porphyritic phlogopite-leucite lamproite, whereas the remainder is filled by bedded lapilli-tuffs. Where exposed by trenching the tuff dips 24 ° towards the centre of the vent; and it appears that the pipe narrows rapidly with depth. The tuff is a uniform, fine-grained "sandy" lapilli-tuff, that contains glassy lamproite lapilli, up to 1 cm across, and rare pumiceous blocks and sedimentary xenoliths, up to 10 cm. The proportion of lapilli is variable but commonly about 50%: the remainder consists of a few small shale xenoliths, sporadic pisoliths and pisolitic aggregates, abundant rounded quartz grains, lamproite ash and sparse interstitial clay. The lapilli are of devitrified vesicular glass, and contain minute crystallites of altered leucite, microphenocrysts of altered olivine, and flakes of phlogopite up to 2 mm.

Two varieties of lamproite are present in the magmatic core, and may represent two phases of intrusion. The first is an olivine-phlogopite-leucite lamproite that contains altered olivine, up to 1 mm, and phlogopite, up to 3 mm long, in a fine-grained groundmass that is studded with small, altered leucite euhedra, groundmass phlogopite, and grains of priderite. A fragmental specimen composed entirely of vesicular clasts of a similar rock type may be a marginal autobrecciated phase of the same intrusion. The second lamproite type is a fine-grained olivine - diopside -potassic-richterite - leucite lamproite. Phenocrysts of partly unaltered olivine, up to 2 mm long, are set in a groundmass of close-packed leucite and interstitial prisms of diopside, poikilitic potassic richterite, acicular priderite, subordinate phlogopite, and devitrified glass. This rock is variable to olivine-leucite and olivine -potassic-richterite - leucite lamproite. Three trenches were excavated, and a bulk sample of 279 m^3 of lamproite and pyroclastics treated by jig plant. No diamonds were recovered: but the heavy-mineral suite included barite, chromite, diopside, perovskite, and priderite, from the lamproite; and andalusite, corundum and almandine from (presumed) basement xenoliths. A 17 kg sample of the phlogopite-leucite lamproite yielded 6 microdiamonds after digestion in hydrofluoric acid; the largest being 0.015 CM (Gregory, 1981).

Within E04/1437 a small concealed plug of diopside-olivine-leucite lamproite is overlain by 4-5 m of aeolian sand intruding Permian siltstones. This lamproite is located 4.3 km east-southeast of Spielers Bore. Drilling outlined an oval body, approximately 225 x 125 m, or about 2.5 ha, that consists entirely of intrusive lamproite and contains no pyroclastic material. The rock is fine-grained, and contains former olivine microphenocrysts up to 0.6 mm. These phenocrysts have been pseudomorphed by talc and are in a groundmass of altered leucite, small diopside prisms, sparse phlogopite and acicular priderite and apatite. The interstitial material is a dark clay mineral. Sporadic chromite grains are also present. Five auger holes were drilled to obtain a 50 tonne bulk sample of weathered lamproite. This was treated in a jig plant, but no diamonds were recovered (Gregory, 1981) which possibly reflects the absence of tuffaceous material.

7. Geological Setting

7.1 Overview

The Kimberley block consists of the Kimberley craton surrounded by off-craton Proterozoic mobile belts (Janse, 1992). The Kimberley craton consists of a thick series of generally flat to slightly folded sedimentary and volcanic rocks of the Kimberley Group that were deposited between 1.9 and 1.6 Ga ago (Thorn, 1975). These rocks form the Kimberley Plateau. They are underlain by a basement of crystalline igneous rocks of the Lamboo Complex: starting with the Halls Creek Group of sediments which are intruded by basic and ultrabasic rocks and granites (Janse 1992). These rocks are not exposed at the surface of the plateau. Recent investigations have indicated that the basement is of Archean age (>2.5 Ga; Graham et al., 1999). Around 2.2-2.0 Ga ago the complex was intensely deformed and metamorphosed with the latest thermal events occurring ~ 1850 Ma with granite intrusions and associated volcanic rocks. These are correlated with the Barramundi Orogeny of between 1880 and 1850 Ma which cratonized the basement of the Halls Creek Mobile zone. The craton has remained tectonically stable since the Proterozoic apart from regional uplift (Thorn, 1975).

On the northeast, the craton margin is a faulted basin margin and on the north west probably a major crustal downwarp. To the southeast, the Archean craton is bounded by the Halls Creek Mobile Zone (East Kimberley Region). The Halls Creek Mobile Zone is a north-northeast trending zone approximately 400 kilometres long and 100 kilometres wide. It is bounded by two long, regional transcurrent faults: the Greenvale on the west and the Halls Creek fault on the east (Janse, 1992). Additionally, numerous anastamosing, northeast trending left lateral faults and secondary northeast-trending folds and reverse faults transect the belt (Plumb and Veevers, 1971). The zone is composed of early Proterozoic sediments, metamorphics and granites. The oldest rocks exposed in the Halls Creek belt are the Hall Creek Group which is part of the Lamboo Complex (~2.5Ga; Page, 1976). The northern part of the zone is covered by the Paleozoic sediments of the Bonaparte Basin (Jaques *et at.,* 1986).

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. The crystalline basement of the zone is the Hooper Complex which is correlated with the Lamboo complex. Vertical fault movements are characteristic of this zone (Janse, 1992). The Lennard Shelf presumably overlies the southern extension of the King Leopold Mobile Zone and is formed by flat lying Devonian limestones overlain by sparse remnants of a once extensive Permian sandstone formation. The Fitzroy Trough is a faulted graben filled with up to 8km of Paleozoic sediments topped by Devonian limestones. The King Leopold and Halls Creek mobile zones have experienced a long continuity of tectonic and depositional activity (Thorn, 1975). The West Kimberley Region has experienced widespread Tertiary to Quaternary laterization. A variety of Quaternary soils, sands, muds and alluvium sporadically cover the area.

Diamondiferous olivine lamproites have been found in or near the Halls Creek and King Leopold Mobile Zones whereas diamondiferous kimberlites have been found on the central Archean craton. Both types of diamondiferous rocks occur as dykes and pipes (Shigley et al., 2001).

7.2 Structural Geology

The Kimberley block (Kimberley craton and adjacent Halls Creek and King Leoplod Proterozoic mobile belts) is part of the larger North Australian Craton which also includes a large portion of Central Australia and the western part of Queensland. Cratonization of the Kimberley craton occurred during the Proterozoic.

The structurally stable Kimberley block is dominated by shallow basins and domes produced by cross folding. The folds are gentle, broad and open. In the North Kimberley region two prominent faults, the Barton River and Seppelt Range faults, trend north-northwest parallel to the margin of the Bonaparte basin. (Gellatly and Soufolis, 1969). The orientation of intrusives (i.e. kimberlite pipes and dykes and dolerite dykes) is sub-parallel to the Halls creek mobile Belt and the northwest Kimberley coastline (Jaques et al., 1986).

The structure and evolution of the Halls Creek Mobile Zone can be explained in terms of successive extension and compression during the Proterozoic. The Halls Creek and Greenvale Faults are major geosutures which, in the early Proterozoic, localized lithospheric stretching in the area of the present mobile zone. The resultant basin was fed by sediments derived from the stable Kimberley island-continent block. During subsequent convergence between the Kimberley and Stuart Blocks the sediments were deformed and metamorphosed and syn and post-tectonic granites were emplaced. The main pressure during convergence was directed from a few degrees west of north with the result that the major boundary faults show extensive sinistral strike-slip movement and within the mobile zone there are a number of northeast trending en-echelon shears such as the Bow River. The emplacement of intrusives appears to be strongly controlled by the structure of the Halls Creek Mobile Zone, particularly the faulting.

The King Leopold Mobile Belt is quite similar to the Halls Creek Mobile Zone. The two zones meet in the Halls Creek area where a number of major faults of the Halls Creek Mobile Zone including the Greenvale Fault, appear to swing round into the King Leopold Mobile Zone. It is interpreted that both the mobile zones were formed from the same extensional and compressional episodes (Hancock and Rutland, 1984). The distribution of the lamproites appears to be related to ancient faults and many intrusions are associated with major faults parallel to the northern margin of the Fitzroy Trough (Jaques et al., 1986).

8. Mineralisation and Deposit Types

8.1 Diamond Bearing Ultramafic and Related Rocks

The most common rock types from which diamonds are mined are kimberlites and lamproites. In the case of the West Kimberley Region of Western Australia, diamonds are mined from olivine lamproites, a rock that is very similar in nature to a kimberlite. Kimberlite (and to a lesser degree olivine lamproite) is best described as a hybrid igneous rock (Mitchell, 1986, 1989, 1991; Skinner, 1989; Scott Smith, 1995). Kimberlites and olivine lamproites are igneous in nature since they have crystallised from a molten liquid (magma) originating from the earth's upper mantle. This magma contains volatile gases and is relatively buoyant with respect to the upper mantle. As a result, pockets of magma will begin to ascend upward through the upper mantle and along a path of least resistance to the earth's surface. As the volatile charged magma ascends, the volatile gases within the magma expand, fracturing the overlying rock, continually creating and expanding its own conduit to the earth's surface. As a magma begins to ascend to the earth's surface it rips up and incorporates fragments or xenoliths of the various rock types the magma passes through on its way to surface. As the magma breaks down and incorporates these xenoliths, the chemistry and mineralogy of the original magma becomes altered or hybridised. The amount and type of foreign rock types a kimberlite/lamproite may assimilate during its ascent will determine what types of minerals are present in the kimberlite/lamproite when it erupts at surface.

When kimberlitic or lamproitic magma reaches or erupts at the earth's surface, the resulting volcanic event is typically violent, creating a broad shallow crater surrounded by a ring of volcanic ash and debris ("tuffaceous kimberlite/lamproite"). The geological feature created by the eruption is referred to as a diatreme or kimberlite pipe or lamproite pipe (Mitchell, 1986, 1989, 1991). In a simplified cross section a diatreme appears as a near vertical, roughly "carrot shaped" body of solidified magma capped by a broad shallow crater on the surface that is both ringed and filled with tuffaceous kimberlitic/lamproitic material and country rock fragments (Mitchell, 1986, 1989, 1991).

8.2 Diamond Indicator Minerals

To understand the significance of diamond indicator minerals (DIMs), it is important to understand the type of igneous rocks from which primary diamond deposits are mined. The most common rock type from which diamonds are mined are kimberlites and, to a lesser extent, olivine lamproites and orangeites. Diamond indicator minerals (DIMs) describe minerals that are common constituents of these three rock types, some of which are phenocrysts and others that are xenocrysts. For the purposes of this discussion, DIMs refer to minerals that are both characteristic and diagnostic of kimberlites and lamproites. They are present in orders of magnitude of greater abundance than the diamonds themselves and are therefore much easier to locate than diamonds.

Diamonds do not crystallise from a kimberlitic/lamproitic magma: they crystallise within a variety of diamond bearing igneous rocks in the upper mantle called peridotites and eclogites. Peridotites and eclogites are each made up of a diagnostic assemblage of minerals that crystallise under specific pressure and temperature conditions similar to those conditions necessary to form and preserve diamonds ('diamond stability field'). Diamond bearing peridotite can be further broken down into three varieties which are, in order of greatest diamond bearing significance, garnet harzburgite, chromite harzburgite and to a lesser extent, garnet lherzolite. For a kimberlite/lamproite to be diamond bearing, the primary magma must disaggregate and incorporate some amount of diamond bearing peridotite or eclogite during its ascent to the earth's surface. The type and amount of diamond bearing peridotite or eclogite the kimberlitic/lamproitic magma incorporates during its ascent will determine the diamond content or grade of that specific kimberlite/lamproite as well as the size and quality of diamonds. Diamond bearing peridotite and eclogite occur as discontinuous pods and horizons in the upper mantle, typically underlying the thickest, most stable regions of Archean continental crust or cratons (Helmstaedt, 1993). As a result, almost all of the economic diamond bearing rocks worldwide occur in the middle of stable Precambrian (typically Archean) cratons. The Kimberley Archean Craton, which is interpreted to underlie the Proterozoic Kimberley plateau region, is an example of such a craton.

DIMs include minerals that have crystallised directly from kimberlitic/lamproitic magma (phenocrysts) or mantle derived minerals (xenocrysts) that have been incorporated into the magma as it ascends to the earth's surface. Examples of DIMs are picroilmenite, titanium and magnesium rich chromite, chrome diopside, magnesium rich olivine, pyropic and eclogitic garnets. The most important DIM in the Kimberley is chromite which is strictly termed a chromian spinel. This mineral is much more robust in the alteration and extreme weathering environment of the Kimberley landscape. Chromian spinel consists of extremely high Cr and moderate amounts of Mg and Fe, and slightly less Al. A great deal of research work has been conducted on this mineral over the last 50 years and the ability of these four elements to discriminately define temperature and pressure regimes of rocks containing this mineral which were once buffered by forsteritic olivine is not questioned. In simple terms there is a restricted compositional range that chromian spinel has when it was in equilibrium at high temperatures and pressures with diamond. The discriminant fields in terms of Cr3O3, MgO, Cr/(Cr+Al), and $Fe^{2+}/(Fe^{2+}+Mg)$ for the diamond bearing Ellendale lamproites are shown in Figure 7 below. However, the weathering regime is so well advanced in the Kimberley that many chromian spinels are pervasively altered. Great care must be taken when microprobing such grains so that only pristine compositions are recorded. For a detailed analysis of the alteration of chromian spinel the reader is referred to Pooley (2004).

Weathering in the Kimberley is less merciful on some varieties of garnets. Pyrope garnets are rare in the Ellendale Diamond Field and elsewhere in the Kimberley they are only found in abundance in or immediately adjacent to the source rock. Varieties of garnet include G1, G2, G9, G10, G11, G12 pyropes as defined by Dawson and Stephens (1975), G9 and G10 pyropes as defined by Gurney (1984) and Gurney and Moore (1993) and G3, G4, G5, and G6 eclogitic garnets as defined by Dawson and Stephens (1975).

DIMs are used not only to assess the presence of kimberlites and lamproites in regional exploration programs but also to assess whether these rocks have the potential to contain diamonds. There are a limited variety of DIMs from which information pertaining to the diamond bearing potential of the host kimberlite/lamproite can be gained. Typically, these are DIMs which have been derived from diamond bearing peridotite and eclogite in the upper mantle (Mitchell, 1989). The most common examples of these would include sub-calcic, G10 Cr-pyrope garnets (harzburgitic), G9 pyrope garnets (lherzolitic), Cr-rich and Mg-rich chromite (diamond inclusion quality or "DIF" chromite from chromite or spinel harzburgite), diamond inclusion quality "DIF" eclogitic garnets and chemically distinct jadeite clinopyroxene (diagnostic of diamond bearing eclogites).

Other indicator minerals that have crystallised from a kimberlitic/lamproitic magma can provide information as to how well the diamonds in a given kimberlite/lamproite have been preserved during their ascent to surface. For instance, the presence of low iron and high magnesium picroilmenites in a kimberlite or lamproite is a positive indication that the oxidizing conditions of a kimberlitic/lamproitic magma were favourable for the preservation of diamonds during their ascent to surface in the kimberlitic magma.

8.3 Exploration

Due to the unique geometry of a kimberlite or lamproite pipe and the manner in which the magma has intruded a pre-existing host rock type, there are often differences in the physical characteristics of a kimberlite/lamproite and the host rock. Sometimes these contrasting physical characteristics are significant enough to be detected by airborne or ground geophysical surveys. Two of the most commonly used geophysical techniques are airborne or ground magnetic surveys and electromagnetic (EM) surveys. A magnetic survey measures the magnetic susceptibility and EM surveys measure the electrical conductivity (or resistivity) of the material at or near the earth's surface. When magnetic or resistivity measurements are collected at regular spaced intervals along parallel lines, the data can be plotted on a map and individual values can be compared. If a geophysical survey is conducted over an area where the bedrock and overburden geology is constant and there are no prominent structures or faults, there will be little variation in magnetic or resistivity response. However, when a kimberlite intrudes a homogenous geologic unit and erupts onto the surface, there is often a detectable change in the geophysical signature or anomalous magnetic or resistivity response over the kimberlite or lamproitic diatreme. When the data are contoured the anomalous results often occur as a circular or oval anomaly outlining the surface or near surface expression of the diatreme.

The effectiveness of geophysical methods in kimberlite/lamproite exploration is dependent on the assumption that the difference between the geophysical signature of the hosting rock unit and a potential kimberlite or lamproite is significant enough to be recognised by the geophysical techniques available. There are many examples of economic kimberlites that produce very subtle, unrecognisable geophysical responses as well as non kimberlitic geologic features and man made structures (referred to as "cultural interference") such as oil wells, fences, bridges, buildings which can produce kimberlitic/lamproitic like anomalies. In addition, in areas of thick overburden, such as the James Bay Lowlands, sand and gravel with water and placer accumulations of heavy oxide minerals can yield both magnetic and EM anomalies that are easily confused with those due to kimberlite or lamproite.

Historically, the majority of the diamond indicator minerals recovered from sampling throughout the Kimberley region were picroilmenite and chromite. In contrast, the recovery of pyrope garnet was relatively rare, hence samples containing pyrope garnet provided a more discrete tracer and were considered derived from a nearby source kimberlite/lamproite. Therefore samples containing pyrope garnet should be followed up to determine the source of the pyrope. Unfortunately in the Kimberley weathering profiles can be extremely deep. In such cases the magnetic minerals that give rise to these subtle magnetic signatures are almost completely destroyed. In these cases diamond bearing pipes will have little or no magnetic signature and the precise location of such pipes will rely heavily on the diamond indicator mineral(s) that have survived this harsh weathering regime. Competent diamond exploration companies in the Kimberley and elsewhere such as CRA, WMC, Ashton Mining Ltd and KDC have found it extremely important that other information such as DIM surveys, particularly chromite, be used in tandem with geophysical evidence to confirm whether there is other information to support the presence of a kimberlite/lamproite pipe.

9. Verification of Mineral Chemistry Data

In order to establish the veracity of the DIMs microprobe analyses were performed on individual picked grains in order to obtain their chemical composition. Individual grains were analysed using an electron microprobe equipped with an energy dispersive spectrometer (EDS). The data was collected using an accelerating voltage and current of 15 kilovolts and 5 nanoamperes respectively and a beam diameter between 1 and 3 micrometres. Prior to analysis each grain was scanned by the electron beam and imaged using backscattered electrons in order to establish an area of pristine composition. The chemical composition of each grain aids in the determination of kimberlite or lamproite provenance.

Analytical standards (one for each mineral type analysed) were used to assess the precision and quality of the microprobe analyses. The results of the analytical standards indicate that the data is of a high quality. A representative number of grains were also analysed using an electron microprobe equipped with wavelength dispersive spectrometers and no statistical difference was noted down to 0.04 to 0.08 wt% depending on the element being analysed. The quality of the data is also apparent in that the elemental ratios very closely approximate the stoichiometric formulae of those mineral types and the analyses yield acceptable analytical totals for the anhydrous minerals analysed. This work was conducted at the Centre for Microscopy and Microanalysis at the University of Western Australia.

10. Geology of Ellendale East

The West Kimberley Laraproite Province is located on the North Australian Craton and occupies an area of about 150 kilometres in length covering parts of the Proterozoic King Leopold Zone and adjacent parts of the Palaeozoic Lennard Shelf and Fitzroy Trough on the northern margin of the Canning Basin. The diamondiferous Ellendale lamproite field is the northern-most one of four known fields, the other three being Noonkanbah, Eastern Lennard Shelf, and Calwynyardah fields.

Ellendale is the largest of the known lamproite fields with more than 100 discrete intrusives identified to date. Kimberley Diamond Company (KDC) operates diamond mines on the Ellendale 4 and Ellendale 9 lamproite pipes to the north-west of the tenement. The Spielers Bore lamproite is located within the E04/1437 tenement and is diamond bearing (see Figure 4).

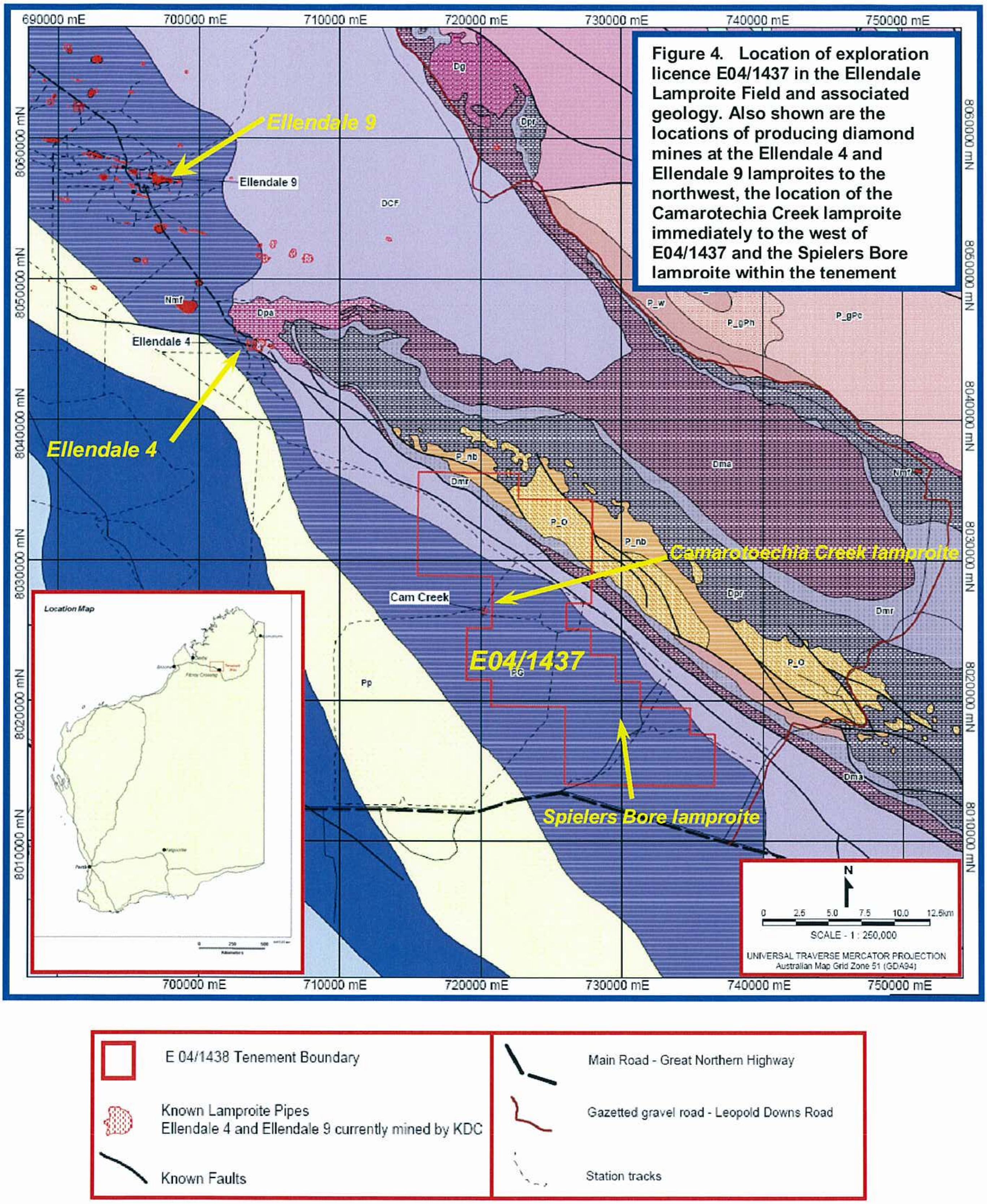


Figure 4. Location of exploration licence E04/1437 in the Ellendale Lamproite Field and associated geology. Also shown are the locations of producing diamond mines at the Ellendale 4 and Ellendale 9 lamproites to the northwest, the location of the Camarotechia Creek lamproite immediately to the west of E04/1437 and the Spielers Bore lamproite within the tenement

Detailed geological lengend to accompany Figure 4.

Nmf	FITZROY VOLCANICS: lamproite and associated pyroclastic rock
TRb	BLINA SHALE: siltstone and shale; minor phosphatic horizons
PL	LIVERINGA GROUP: sandstone and siltstone; minor conglomerate
Pn	NOONKANBAH FORMATION: siltstone, shale, and sandstone; minor carbonate
Pp	POOLE SANDSTONE: sandstone; minor siltstone
PG	GRANT GROUP: sandstone, diamictite, siltstone, conglomerate, and shale; largely glacigene
DCF	FAIRFIELD GROUP: shale, sandstone, and limestone
Dg	DEVONIAN REEF COMPLEX Siliciclastic conglomerate & sandstone associated with reefal carbonate
Dpa	DEVONIAN REEF COMPLEX: Famennian reefal carbonate, platform facies
Dma	DEVONIAN REEF COMPLEX: Famennian reefal carbonate, marginal slope and basinal facies
Dmr	DEVONIAN REEF COMPLEX: Givetian and Frasnian reefal carbonate, marginal slope and basinal facies
Dpr	DEVONIAN REEF COMPLEX: Givetian and Frasnian reefal carbonate, platform facies
P_U	MOUNT HOUSE GROUP: tillite, sandstone, siltstone, and shale; minor sandy dolomite
P_O	OSCAR RANGE GROUP: sandstone, siltstone, shale, conglomerate, and altered mafic igneous rock
P_Kp	PENTECOST SANDSTONE: sandstone and pebbly sandstone; minor conglomerate, arkose, siltstone, and shale
P_Kw	WARTON SANDSTONE: sandstone; minor hematitic siltstone
P_Kc	CARSON VOLCANICS: basalt, amygdaloidal basalt, basaltic volcaniclastic rock
P_Kl	KING LEOPOLD SANDSTONE: sandstone and pebbly sandstone; minor conglomerate and siltstone
P_S	SPEEWAH GROUP: sandstone, feldspathic sandstone, siltstone, and mudstone, minor phyllite and pebble
P_w	WHITEWATER VOLCANICS: dacite and rhyodacite lava, and volcaniclastic sedimentary rocks
P_m	MARBOO FORMATION: low- to high-grade metamorphosed turbiditic sandstone, siltstone, and mudstone
P_gPc	HOOPER COMPLEX: Fine- to coarse-grained biotite(-hornblende) monzogranite, syenogranite, granodiorite, and tonalite;
P_nb	NINETY SEVEN MILE FORMATION and ELIMBERRIE FORMATION: sandstone, diamictite, siltstone, limestone

Camarotoechia Creek pipe lies to the west of the tenement. The Oscar Fault, a major basement fault lying along the southern margin of the Oscar Range, which was active from Proterozoic times through to the Jurassic, has controlled lamproite emplacement. The lamproites intrusions were emplaced during the Miocene about 20 million years ago.

The southern edge of the Oscar Range, an exhumed reef complex, forms the northern portion of the tenement and exposes Devonian Limestone of the Pillara and Napier Formations. To the south, dunal sands and black soils overly Upper Palaeozoic and Triassic sedimentary rocks of the Lennard Shelf and Fitzroy Trough which are part of the Canning Basin. Figure 4 shows the regional geological setting of the tenement.

A great deal of focused exploration activity has been conducted by Caldera Resources Pty Ltd. or its joint venture partners on this highly prospective tenement. The nature of this section is to describe briefly the diamond exploration activities undertaken from November 2004 to the present day. It is the author's intention to highlight the successful exploration milestones that have been accomplished by Caldera Resources Inc. that place the company in a strategic position to conduct a detailed diamond bulk sampling programme on the tenement.

10.1 Exploration, Drilling Activity and Sampling in the Ellendale East Project

Caldera commenced work on the tenement during 2004 with the initial reporting period being 17th November 2004 to 15th November 2005. Systematic diamond exploration has been conducted on the tenement. The work initially included a loam sampling survey undertaken during 2004 and 2005 which sampled 16 magnetic targets that were identified from aeromagnetic data purchased from the original tenement holder. This data consisted of a 60m line-spaced survey (see Figure 5). Two neutral 'targets' were also sampled, plus a sample taken over the nearby Camarotoechia Creek Lamproite. Chromites (chromian spinel) were recovered from a number of the anomalies, including one of the 'neutral' targets. Interestingly, no chromites were recovered from the sample taken from the Camarotoechia Creek Lamproite. This was explained by the relatively small sample size taken however it is most likely due to the advanced weathering profile that exists in this area and the complete breakdown of the chromites to hydrated chromian oxides.

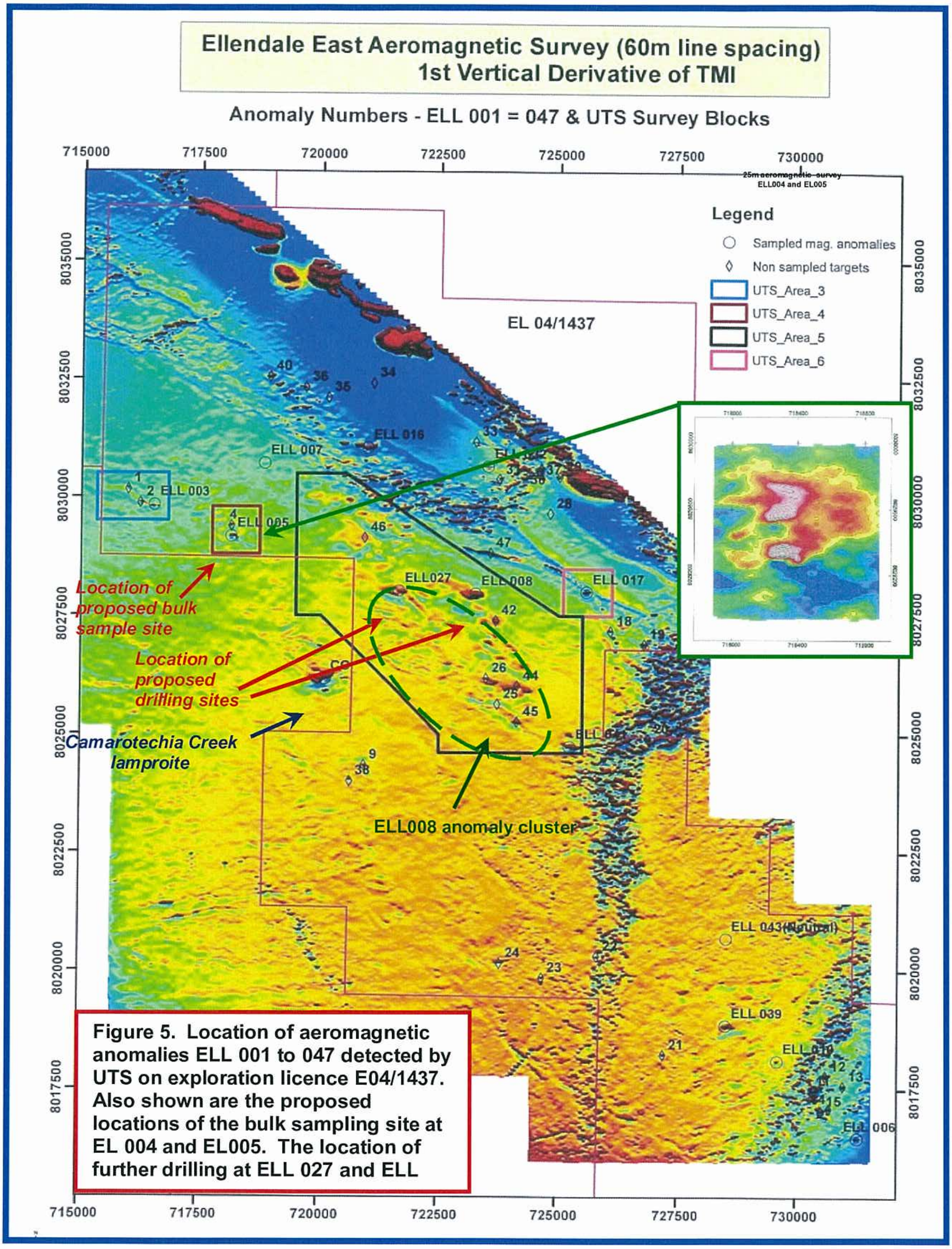


Figure 5. Location of aeromagnetic anomalies ELL 001 to 047 detected by UTS on exploration licence E04/1437. Also shown are the proposed locations of the bulk sampling site at EL 004 and EL005. The location of further drilling at ELL 027 and ELL

This initial work was followed by four 25-metre line-spaced aeromagnetic survey which was flown by UTS in 2005 and specifically designed to clarify a number of aeromagnetic targets (see inset in Figure 5 showing the increased resolution of the target). This survey was followed by an aircore drilling programme which targeted the results of the UTS 25m aeromagnetic survey and consisted of 10 of the magnetic targets being drilled. Fifteen aircore holes with a total of 1,007 metres were completed. Eleven of the aircore holes intersected an unusual horizon of 'grey material'.

Depth of intersection and thickness of this unit varied. The grey material is described as 'shale – possibly crater' sequence in the drill logs.

Material from anomaly ELL008 and drill spoil from ELL008, ELLOO8B. ELL027B, and ELL044 were submitted for caustic fusion. A sample from ELL027B returned one diamond fragment. Indicator mineral analyses of drill chips taken from the 'grey material' horizons returned numerous chromites. The chemistry of these chromites is wholly consistent with the chemistry of the populations recorded by chromites recorded from the diamond bearing lamproites of the Ellendale Diamond Field (see Figure 7 and later discussion in Section 10.4). Furthermore a series of polished thin sections from drill-core taken from these selected horizons of 'grey material' indicated extremely deep and aggressive scratches on the highly polished surface of the thin-sections. Examination of these surfaces using a scanning electron microscope fitted with a cathodoluminescence detector indicated the presence of numerous fragments of microdiamonds. The shape of these fragments is consistent with the impact shattering of larger microdiamonds or diamonds.

Table 1. Summary of work undertaken by Caldera on E04/1437 to November 2005

Anomaly	Loam Sampled	Surface (loam) Microprobe	Drilled (aircore)	Drill Sample Microprobe Data	Petrology	Microcdiamond Analyses (caustic fusion)	Microdiamond Scanning (PTS)
ELL 001	Y	not available					
ELL 002			1 DH	23 chromites			
ELL 003	Y	13 chromites					
ELL 004	Y	not available	1 DH	24 chramites			
ELL 005A+B	Y	22 chromites	3DH	43 chromites			
ELL 006	Y	not available					
ELL 007							
ELL 008	Y	not available	2Dh	#8 - 36 chromites #8B-34 chromites	#3B	Y=#8+8B	Y - 8 PTS
ELL 010	Y	13 chromites					
ELL 016	Y	not available					
ELL 017	Y	19 chromtes	2DH				
ELL 026			1DH	11 chromites			
ELL 027	Y	not available	2DH	#27B - 13 -chromites		#27B – 1 diamond fragment	Y - 1 PTS
ELL 032	Y	2 chromites					
ELL 039	Y	13 chromites					
ELL 041	Y	not available					
ELL 042			1DH	11 chromites			Y - 1 PTS
ELL 044			1DH	31 chromites		Y	
ELL 045	Y	not available					
ELL 046	Y	not available	1DH	not available			
ELL 048	Y	not available					
	16		15DH		1	4	10

Caldera's 2005 work identified two principle areas of interest - the ELL004 cluster and the ELL008 cluster of anomalies. Most aircore work was focused within the ELL008 cluster, but three holes were also drilled into ELL004 cluster. In both anomalies, aircore drilling intersected a 'grey horizon' which was atypical of the expected Grant Group sediments. A petrological study of this material indicated that this material has a "rather jumbled appearance which was possibly due to soft-sediment deformation during compaction or phreatic volcanic activity. A combination of the two processes is most likely." This study, combined with the presence of numerous diamond indicator chromites and the evidence of microdiamond fragments in polished thin sections and the recovery of one microdiamond from a caustic fusion sample indicated that the 'grey material' is better described as volcanoclastic quartz tuff that was likely to have suffered some reworking immediately proximal to source.

In 2006 Blina Diamonds NL conducted a programme of technical work on behalf of a joint venture between Caldera Resources Incorporated and Resource and Investment NL. The aim of the 2006 programme was to re-sample this horizon of interest identified by Caldera and to establish the cause of the magnetic anomalies. The 2006 program consisted of 46 drill-holes for 2.665 m which tested 28 priorotised targets. Figure 6 shows the entire group of magnetic anomalies on E04/1437 and summarises the exploration work undertaken to date. The ELL008 cluster was the main target area. This group of discrete magnetic anomalies lies within a larger, magnetically anomalous zone that covers an area of approx. 200 hectares. The ELL008 anomaly is teardrop-shaped, elongated from northwest to southeast, and about 4.3 km long by up to 2.5 km wide (see Figure 5). All drill-holes within the anomaly, except for those that collapsed prematurely, intersected mostly grey, matrix-rich, poorly-sorted sediment. This material was identified in Blina's drill-logs as a 'greywacke' with 15 to 20% clay and described as a clay-rich with a high proportion of quartz and also containing feldspar and lithic fragments as well as granite, granodiorite and granitic

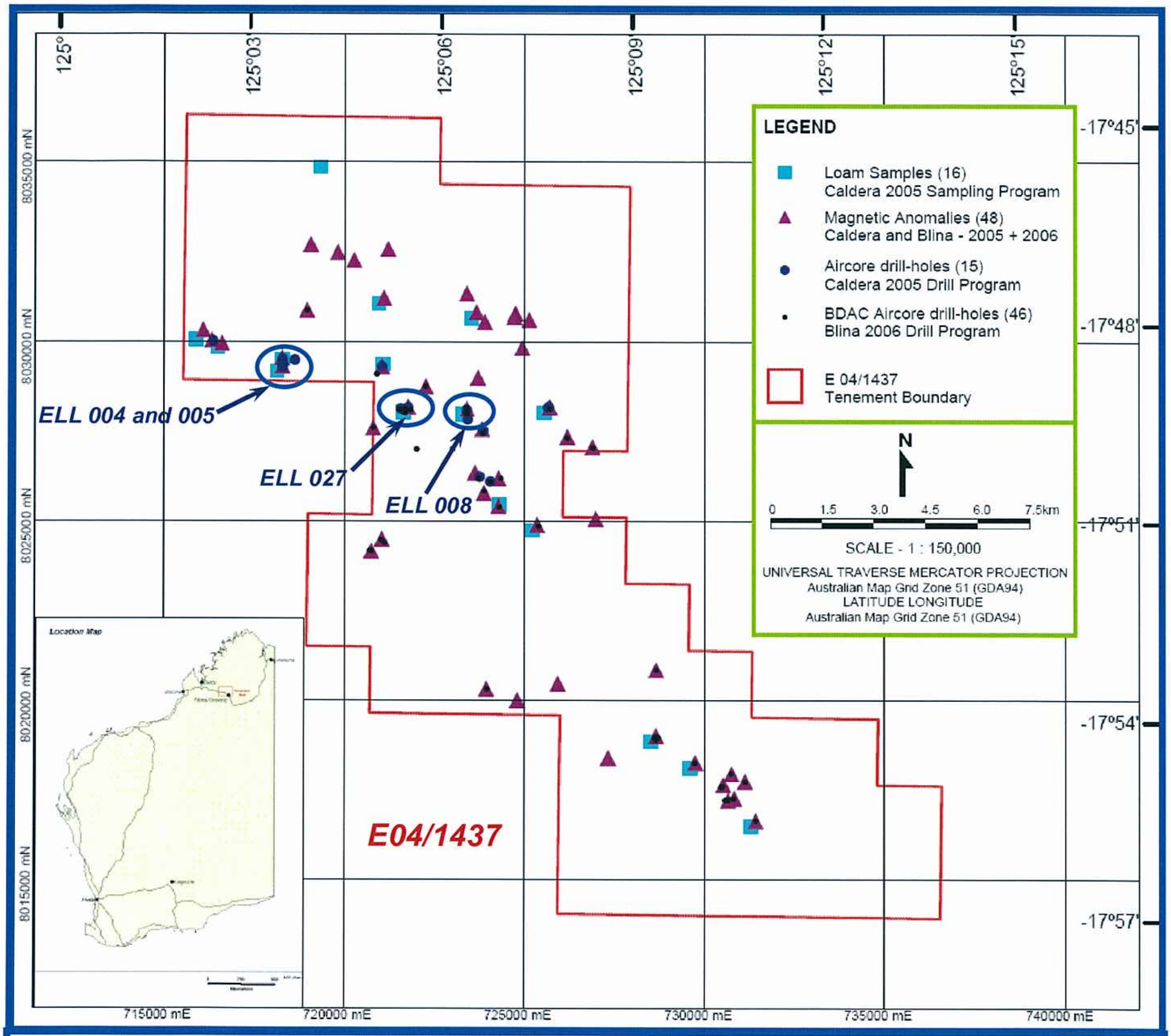


Figure 6. Location of magnetic anomalies detected on E04/1437. Also shown are the location of the loam samples collected by Caldera and the position of Caldera's 2005 air-core drill holes. The 2006 air-core drill holes of Blina Diamonds NL are also shown.

gneiss. The quartz grains range in size from fine-grained to very coarse (greater than 5mm) and is present as two quartz groups - a well, rounded and slightly frosted fraction plus a coarse, more angular glassy fraction. In places, especially nearer the top of the horizon the sediment is very feldspar-rich. Although the horizon varies considerably between drill-holes, there are common features in the profiles which include:

- greywacke which lies beneath typical intersections of Grant Group sandstone, including medium grained, well-sorted quartz sandstone, feldspathic quartz sandstone, and fine grained clay-rich sandstone. All these sandstone types are commonly encountered in drill holes throughout the Ellendale Diamond Field,

- some drill-holes penetrated through the greywacke horizon and intersected medium-grained porous sandstone. Typically there is a zone of interbedding of the greywacke with the sandstone before encountering sandstone only.

- the drill-holes in the north-western section of the ELL008 cluster anomaly encounter greywacke with coarse quartz and relatively more lithic fragments than those holes in the south-eastern portion of the cluster which are predominantly finer-grained, with more matrix and finer-grained quartz.

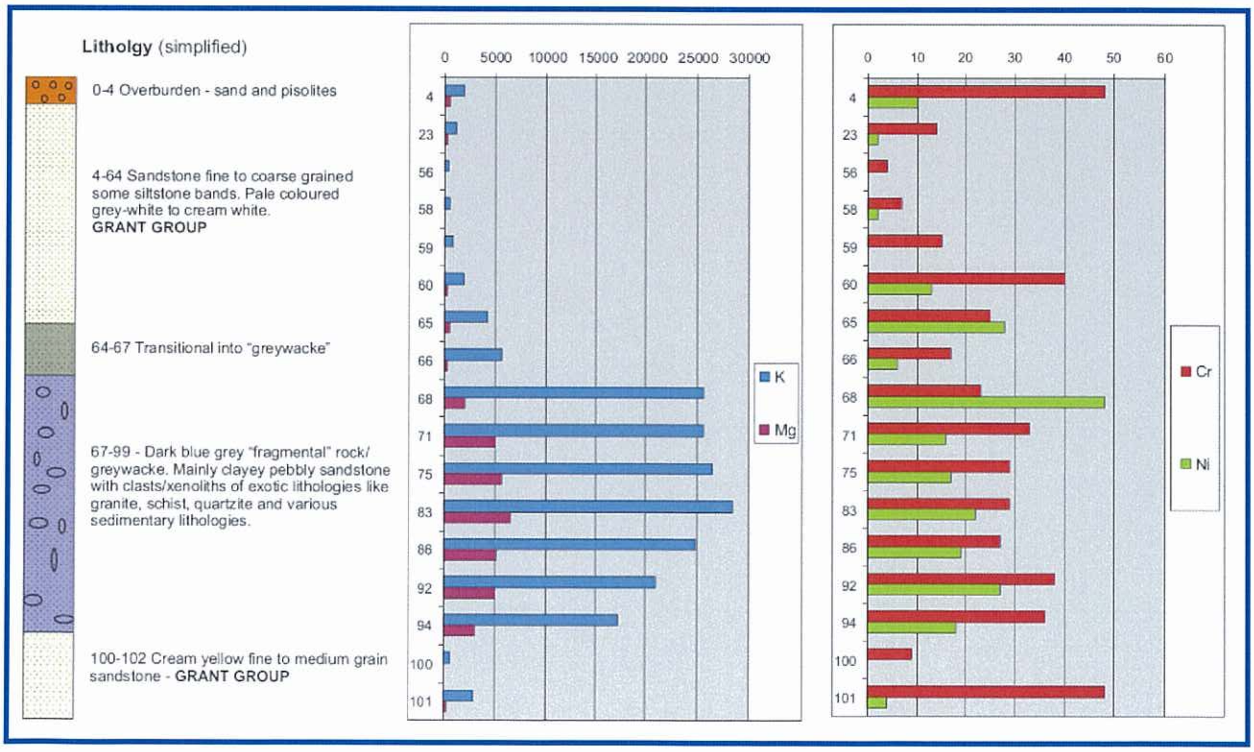
- the magnetic susceptibility of the regolith in the upper portion of each hole varied with some lateritic horizons returning measurements of up to 40 x lO^{-5} SI units, however the highest readings (up to 300 x lO^{-5} SI units) were always associated with the greywacke horizons containing numerous fragments of granite and granodiorite.

Drilling outside of the ELL008 cluster at anomaly ELL039 intersected a 10 m thick greywacke horizon below 47 m depth consisting of a fine-grained, matrix-rich sediment with possibly very small lithic fragments. Most drill-holes into magnetic anomalies outside the EL008 cluster were less than 30 m in depth which was due to difficult ground conditions causing the drill-holes to collapse. Three holes were drilled in magnetically quiet areas away from magnetic targets. Two stratigraphic holes were drilled just beyond the boundary of the ELL008 cluster anomaly to the north and west and neither hole intersected the greywacke horizon. This indicates that the greywacke horizon is the most likely cause of the magnetic anomaly that constitutes the ELL008 cluster.

Caldera had also intersected the unusual grey 'sediment' horizon in a second cluster of anomalies around ELL004. Unfortunately, thunderstorms in the project area ended the 2006 drill programme prematurely and this cluster of anomalies was not tested.

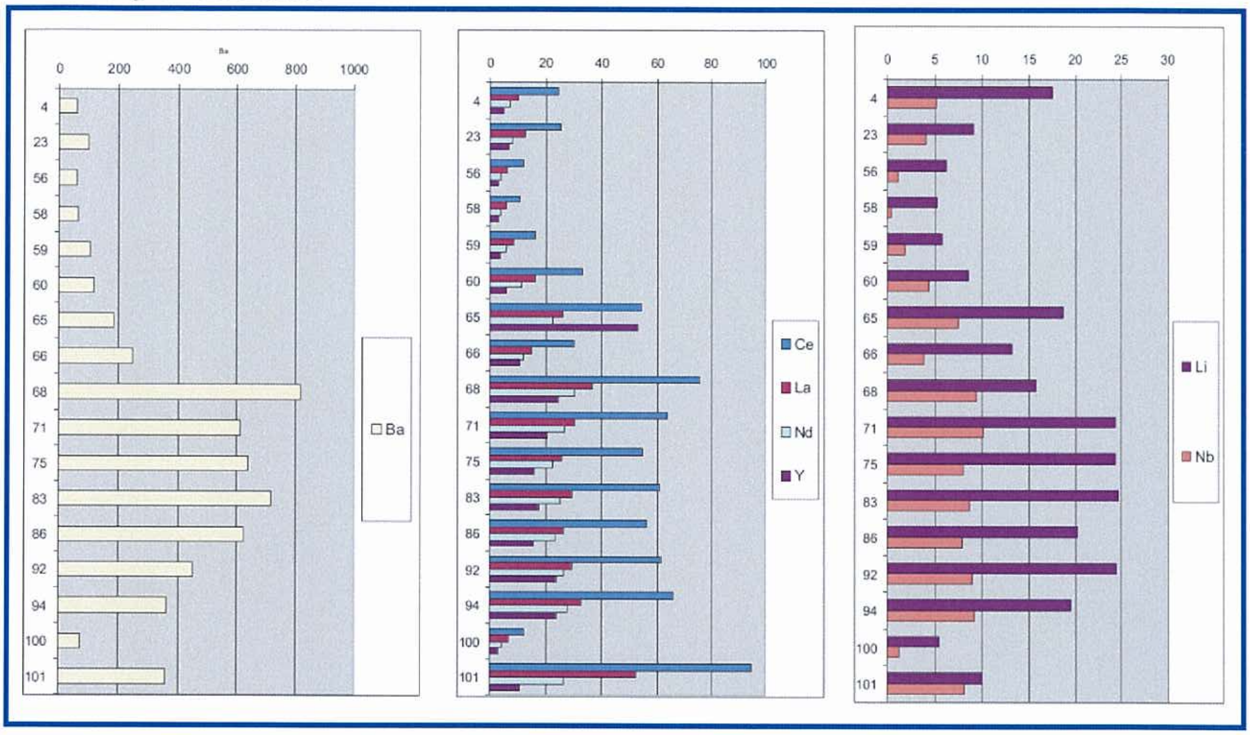
10.2 Geochemistry of Drill Hole Samples.

A total of 373 samples of drill spoil were taken from various horizons on each drill-hole. These were submitted to Genalysis and analysed for 14 elements. A typical example of the geochemical profile (in ppm) through the greywacke horizon in the sandstones of the Grant Formation is presented below.



The elements selected comprised a suite of kimberlitic/lamproitic geochemical indicator elements, including niobium, chromium. nickel, lanthanum, cerium, neodymium. titanium, barium, and magnesium, and also granitic indicator elements including aluminium, lithium, potassium, yttrium, and zircon.

The contrast in chemistries of the two rock units is striking. Firstly, the effects of element migration due to the fluctuating conditions of the water table are clearly defined producing an apparent vertical smearing of the element profiles. However once this mask is removed the extremely high K, Cr, Ba, Ce and Li amomalies are evident. This combined with the apparent lesser anomalies of Ni, Mg, La, Nd, Y and Nb indicates that the greywacke horizon is not a normal sediment. This rock is highly anomalous in elements that are typical of lamproitic rocks which have been diluted by the chemistry of the granitic clasts.



It is relevant that in this case the volcanic particles of many sediments may have been transported by fluids and incorporated directly into the accumulating sediments proximal to the erupting vents. In phreato-volcanic fields such as would have existed at the time of eruption of the lamproite the extremely high humidity produced by the volatiles exuded from the numerous eruptive vents would have produced a chaotic mélange of air-fall, muds and other sediments. The prolific grewacke/sandstone banding at the base of the 'grey material' horizon is evidence of the intermittent volcanic activity prior to the main eruptive event that caused the intrusion of the lamproite. The anomalous geochemical responses in elements that reflect an ultramafic (lamproitic) source such as Ba and Cr cannot be dimissed. These rocks were probably once more distinctively pyroclastic than epiclastic in nature. A rock that has been clearly formed in this way is properly called a tuffaceous sandstone or tuff. Whether this 'grey material' is a greywacke or volcanoclastic quartz tuff is academic. Importantly the nature of the 'grey material' horizon and the character of the sediment itself is wholly consistent with the presence of diamond indicator chromites, the shape and strength of the magnetic anomaly and the presence of microdiamonds.

10.3 Indicator Mineral and Microdiamond Sampling

The samples from the 2006 aircore drilling programme were sent to Diatech Processing Laboratory in Perth for initial processing. This laboratory washed and sized the concentrate which was then sent to Blina's Ascidian Laboratory where it was observed for indicator minerals. The minus 0.3mm fraction was sent straight to Ascidian Laboratory for the full microdiamond processing treatment, including sodium peroxide fusion and observation.

The decision to do the initial part of the processing at an independent laboratory was to lessen the opportunity for these samples to be contaminated. It is of interest that the Ascidian Laboratory treated a total of 1300 kilograms from 4 drill holes with no diamond recovery, but did not recover any micro-diamonds whereas the more extensive work of Caldera Resources processed a total of 2670.4 kilograms of drill sample from 9 targets through the Diatech DMS plant, resulting in 38.59 kilograms of heavy mineral concentrates being observed for indicator minerals and diamond, resulting in the recovery of three micro-diamonds and numerous diamond indicator chromites. Only a small proportion of the samples taken from the greywacke horizon were examined by Blina Diamonds NL.

10.4 Indicator Mineral Results

Observation of the concentrate from the plus 0.3mm fraction returned one confirmed chromite and three samples with possible chromites. These grains contain interesting visual features that suggest they could be lamproite-derived. A selection of these possible chromite grains were submitted for semi-quantitative SEM analyses. The mineral chemistry results support the visual determination. These results together with the quantitative chromite work conducted by Caldera are presented in Figure 7.

On the $Fe^{2+}/(Fe^{2+}+Mg)$ and $Cr/(Cr+Al)$ ratio discrimant analysis (Figure 7) five of the Blina analyses coincide within the area attributed to mantle-derived spinel data. Three of the analyses overlap with areas defined by data from Ellendale 4 and Ellendale 9 diamond bearing lamproites. On the Cr_2O_3 and MgO discriminant analysis (Figure 7), again five of the analyses fall within the area outlined by the Ellendale 4 and Ellendale 9 diamond bearing lamproites however below the Diamond Inclusion Field. In contrast the data produced by Caldera is from a greater population of chromite analyses and indicates that many chromite mineral chemistries fall into the discriminant field formed by the Ellendale 4 and Ellendale 9 diamond bearing lamproitic chromites. Furthermore, several compositions also fall within the Diamond Inclusion Field. This difference in the number of chromites and nature of these two sets of results is most likely due to the larger range of chromites examined by Caldera (down to sizes < 0.2mm), their quantitative electron beam microanalysis procedure and quality control during processing of samples.

Surprisingly, Blina Diamonds NL did not report any microdiamonds in the limited number of samples that they processed. This is in sharp contrast to the microdiamonds detected by Caldera from the same anomalies. This disparity is likely due to the more precise processing techniques that were employed by Caldera and their fastidious quality control which is also supported by the greater number of chromite indicators recovered by Caldera and the high quality of their mineral data from the same anomalies. It is apparent that the latter phases of the exploration programme conducted by Blina Diamonds NL on E04/1437 was during an aggressive takeover period of the Ellendale Diamond Field by Gem Diamonds of the United Kingdom. This may have affected to some degree, the normal efficient operations of the Kimberley Diamond Company.

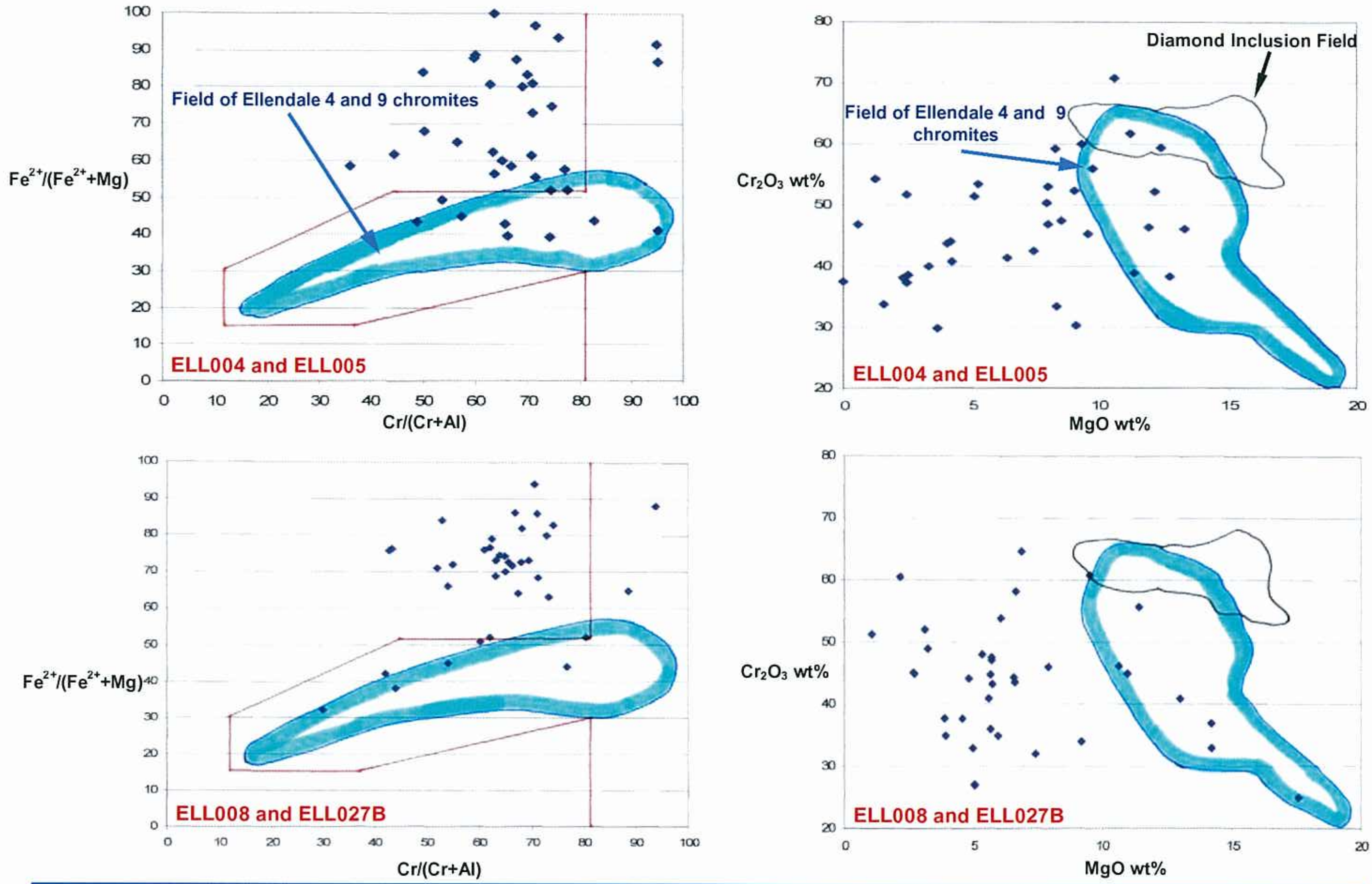


Figure 7. Chromite mineral chemistry in terms of $Fe^{2+}/(Fe^{2+}+Mg)$ and Cr/(Cr+Al) ratios together with Cr_2O_3 and MgO discrimant analysis from anomalies ELL004-0005 and ELL008-027B at Ellendale East. Also shown are the corresponding fields of Ellendale 4 and 9 chromites.

11. Discussion of Results

11.1 Resource Potential

Caldera Resources Pty Ltd, the wholly owned subsidiary of Caldera Resources Inc., has located two diamond bearing volcanoclastic quartz tuffs in a known diamond bearing lamproite field – the Ellendale Diamond Field. Based on close-spaced low-level aeromagnetic data an extremely large anomaly has been discovered (ELL008-027B). This aeromagnetic anomaly consists of two main domains which are intimately linked to form an aeromagnetic feature which is approximately 4.3 kms long and 2.5 kms wide. The main axis of the anomaly trends east-west in a narrow corridor of aeromagnetic anomalies that trend northwest. This directional axis is identical to that of the Ellendale 4 and Ellendale 9 Pipes which are owned and operated by Kimberley Diamond Company NL. A minor component of the regional structural geology in the Ellendale diamond field is the critical east- northeast linear feature which when coupled with the major northwest trending structural lineament has provided an access pathway for the majority of the diamond bearing lamproites in this field. In this case, the critical minor structural component cuts directly through the known Camarotoeicha Creek lamproite immediately to the west of E04/1437 and Caldera's ELL008-027B find to the east.

The Ellendale diamond bearing lamproites are characteristically different from kimberlites. Pyroclastic lamproites are maar-type volcanic eruptions. These phreatomagmatic explosive eruptions result from the interaction of highly charged fluid-rich magmas with the water saturated country rocks into which they are intruding. At the surface the vent enlarges by inward slumping of wall rocks along low angle slip faults. The country rocks consisting of sandstones and siltstones disaggregate to form quartz rich lapilli tuffs.

Subsequently the eruption of fragmental juvenile material forms lamproite lapilli tuffs. These sequences of pyroclastic rocks are phreatically erupting into an atmosphere charged with gases and water. Mud slides and reworking of the pyrocastic sediments is inevitable resulting in the proximal dispersion of the pyrocastics to form reworked tuffaceous sediments (see Figure 8). Eventually the build up of these thick sequences of pyroclastic tuffs isolates the groundwater from the vent causing the magma to degas resulting in the eruption of a more passive lamproitic magma within the vent. The lava lakes cool slowly. Millions of years of weathering and erosion strips the upper levels of the pipe(s) causing heavy minerals and diamonds to be enriched in the top few metres of the pipe and in the further reworked proximal sediments.

Interestingly, surface sampling of the Ellendale 4 and Ellendale 9 Pipes some 25 kms to the northwest indicates higher diamond grades above pyroclastic (tuffaceous) rocks than above magmatic lamproite, for example:

Diamond Grade (carats per 100 t)	Lamproite Tuff	Magmatic Lamproite
Ellendale 4	**25**	**< 5**
Ellendale 9	**10**	**< 5**

This implies that substantially more diamonds are present in the tuffaceous material of these eruptions than in the primary lamproite itself. Any resource shown to have a reasonable volume of tuffaceous material which is diamond bearing is extremely prospective.

At ELL008-027B and ELL004-005 drill holes have intersected volcanoclastic quartz tuff at approx. 60 to 70 metres. These materials are diamond bearing. Presumably the olivine-rich lapilli tuff lies below the quartz-rich lapilli tuff and somewhere within this complex lies the magmatic lamproite that produced these pyroclastics. It is highly likely that the low-level aeromagnetic anomaly described above of some 500 hectares or more is outlining an extremely large lamproitic resource. Furthermore, the discovery of diamond fragments in drill cuttings from this resource is remarkable considering that only relatively small amounts of the tuffaceous material at ELL004-005 has been sampled. This potential resource requires immediate systematic bulk testing and further drilling of specific targets at ELL008-027B.

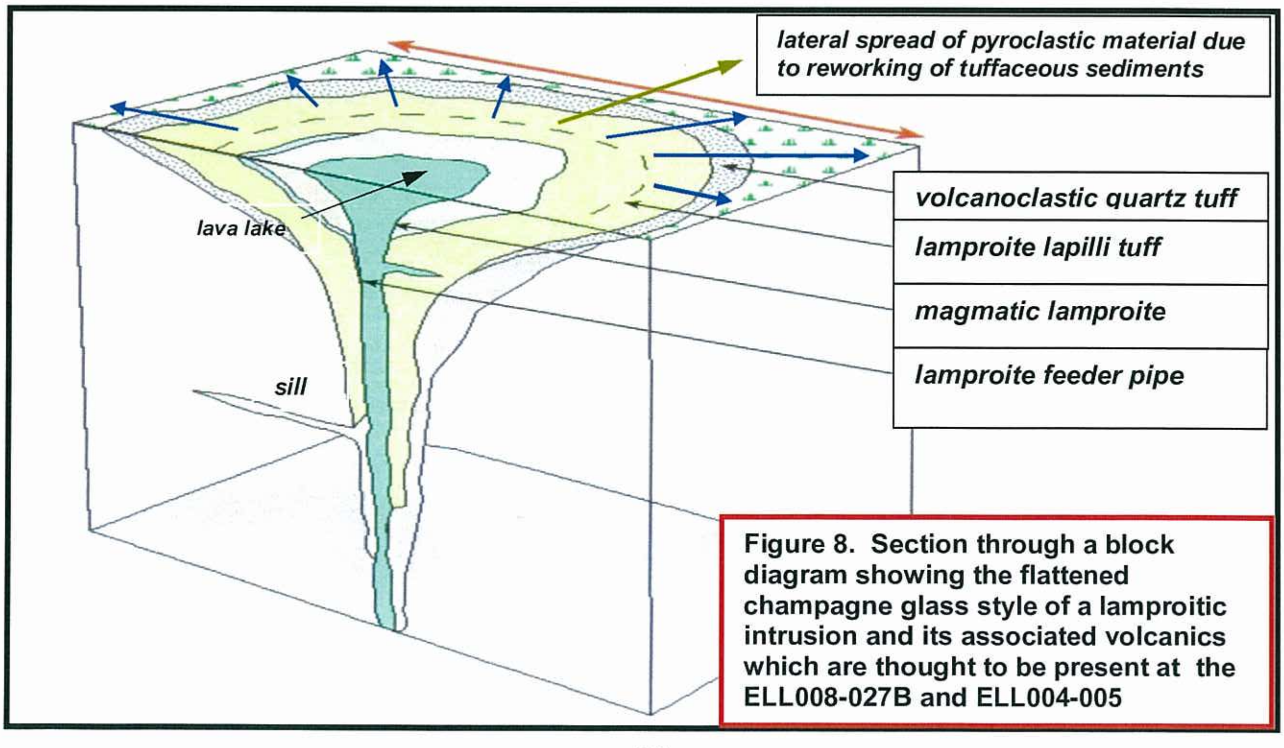


Figure 8. Section through a block diagram showing the flattened champagne glass style of a lamproitic intrusion and its associated volcanics which are thought to be present at the ELL008-027B and ELL004-005

11.2 Diamond Indicator Minerals

Chromian spinel has been established as the most useful diamond indicator in exploration programmes in the West Kimberley. It is present in orders of magnitude of greater abundance than the diamonds themselves. It is relatively stable under normal temperatures and pressures and often decomposes relatively slowly with respect to other diamond indicators such as pyrope garnet. Its pristine chemical composition can be used to reflect the temperature and pressure regime under which it crystallised and therefore indicate whether it was originally associated with diamonds. Chromian spinels from Caldera's ELL 008-027B and ELL004-005 anomalies have a very similar element distribution in terms of Cr/(Cr+Al) and Fe/(Fe+Mg) ratios compared with those from the diamond bearing lamproites of Ellendale 4 and Ellendale 9.

In addition to ELL 008-027B and ELL004-005, there are six other aeromagnetic anomalies that have produced volcanoclastic quartz tuff in Caldera's leases. The chromian spinels from these rocks also have very similar Cr/(Cr+Al) and Fe/(Fe+Mg) ratios compared with those from the diamond bearing lamproites Ellendale 4 and Ellendale 9. The diamond bearing Spielers Bore lamproite lies amongst Caldera's aeromagnetic anomalies and it too produces chromian spinels whose mineral chemistry confirms its diamond bearing potential.

Immediately outside the western boundary of Caldera's lease lies the long established Camarotoeicha Creek lamproite. This lamproite is also characterised by an aeromagnetic anomaly which is similar to the aeromagnetic anomalies discovered by Caldera however, it consists wholly of magmatic lamproite and probably contains very few diamonds. It appears that the associated tuffs which may have contained abundant diamonds have been eroded away which was possibly the result of differential uplift in the immediate area. The fact that the Caldera anomalies contain substantial thicknesses of volcanoclastic quartz tuffs not only implies a high potential for the discovery of a primary diamond resource but it also indicates that the Caldera anomalies are relatively well preserved. This implies that the Caldera corridor of lamproitic anomalies was once a geomorphological low compared with the immediate western palaeo-surface. The western sector of the Caldera leases may well contain the eroded diamond bearing alluvial detritus of the upper levels of the Camarotoeicha Creek lamproite.

12. Mineral Processing and Metallurgical Testing

Mineral processing has been conducted on all samples taken from the Ellendale East property in order to retrieve DIMs. Some samples have been subjected to fusion to recover diamonds and microdiamonds.

13. Mineral Resource and Mineral Reserve Estimates

No mineral resources or reserves estimates have been conducted on the Ellendale East tenement.

14. Synopsis

14.1 Critical Factors for Diamond Potential in Ellendale East

1. *Well defined aeromagnetic anomalies:* E04/1437 at Ellendale East contains a number of discrete low-level aeromagnetic anomalies whose shape and areal extent are strikingly similar to the shape and areal extent of the presently mined diamond bearing lamproites of Ellendale 4 and Ellendale 9 some 25kms to the northwest.

2. *Presence of volcanoclastic tuffs*: seven anomalies tested to date contain substantial thicknesses of reworked volcanoclastic quartz tuff. Preliminary testing of drill chips has located fragments of diamonds in two of these anomalies. It is expected that with proper bulk sampling techniques that all the anomalies

containing volcanoclastic quartz tuff will prove positive.

3. *Appropriate structural control*: detailed low-level aeromagnetic maps of the Caldera lease and the surrounding environment indicate a precise and systematic control of the emplacement of lamproites in Ellendale East Field. This control is identical to that found further to the northeast in the Ellendale Diamond Field proper. It is clearly evident from aeromagnetic data that the emplacement mechanism involving the injection of the lamproitic magma which has produced the largest and richest primary diamond deposits is controlled by two lineaments.
4. *Diamond associated chromian spinels:* all the anomalies tested to date contain chromian spinels whose compositions indicate that they are in equilibrium with diamond. These chromian spinels are strikingly similar to those recovered from the Ellendale 4 and Ellendale 9 diamond mines.
5. *Province of known diamond bearing lamproites:* over 100 lamproite pipes have been discovered in the Ellendale Diamond Field. A number of these are successfully producing some extraordinarily beautiful gem quality yellow diamonds.

Caldera has discovered an additional seven aeromagnetic anomalies that contain volcanoclastic quartz tuff and diamond indicator minerals, two of these anomalies also contain diamonds, one a fragment of a yellow diamond. Caldera's work has established the southern portion of the Ellendale Diamond Field as a potential diamond bearing entity in its own right. At least two of these anomalies warrant bulk testing and a further two require strategic deep RC drilling.

14.2 Recommendations

The West Kimberley region of northern Western Australia area represents a favourable area for the presence of diamondiferous lamproites 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 lamproites including the Ellendale diamond mines. The Ellendale East project contains a number of tenement blocks that are considered prospective for the presence of diamondiferous lamproites. The presence of known lamproite occurrences nearby and the character of their high quality DIMs indicates that the high quality DIMs recoverd from drilling at Ellendale East coupled with the presence of a number of unexplained geophysical anomalies warrants a bulk sampling programme of specific targets and further exploration of a number of other targets on the property..

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 preparation 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.

The Phase 2 program should consist of a) locating specific sites in the prepared areas to commence bulk sampling b) bulk sampling and stock piling of ore material, c) dispatch and processing of no less than 500 tonnes of ore material at the Blina diamond processing facility nearby (Blina's diamond processing plant at Ellendale should not be confused with the Blina's Ascidian Diamond laboratory in Perth that previously conducted work on Caldera's East Ellendale samples, the two diamond recovery processors are completely different, where the Ellendale recovery process is ideally suited for the recovery of bulk samples), and d) 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.

This programme of work will consist of:

BUDGET ESTIMATE FOR REVERSE CIRCULATION DRILL PROGRAM OF FIVE HOLES AT EACH OF ANOMALIES 8 and 27 – ELLENDALE EAST

Mobilisation	8,000.00
Ten RC holes to 140 metres in depth, no sumps required. Sampling interval between 60 – 140m. Includes all consumables.	140,000.00
Rehabilitation of drill pads	8,000.00
Geologist – 10 days field	10,000.00
Field assistant, vehicles, supplies, fuel	15,000.00
Road freight cost of 8 tonne sample to Perth	6,000.00
Diatech DMS Processing of Sample as Two Composites 1. Sort and weigh drill samples as listed 2. Mill each sample for 1 hour to disaggregate 3. Wet screen each sample at +2.0 (oversize), -2.0+0.3mm and -0.3mm (retain the -0.3mm fraction) 4. Dry the +2.0mm 5. DMS separate the -2.0+0.3mm 6. Dry screen the DMS concentrate at 1.2mm, and Magnetically separate the -1.2+0.3mm 7. Heavy liquid separate the NM fraction 8. TBE +200-300 fraction	76,000.00
Observing of samples	8,000.00
SEM-CSIRO grain identification	6,000.00
Report compilation	12,000.00
UWA Probe Analyses	12,000.00
Administration	10,000.00
	311,000.00
Contingency of 10%	31,100.00
	342,100.00

BUDGET ESTIMATE FOR BULK SAMPLE PROGRAM AT ANOMALIES 4 and 5 – ELLENDALE EAST

Phase 1	Preparation of a detailed Program of Work for the DoIR and completion of necessary applications for ground disturbance.	5,550.00
	Preliminary field work and assessment of site for excavation including site preparation.	25,000.00
	Grader work on access track between Caldera property and Ellendale 4 Diamond Mine for haulage tippers.	40,000.00
Phase 2a)	Komatsu excavator wet hire @ $145.00 per hour for bulk sample collection.	14,250.00
b)	Komatsu excavator rehabilitation of sample pit.	8,600.00
	Haulage of 500 tonne sample in 6WD 10 tonne capacity tippers @ $90 per hour wet hire and based on 3 return trips per day to Blina DMS Exploration Plant.	14,400.00
	Blina DMS Plant @ 30 – 40 tonnes per day at $3,500 per day including a day for diamond recovery – 16 days. (Possible $4,000.00 pd)	56,000.00
	Disposal of waste material.	16,000.00
	Field geologist – three weeks.	21,000.00
	Field assistants, vehicles, supplies, fuel.	40,000.00
	Transport of 2 tonnes of HMC as a sub-sample to Perth.	1,500.00
	Processing of 2 tonne HMC at Diatech Laboratory in Perth.	22,000.00
	Associated indicator and diamond analyses – observing, SEM, UWA Probe. Includes Blina HMC and Diatech HMC.	62,150.00
	Report compilation and preparation.	20,000.00
	Administration	24,000.00
	Sub-Total	370,450.00
	TEN TONNE SAMPLE FROM PIT FOR PROCESSING IN PERTH AS CHECK SAMPLE	
	Road freight to Perth	6,000.00
	Processing at Diatech Laboratory in Perth 1. Sort and weigh drill samples as listed 2. Mill each sample for 1 hour to disaggregate 3. Wet screen each sample at +2.0 (oversize), -2.0+0.3mm and -0.3mm (retain the -0.3mm fraction) 4. Dry the +2.0mm 5. DMS separate the -2.0+0.3mm 6. Dry screen the DMS concentrate at 1.2mm, and Magnetically separate the -1.2+0.3mm 7. Heavy liquid separate the NM fraction	76,000.00
	Observing of samples.	8,000.00
	SEM – CSIRO grain identification.	6,000.00
	UWA Probe Analyses	12,000.00
	Report Compilation	12,000.00
	Administration	10,000.00
		500,450.00
	Contingency of 10%	50,045.00
		550,495.00

14.3. Interpretation and Conclusions

Based on a review of previous exploration data, property site visits and samples collected on the property, it is highly likely that undiscovered primary diamondiferous sources exist within the Ellendale East Project. There is a high probability that secondary (alluvial) diamondiferous deposits also exist on the property. Olivine lamproite pipes and dykes are present on the property and in surrounding areas. Samples collected from anomalies on the property yielded a relatively large number of chromites which indicate the presence of potentially diamondiferous lamproite. A number of microdiamonds have been recovered from very small samples taken from the anomalies. The occurrence of DIMs and microdiamonds from drill samples taken from magnetic targets in the Ellendale East property justifies the high priority bulk sampling of specific targets for a diamondiferous lamproite(s) and warrants an aggressive follow-up exploration program on the adjacent anomalies.

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14/7/2008

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15. References

Allen, B., 1993. Report on E 04/1780 Little Spring, Kimbertey Mineral Field. Report submitted to Department of Mines, Western Australia, CRA Exploration Pty, 10p.

Atkinson, W.J., Hughes, F.E., Smith, C.B., 1984. A Review of the Kimberlitic Rocks of Western Australia *in* Kornprobst, J. (ed.) Kimberlites; I, Kimberlites and related rocks, p. 195-224, Elsevier, Amsterdam

Coxhell, S., 2001. Combined Annual report E04/819, 820, 821. Submitted to the Department of Mines, Western Australia, Prima Resources, 26p.

Dawson, J.B., and Stephens, W.E., 1975. Statistical classification of garnets from kimberiite and associated xenoliths. Journal of Geology, Vol.83, p.589-607.

Derrick, G.M., Gellatly, D.C., 1972. New leucite lamproites from the West Kimberley, Australia. BMR, Bulletin 125, p. 103-120

Felhberg, B., 1997. Combined Annual report E04/819, 820, 821. Submitted to the Department of Mines, Western Australia, Bazco Ry Ltd, 20p.

Gellatly, D.C, Sofoulis, J., 1969. Drysdale and Londonderry, Western Australia. Western Australia Geological Survey, 1:250 000 Geological Series Explanatory Notes, 19p.

Graham, S., Lambert, D.D., Shee, S.R., Smith, C.B., Reeves, S., 1999. Re-Os isotopic evidence for Archean lithospheric mantle beneath the Kimberley block, Western Australia. Geology, v.27, no. , p. 431-434

Gregory, G.P.,1980. Mount Wynne Joint Venture, annual report for 1979: BP Minerals, (unpublished)

Gregory, G.P., 1981. Fitzroy Joint Venture, annual report for 1980: BP Minerals, (unpublished).

Griffin, T.J., Tyler, I.M., Playford, P.E., 1993. Lennard River, Western Australia. Western Australia Geological Survey, 1:250 000 Geological Series Explanatory Notes, 56p

Gurney, J.J., 1984. A correlation between garnets and diamonds in kimberlite. *In* Kimberlite Occurrence and Origin: A basis for conceptual models in exploration, J.E. Glover and P.G. Harris (eds.). Geology Department and University Extension, University of Western Australia, Publication No.8, p. 143-166.

Gurney, J.J., and Moore, R.O., 1993. Geochemical correlations between kimberlitic indicator minerals and diamonds; *In* Diamonds: exploration, sampling and evaluation, Prospectors and Developers Association of Canada, p.145-171

Haebig, E., 1983. Final report on exploration completed within mineral claims 04/1848 to 1851 and 04/2149 to 2150 Big Springs, Lennard River, Western Australia. Report submitted to Department of Mines, Western Australia, Bakarra Pty, 10p.

Hancock, S.L., Rutland, R.W.R., 1984. Tectonics of an early Proterozoic geosuture: the Halls Creek orogenic subprovince, northern Australia. Journal of Geodynamics, v.1, p. 387-432

Hassan, L. Y., 2004. Mineral occurrences and exploration potential of the west Kimberley: Western Australia Geological Survey, Report 88, 88p.

Helmstaedt, H.H., 1993. Natural diamond occurrences and tectonic setting of "primary" diamond deposits; *In* Proceedings of a short course presented by the Prospectors and Developers Association of Canada; March 27, 1993, Toronto, Ontario, p.3-72.

Jackson, M.E., 2005. Ellendale East Diamond Project – Results Report No. 1 Caldera Resources (unpublished company report).

Jackson, M.E., 2005. Ellendale East Diamond Project – Drilling Report No. 1 Caldera Resources (unpublished company report).

Jackson, M.E., 2006. Annual Report for Exploration Licence E04/1437: Caldera Resources

Pty Ltd, for the period 17th November 2004 to 16th November 2005 (unpublished company report).

Jackson, M.E., 2006. Ellendale East Diamond Project – Project Review Caldera Resources (unpublished company report).

Janse, A.J.A., 1992. The Argyle diamond discovery, Kimberley Region, Australia. Exploration Mining Geology, v.1, No 4, p. 383-390

Jaques, A.L., Lewis, J.D., Smith, C.B., 1986. The kimberlites and lamproites of Western Australia. Western Australia Geological Survey, Bulletin 132, 268p.

Kimberley Diamond Company NL, 2007. The Journey 2007 Annual Report. www.kimberleydiamondco.com.au, 88p.

Mitchell, R.H., 1986. Kimberlite: Mineralogy, Geochemistry and Petrology. Plenum Press, New York, 442 pages.

Mitchell, R.H., 1989. Aspects of the petrology of kimberlites and lamproites: some definitions and distinctions; *In* Kimberlites and Related Rocks, Volume 1, Their Composition, Occurrence and Emplacement; Geological Society of Australia, Special Publication No. 14, p.7-46.

Mitchell, R.H., 1991. Kimberlites and lamproites: Primary sources of diamond. Geoscience Canada, Vol.18, p. 1-16.

Morrit, R.F.C., 1994. Annual report E04/821. Submitted to the Department of Mines, Western Australia, Goldstream Mining NL, 12p.

Muggeridge, M.T., 1994. Camerons Bore Prospect Annual EL 04/591, 809, 810, Exploration report. Submitted to the Department of Mines, Western Australia, Moonstone Diamond Corporation NL, 201 p.

Muggeridge, M.T., Temby, P.A., 1997, Camerons Bore Prospect Annual EL 04/591, 809, 810, Exploration report. Submitted to the Department of Mines, Western Australia, Diamond Rose NL, 32p.

Plumb, K.A., Veevers, J.J., 1971. Cambridge Gulf, Western Australia. Western Australia Geological Survey, 1:250 000 Geological Series Explanatory Notes, 32p.

Pooley. G.D., 2004. The alteration of chromian spinel. Journal of Scanning

Ruddock, I., 2003. Mineral occurrences and exploration potential of the north Kimberley: Western Australia Geological Survey, Report 85, 58p

Scott Smith, B.H., 1995. Petrology and diamonds. Exploration and Mining Geology, Vol.4, No.2, p. 127-140.

Shigley, J.E., Chapman, J., Ellison, R.K., 2001. Discovery and mining of the Argyle Diamond Deposit, Australia. Gems and Gemmology, v.37, no.1, pp.26-41

Skinner, E.M.W., 1989. Contrasting Group I and Group II kimberlite petrology: towards a genetic model for kimberlites. *In* J. Ross (ed.) Kimberlites and Related rocks, Vol.1, Their Composition, Occurrence, Origin and Emplacement, Proceedings of the Fourth Kimberlite Conference, Perth, 1986, Geological Society of Australia, Special Publication No. 14, p.528-544

Smith, C.B., 1977. Final report on Cape Londonderry Peninsula, Temporary Reserves 6306H, 6307H, 6308H and 6309H. Submitted to the Department of Mines, Western Australia, CRA Exploration Pty Limited, 14p.

Thorn, J.H., 1975. Remaining Precambrian areas - Kimberley Region *in* Geology of Western Australia; Western Australia Geological Survey, Memoir 2, p. 160-193

Thome, A.M., Sheppard, S., Tyler, I.M., 1999. Lissadell, Western Australia. Western Australia Geological Survey, 1:250 000 Geological Series Explanatory Notes, 68p.

16. Certificate of author

I, Gregory David Pooley, do hereby certify that:

1. I am an independent geologist

2. I graduated with a Bachelor of Applied Science Honours degree in Applied Geology in 1969 and gained a Doctor of Philosophy (PhD.) in the study of the nature and petrology of the ultramafic and related rocks in the Great Serpentinite Belt of New South Wales in 1979 from the University of New South Wales in Sydney, Australia. In addition I hold a Master of Business Administration degree in industrial marketing (commodities) which is an extended unit degree from Macquarie University in Sydney, New South Wales and The University of Western Australia, Perth, Western Australia in 1989.

3. I am and have been registered as a Student Member and later as a Professional Member with the Australian Institute of Mining and Metallurgy first in 1967 and rejoining most recently in 2004.

4. I have worked as a geologist for nearly 40 years since my graduation from the University of New South Wales in 1969. As an undergraduate I consulted on numerous, geological, engineering and geophysical projects.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.

6. I am responsible for, or directly supervised, the preparation of all sections of the Technical Report entitled 'Technical Report on the Diamond Potential of the Ellendale East Diamond Project of Caldera Resources Incorporated, West Kimberley Region, Western Australia, and dated July 7th, 2008 (the "Technical Report"). I visited the Property on numerous occasions during the field season of 2007 and again in March 2008. Numerous reference samples were collected on all visits.

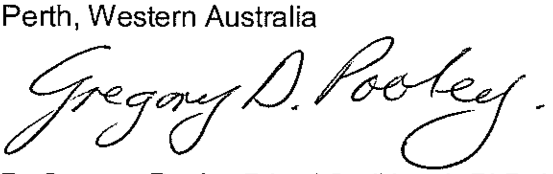
7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

8. I am independent of the issuer applying all of the tests in section 1.5 of NI 43-101.

9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated July 14th, 2008
Perth, Western Australia



Dr Gregory Pooley BAppl.Sc (Hons), PhD, MBA. AusIMM.

Appendix 1.

Programme of Work for Ellendale East

Caldera Resources Pty Ltd

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South Perth. 6151
Western Australia

Telephone: 61 8 9368 2800
Facsimile: 61 8 9368 2661
e-mail: calderares@bigpond.com

PO Box 208
South Perth. 6951
Western Australia

30th June 2008

Environment Division
Department of Industry & Resources
Plain Street
East Perth WA 6004

Dear Sir,

Program of Work Application by Caldera Resources Pty Ltd (CDR) for a Bulk sample Program and a Drill Program on EL04/1437 – West Kimberley MF.

Attached is a PoW for the above exploration program on EL04/1437 in the

A summary of previous work carried out is as follows:

1. CDR was granted the EL 04/1437 on 17 November 2004 and also purchased airborne magnetic data for the entire Exploration Licence area.

2. CDR completed detailed airborne magnetics at 25m line spacing over four areas identified as being of interest for potential lamproite intrusions.

3. CDR surface sampled a number of targets for diamond indicator minerals and recovered chromian spinels that are indicative of being diamond associated.

4. CDR carried out an aircore drilling program in July 2005 for a total of 1007 metres and in most instances intersected a 'grey' zone from which numerous diamond associated chromian spinels were recovered from heavy mineral concentrates. The 'grey' rock was identified as a volcanoclastic quartz tuff.

5. CDR processed a total of 2670.4 kilograms of drill sample from 9 targets through the Diatech DMS plant, resulting in 38.59 kilograms of heavy mineral concentrates being observed for indicator minerals and diamond

6. Three micro diamonds were recovered from targets 8 and 27, along with a 170 micron fancy yellow micro diamond which was obtained from the +100-300 fraction of a 19.4 kilogram caustic fused sample.

7. Scratching from numerous thin section preparations for petrology also indicated the presence of diamond in the 'grey' material.

8. In June 2006, CDR signed a joint venture with Kimberly Diamond Company (KDC) associate, Resource & Investment (R&I) NL, formerly Namakwa Diamond NL. Blina Diamonds, the exploration arm of KDC was contracted to carry out all field work.

9. In 2006, R&I completed an aircore drill program for a total of 2655 metres and tested 28 anomalies.

10. R&I treated a total of 1300 kilograms from 4 drill holes with no diamond recovery, but did identify a number of chromian spinels.

11. Blina Diamond NL's recommendation to R&I was that based on their experience from developing and testing the Ellendale 4 and 9 pipes that are now in production of diamonds, the only adequate method to fully evaluate the targets at Ellendale East was to take a 500 tonne bulk sample from targets 4 & 5 and treat them at Blina DMS exploration plant. This recommendation was made on the basis of extreme variation in micro diamond recovery from all the tested pipes in the Ellendale Field and that lack of micro diamond in small test samples did not necessarily reflect the economic viability of a pipe.

12. A 500 tonne bulk sample was planned by R&I for the 2007 field season, but in early 2007 a takeover tussle for Kimberly Diamond Company by Gem Diamonds UK became a severe distraction for R&I due to board members being associated with all three companies – KDC, Blina and R&I.

    The takeover of KDC and subsequent resulting board change of Blina Diamonds was only finalised in early 2008 by which time the entire 2007 field season had been lost for any work to be carried out on the Ellendale East JV.

13. The now Gem Diamond owned KDC and controlled Blina Diamonds denied R&I access to the DMS exploration plant, in April 2008, R&I formally withdrew from the Joint Venture. R&I were keen to pursue the bulk sampling program but without access to the Blina infrastructure, the exercise was considered cost prohibitive. At the time of withdrawal R&I had expended a total of $646,000:00.

14. In June 2008, CDR approached Blina in its own right regarding the bulk sample program which was met with a favourable response. Blina will

offer advice re the sampling program and have agreed to treat the 500 tonne sample on commercial terms.

15. The Blina Diamonds exploration management will also offer advice as to suitable contractors and the most effective method to obtain the sample.

DRILL PROGRAM

16. A drill program is also planned on targets 8 and 27 from where the micro diamonds were recovered along with abundant chromian spinel. This drill program will recover approximately a 10 tonne sample for treatment and processing at the Diatech DMS plant in Perth.

    Two groups of five closely spaced drill holes will be carried out at two drill pads previously established during the 2005 and 2006 drill programs.

OTHER

17. Blina Diamonds have approved access to their exploration plant utilising the Old Telegraph Line track which runs through EL04/1437 and passes the Ellendale 4 Diamond Mine. This track will only require minor grading to restore for haulage purposes using 10 tonne 4WD tracks.

    Other tracks from the Old Telegraph Line into the target areas will also require minimal upgrade as these were used for both previous drill programs. These tracks include the access road to the Camarotoeicha Pipe which lies 1 kilometre to the west of EL04/1437.

18. The company advises that no ground disturbance, or any other activity will be undertaken at the three Aboriginal Sites indicated on the attached map as printed from the Register of Aboriginal Sites. The Company also advises that none of the proposed drill-sites are located within Water Reserve 1577, Conservation Park 43099 and Stock Route 12475. Nor do any of the proposed access tracks encroach on these Reserves.

19. The owner of Brooking Springs Station Pastoral Lease 3114-573-242, has been advised of both programs.

If you have any queries, please contact me at the above address.

Yours sincerely,

C. Reindler - Director

Department of Industry and Resources

ENVIRONMENT DIVISION
(PROGRAMME OF WORK FORM)

Office use only: EXP Nº.................

PROGRAMME OF WORK – EXPLORATION (*MINING ACT 1978*)

Proponent Name: Caldera Resources Pty Ltd	**Contact person:** Chris Reindler
Address: PO Box 208 South Perth WAS 6951	
Email: calderares@bigpond.com	**Tel:** 08 9368 2800
Mob: 0419 999 303	**Fax:** 08 9367 7705

1. Are you the Registered Tenement Holder? (Check *Mineral Titles Online* database at www.doir.wa.gov.au)

☒ Yes ☐ No

If NO state ALL the registered tenement holders:

If No;

☐ I have attached a signed copy of an Agreement for Access / Consent from all the Registered Tenement Holders. **OR;**

☐ I have provided this agreement previously. EXP: Date provided:

NOTE: The Programme of Work cannot be approved until consent of all registered tenement holders is received.

2. Proposed Activities:

Tenement Number *(Up to 4 can be listed)*	E04/1437	E04/1437		
Type of Drilling Rig *(e.g. RAB, RC, Diamond, Aircore)*	AIRCORE	-		
Mineral(s) Being Explored For	DIAMOND	DIAMOND		
Drilling Company *(If known)*				
Number of Drill Holes	10	-		
Is this infill or resource drilling? *	NO	-		
How far apart are drill holes? *(Metres)*	2 Groups of 5	-		
Is drilling occurring on hillsides? *(If yes, please contact a DoIR Environmental Officer. Further detailed information may be required.)***	NO	-		
Number of Drill Pads *(Length: 20 x Width: 20m)*	2	-		
Is the drilling likely to encounter groundwater?	NO	-		
Number of Sumps *(Length: x Width: x Depth: m)*	N/A	-		
Length of Line / Track Clearing *(Kilometres: x Width: m)*	NIL	NIL		
Number of Costeans *(Length: 15x Width: 6x Depth: 5m)*				
Total Area Disturbed *(Hectares)*	0.08ha	0.25ha		
Total Tonnage Disturbed ** *(Tonnes)*	NIL	900		
Total Bulk Sample *(Tonnes)*	NIL	500		
Previous disturbance on tenement *(Ha) If Known*	3.0hha	3.0ha		

**** If infill or resource drilling, it is recommended you conduct waste characterisation to assist in mine planning. Waste characterisation is required as part of a Mining Proposal. Please refer to the "Guidelines for Mining Proposals in Western Australia" on the DoIR website http://www.doir.wa.gov.au/documents/environment/Mining_Guidelines.pdf***
***Note that tonnage limits on P's and E's apply to tonnage disturbed for cut and fill pads and access tracks.*

Does your proposal exceed the tonnage limit for the tenement type? *Disturbance exceeding 500 tonnes on a Prospecting Licence (Section 48c Mining Act 1978) or 1,000 tonnes on an Exploration Licence (Section 66c Mining Act) requires Ministerial approval or delegated approval by the Director, Environment. These tonnage limits apply for the life of the tenement.*

[X] Yes [ ] No

If yes; You will need to apply for excess tonnage approval. *Please contact your Regional Environmental Officer.*

An "exploration operation notification" form covering the activities proposed in this PoW must be submitted to DoCEP prior to the activities taking place, as required under the *Mines Safety Act and Regulations*. This form is available at the following link:
http://www.docep.wa.gov.au/ResourcesSafety/PDF/Forms/Mining/MSH_F_ExploratOpNoti.pdf

Has this form been submitted? [X] Yes [ ] No

3. Proposed Dates:

Proposed Commencement Date: Prior to 2008 wet season	**Proposed Completion Date:** Three weeks from commencement

Please note that these commencement and completion dates are binding, and that rehabilitation must take place with in 6 months of the date of drilling, not 6 months from the end date of the programme. Any extension of the rehabilitation dates must be applied for before the six month window closes.

4. Existing Tenure:

Is The Proposal On: (Use *Tengraph* at www.doir.wa.gov.au)

[ ] Unallocated Crown Land

[X] Pastoral lease – Pastoralist notified

When: 01/07/2008	**How:** email and phone

NOTE: Section 20 of the Mining Act 1978 requires written consent of the occupier of Crown Land prior to ground disturbing activities within 100m of a yard, stockyard, garden, cultivated field, orchard, vineyard, plantation, airstrip or airfield, a burial ground or cemetery, land under crop, a house or other substantial building that is in occupation, and within 400m of a water works, race, dam or bore on Crown Land that is the subject of a pastoral lease. If required for your proposal, please attach a copy of this consent.

[ ] Freehold Land — *NOTE: Landowner consent and Surface Rights may be required (Section 29, Mining Act). Please check your tenement conditions.*

[ ] DEC Managed Land - *NOTE: DoIR may consult with Department of Environment and Conservation (formerly CALM) regarding the proposal and DEC advice may be required.*

[X] Other

Eg. Reserves: Water Reserve 1577, C. Park 43099, Stock Route 12475

NOTE: Ground disturbing activities within Reserves (e.g. Water Reserves, Road Reserves) may require consent from the vesting authority, and/or Ministerial consent. Please check your tenement conditions.

5. Are the activities proposed in this Programme of Works located within an area under formal assessment by the EPA under Part IV of the Environmental Protection Act 1986?

[ ] Yes [X] No **If yes;** Name of project:

6. Aboriginal Heritage Management:

[X] I have completed a query of the Register of Aboriginal Sites at http://www.dia.wa.gov.au/AHIS/ for the area subject to this application.

Does your proposal partly or wholly intersect the boundary of a registered site?

[ ] Yes [X] No

If yes; Prior to submitting this Programme of Work to DoIR, you must consult with the Department of Indigenous Affairs (DIA) to ensure that your activities will not breach the *Aboriginal Heritage Act 1972* or the *Environmental Protection Act 1986.* Further referrals may be required under these Acts.

Note: To facilitate advice DIA will require (i) a description and map (GDA94 co-ordinates) showing the proposed activities and the affected mining tenements, (ii) the title, author and date of any Aboriginal heritage survey conducted over the area, and (iii) a copy of this survey if not already provided to DIA. If the survey is more than 10 years old DIA may require a new survey.

Please note that if your Programme intersects a DIA site and does not have DIA advice attached it will be rejected. The Programme of Work will need to be resubmitted with the advice attached.

7. Clearing of native vegetation:

Does your proposal involve the clearing of native vegetation?

☐ Yes ☒ No

If yes; (i) Clearing for exploration purposes is exempt from requiring a clearing permit provided it is not within an environmentally sensitive area (ESA), and is conducted under an authority granted under the *Mining Act 1978* (e.g. an approved Programme of Work). This exemption is found at item 25 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004.

(ii) The Native Vegetation Map Viewer, on the Department of Environment and Conservation website, provides a guide to the locations of ESA's. http://portal.environment.wa.gov.au/portal/page?_pageid=53,2569721&_dad=portal&_schema=PORTAL

Instructions on using the Map Viewer can be found on the DoIR website at http://www.doir.wa.gov.au/environment/9B7108D2CECD4A12AD07930C39479473.asp

Environmentally Sensitive Areas are defined in regulation 6 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004. *Some examples of ESA's are Bush Forever Sites, areas listed on the Register of National Estate for natural values, the area within 50 m of Declared Rare Flora, and the area covered by a Threatened Ecological Community.*

(iii) If you have any queries regarding clearing permits please contact the DoIR – Native Vegetation Assessment Branch (9222 3570), or visit their website: http://www.doir.wa.gov.au/environment/EA5A0295E9334F19B992E09D599ACA69.asp

Is the clearing of native vegetation that you propose within an Environmentally Sensitive Area?

☐ Yes ☐ No

If yes; (i) *If known, please state the type of ESA (e.g. Bush Forever Site, Threatened Ecological Community etc);*

(ii) Have you applied for a permit to clear native vegetation?

☐ Yes: *State the CPS number and/or the date the application was lodged:*

☐ No: Please lodge a clearing permit application with the DoIR – Native Vegetation Assessment Branch.

NOTE: Allow at least 15 weeks for processing of a clearing permit application. Your Programme of Work will not be approved until the clearing permit is granted and an additional 30 day period allowing for public appeal has expired. If an appeal is lodged clearing cannot be conducted until the appeal is settled.

8. Environmental Management: please refer to the exploration rehabilitation guidelines, available at http://www.doir.wa.gov.au/documents/environment/Exploration_Rehab_Activities.pdf

Environmental Management and Methods of Minimising Disturbance

- ☐ Use of raised blade
- ☒ Using existing tracks
- ☐ Avoiding significant vegetation e.g. Large trees
- ☐ Topsoil and vegetation stockpiled separately for use in rehabilitation
- ☐ Use of liners to minimise risk of hydrocarbon spillage
- ☐ Use of sumps of appropriate size to contain water and sediment encountered during drilling
- ☒ Use of appropriate machinery to minimise impacts (excavator instead of bulldozer, wheeled machinery instead of tracked, specialist drill rig etc…)
- ☒ Further details **All proposed work is on previously located drill pads**

Rehabilitation Practices and Timing *(tick where applicable)*

- ☒ Drill holes capped immediately
- ☐ Drill holes plugged below ground within 6 months of drilling
- ☐ Sumps backfilled
- ☐ Ripping of compacted areas on the contour
- ☐ Blocking access to tracks
- ☒ Drill sample piles rehabilitated or buried
- ☒ Sample bags removed within 6 months of drilling
- ☒ All rubbish removed from site

☐ Further details ____

Tenement conditions require that all rehabilitation must be completed within 6 months of drilling. <u>Any extension of this timeframe requires the written approval of an Environment Officer.</u>

<u>Describe Existing Environment and Vegetation</u>
(Eg. Mulga shrubland, Eucalypt / saltbush woodland, Spinifex grassland, Jarrah forest etc.)

Spinifex Grass, minor eucalypt, no boab trees

<u>Describe Landform</u>
(Eg. flat alluvial plain, greenstone, range, creeklines, hillsides etc.)

Flat - no drainage - soil island covered

Does the proposed activity occur on isolated hills / ranges in the MidWest or Yilgarn (Banded Iron Formations)?

☐ Yes ☒ No

If yes, the Programme will be referred to the DEC and a flora survey may be required.

Is your exploration program likely to encounter Radioactive Material?

☐ Yes ☒ No

If yes; Please provide information regarding the following environmental practices:

☐ Drilling wet and using sumps to eliminate dust and encapsulate materials
☐ Use of sample bags to prevent dispersion of drill samples into the environment
☐ Burying of drill spoil/ samples 1.5m below surface level
☐ Planning drilling to avoid water courses wherever possible
☐ Drill holes plugged immediately after drilling
☐ Baseline studies of background radiation levels
☐ Other: ____

Please consult with http://www.docep.wa.gov.au (Occupational Health Group) and the Radiological Council regarding human safety issues associated with radiation.

A report outlining rehabilitation undertaken at the completion of the drilling programme is required. This should include baseline and post-drilling radiation levels and pre and post photographs of the site.

Is your exploration program likely to encounter Asbestos?

☐ Yes ☒ No

If yes; Please provide information regarding the following environmental practices:

☐ Drilling wet and using sumps to eliminate dust and encapsulate materials
☐ Use of sample bags to prevent dispersion of drill samples into the environment
☐ Burying of drill spoil/ samples 1.5m below surface level
☐ Planning drilling to avoid water courses wherever possible
☐ Drill holes plugged immediately after drilling
☐ Other: ____

Please consult with (Occupational Health Group) regarding human safety issues associated with asbestos.

Does the proposed activity involve disturbing the Beds and/or Banks of a watercourse?

☐ Yes ☒ No

NOTE: If you are unsure please contact your regional Department of Water (DoW) office for advice.

If yes, You may require a Permit to Interfere with Beds and Banks from the Department of Water (DoW). Please consult with your regional DoW office to ensure your proposal will not breach the *Rights in Water and Irrigation Act 1914*, and attach any advice from DoW or application for a permit to this application.

9. Maps:

☒ I have attached A3 or A4 scaled plans of the proposed area that provide the information outlined below.

NOTE: plans using a topographical map or aerial photo are required, with GDA94 co-ordinates.

The plans clearly show the location of all of the following:

☒ Proposed activities and disturbance (showing drill holes or lines)
☐ Line and track clearing
☒ Major landforms
☒ Existing tracks / route onto tenement and route to proposed drill holes/costeans
☒ Tenement boundaries
☒ Freehold land / Reserve location boundaries

10. Tenement Conditions:

Check Mineral Titles Online database at www.doir.wa.gov.au

☒ I have read the tenement conditions for the tenements affected by this proposal.
☒ This proposal complies with the tenement conditions for the tenements affected by this proposal.
☒ I have attached any additional information required to comply with the tenement conditions.

11. Please note the following:

- Every category available is to be marked with a tick, or where a category is 'Not Applicable' mark N/A.
- Please allow sufficient time for this proposal to be assessed (at least 30 working days). If all required information is not supplied, or if consultation with other agencies is required, then the assessment time frame will increase.
- DoIR have a Memorandum of Understanding with the EPA, which requires proposals to be referred to other agencies if they trigger certain criteria. This document is available at: http://www.doir.wa.gov.au/environment/EA6BC661A37C46D7A122EB28891A65BB.asp
- All tenement holders *will be notified* of the approval.
- This form is not to be modified.
- This application will be available to other government agencies.
- Given the high number of Programmes of Work (PoW) being processed, DoIR implemented a number of initiatives on 1 April 2008 to improve efficiency. Please ensure your PoW is complete and that you have checked and complied with tenement conditions prior to lodging your PoW with DoIR. **Incomplete applications received after the 1 April 2008 will be rejected.**
- **Future requests** for further information will have a time limit of **10 working days** to **contact the Department.**
- This PoW will be withdrawn without further notification, (i) within 12 months of the date of a bond request, if the bond has not been lodged **(effective 1 July 2008, all bond requests issued 1 July onwards will remain valid for a period of 3 months)**.

☒ ***All statements made and information given in this certified application is true and correct.***

NAME:	CHRIS REINDLER	**POSITION:**	DIRECTOR
SIGNATURE:	[signature]	**DATE:**	4/7/2008

*Send your application to **"The Environmental Officer"** at the address below.*

Reference No: 195770 RFGSR

Search Criteria

Mining Tenure: E 0401437

Disclaimer

Aboriginal sites exist that are not recorded on the Sites Register, and some registered sites may no longer exist. Consultation with Aboriginal communities is on-going to identify additional sites. The AHA protects all Aboriginal sites in Western Australia whether or not they are registered.

Legend

Restriction	Status	Access
N No Restriction	I Interim Register	C Closed
M Male Access Only	P Permanent Register	O Open
F Female Access Only	S Stored Data	V Vulnerable

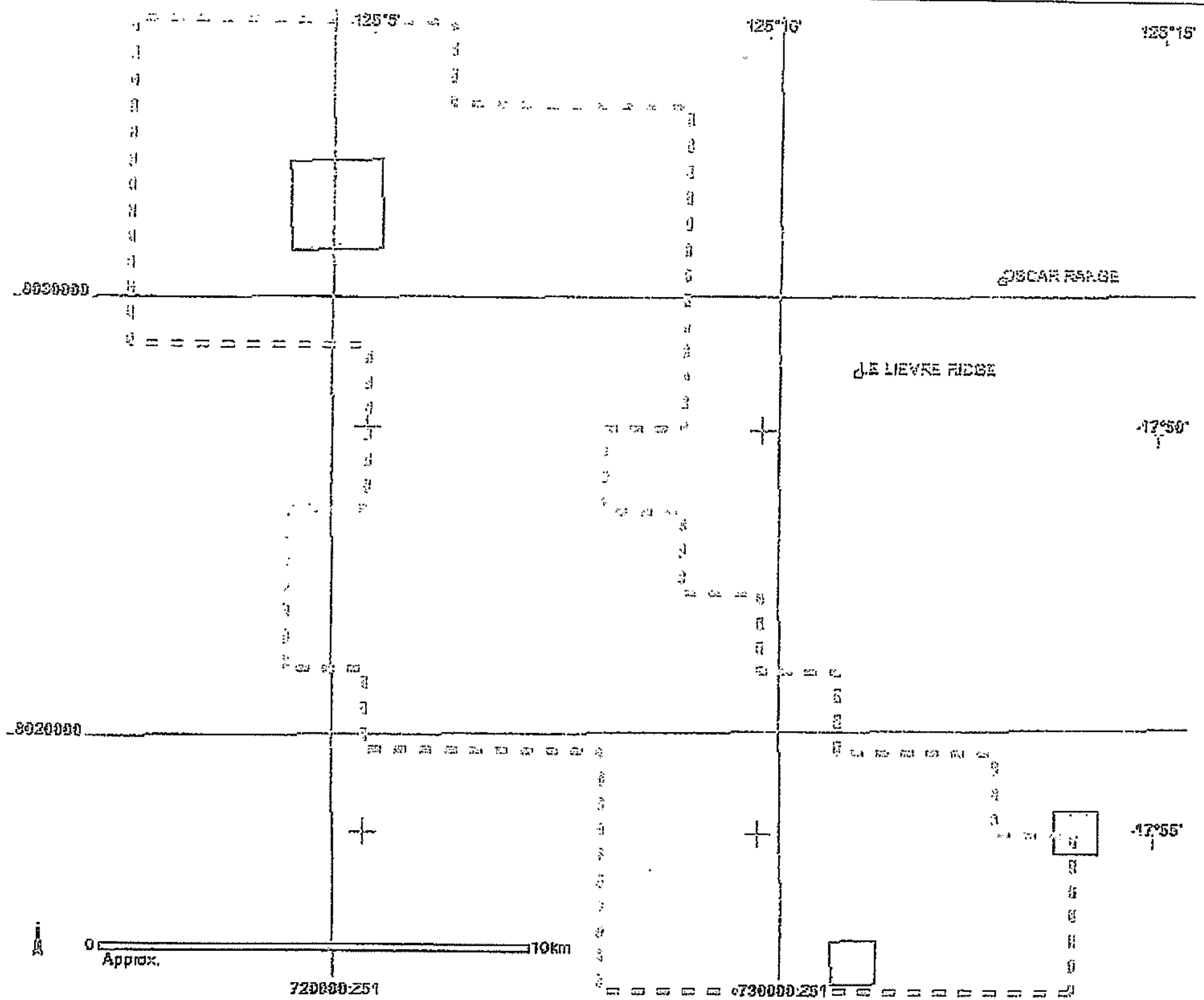
Index coordinates are indicative locations and may not necessarily represent the centre of sites, especially for sites with an access code "closed" or "vulnerable". Map coordinates (Lat/Long) and (Easting/Northing) are based on the GDA 94 datum. The Easting / Northing map grid can be across one or more zones. The zone is indicated for each Easting on the map, i.e. '5000000:Z50' means Easting=5000000, Zone=50.

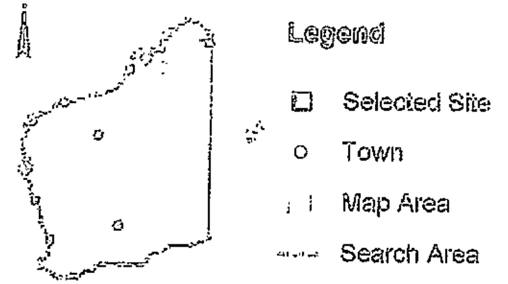
Reliable – The spatial information recorded in the site file is deemed to be reliable, due to methods of capture.

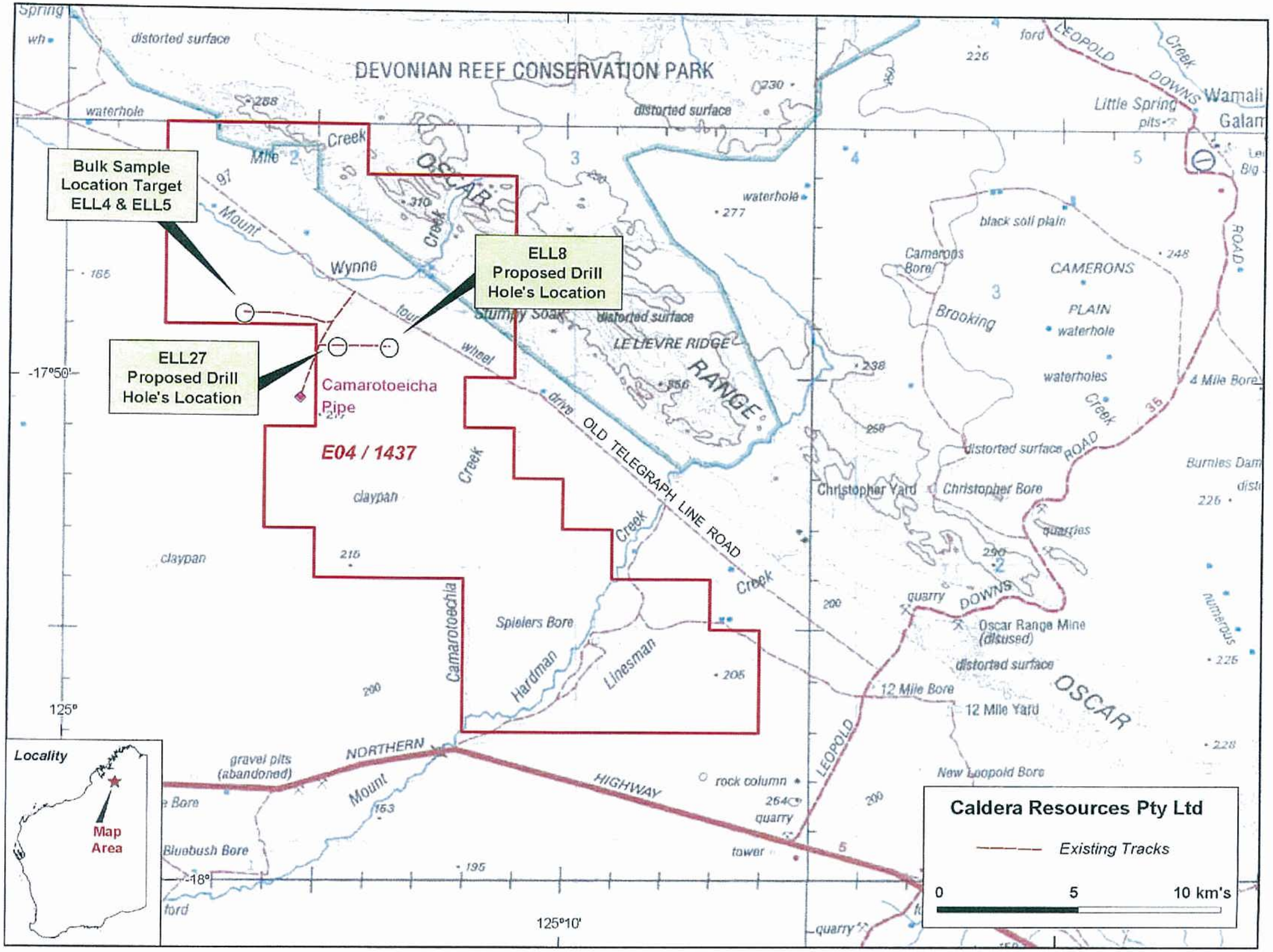
Unreliable – The spatial information recorded in the site file is deemed to be unreliable due to errors of spatial data capture and/or quality of spatial information reported.

Site ID	Status	Access	Restriction	Site Name	Site Type	Additional Info	Informants	Coordinates	Site No.
13601	I	O	N	READYMIX QUARRY 2.	Artefacts / Scatter	Rockshelter		-17.9162 S / 125.2338 E, 736637mE 8017661mN Zone 51 [Unreliable]	K01560
14431	P	O	N	OSCAR RANGE	Painting, Grinding patches / grooves			-17.9439 S / 125.187 E, 731637mE 8014661mN Zone 51 [Unreliable]	K00649
14468	P	C	N	OSCAR RANGE	Skeletal material/Burial, Painting			-17.7918 S / 125.0703 E, 719463mE 8031639mN Zone 51 [Unreliable]	K00633

SITE SEARCH MAP







DEVONIAN REEF CONSERVATION PARK
Bulk Sample Location Target ELL4 & ELL5
ELL8 Proposed Drill Hole's Location
ELL27 Proposed Drill Hole's Location
Camarotoeicha Pipe
E04 / 1437
OSCAR RANGE
LE LIEVRE RIDGE
OLD TELEGRAPH LINE ROAD
NORTHERN HIGHWAY
LEOPOLD DOWNS ROAD
CAMERONS PLAIN
Christopher Yard
Christopher Bore
Oscar Range Mine (disused)
12 Mile Bore
12 Mile Yard
New Leopold Bore
Spielers Bore
Bluebush Bore
Cameron Bore
Little Spring
Wynne
Stumpy Soak
Burnies Dam
4 Mile Bore
-17°50'
-18°
125°
125°10'
Locality
Map Area
Caldera Resources Pty Ltd
Existing Tracks
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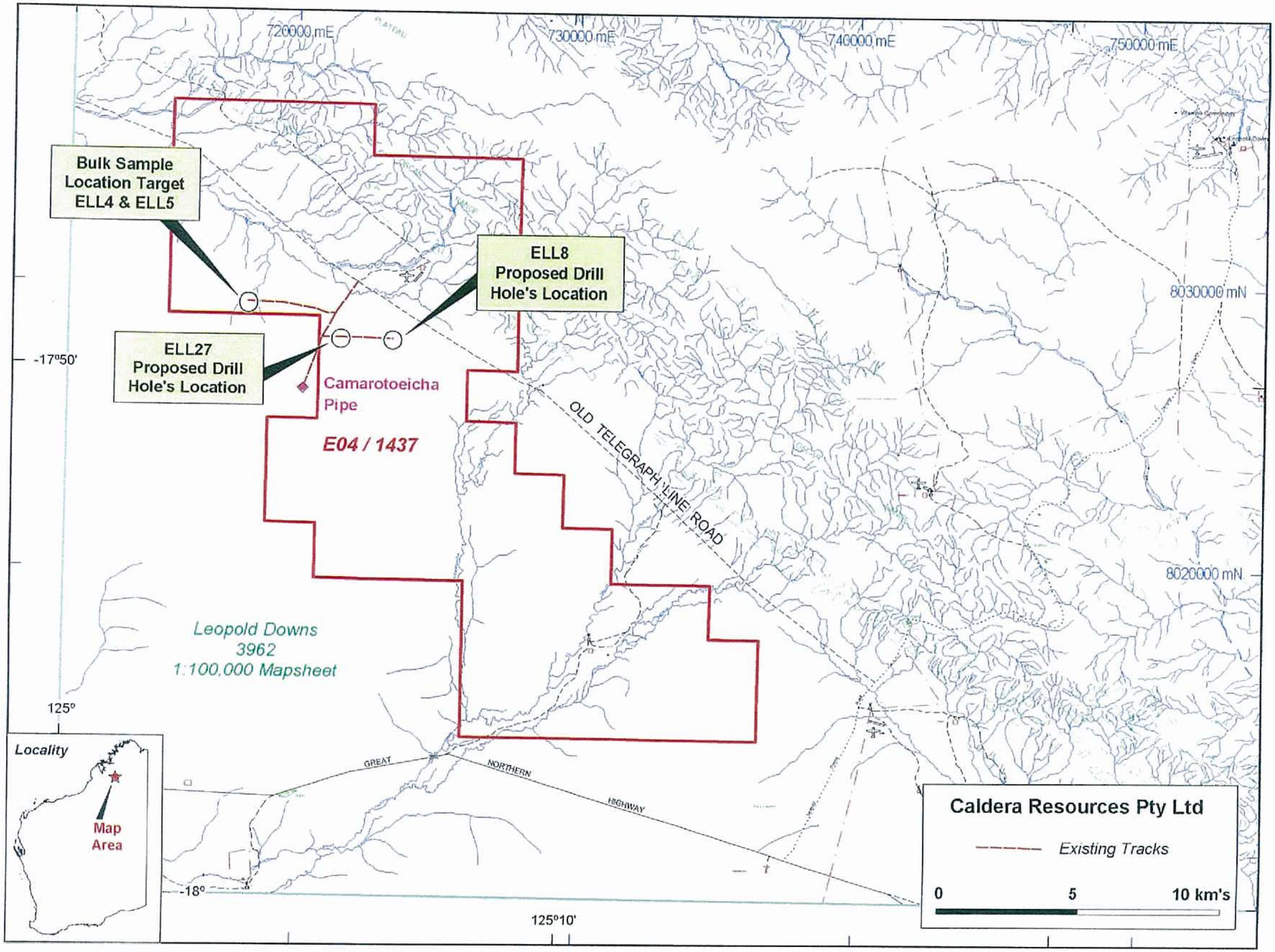
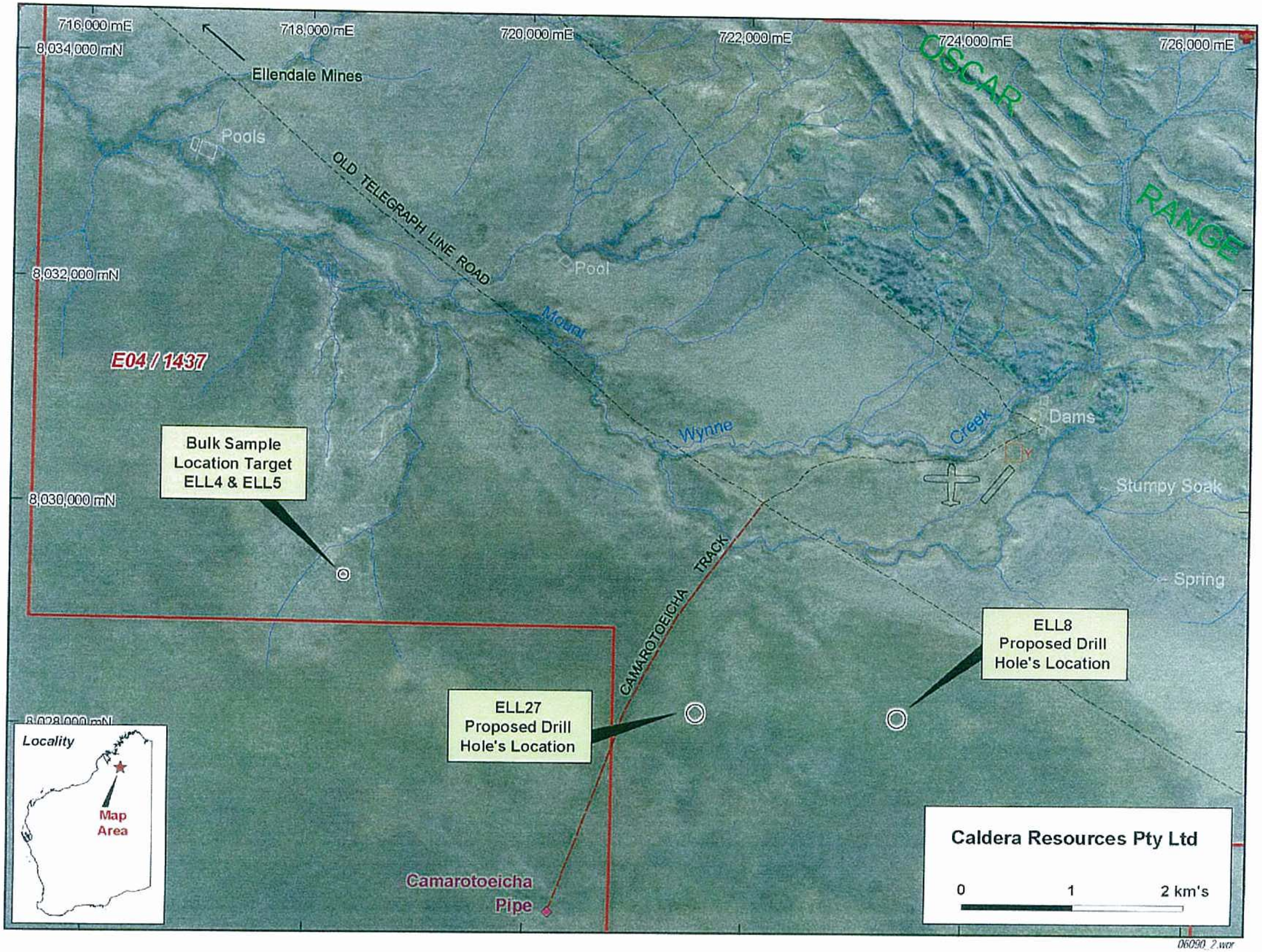
5
10 km's
06090_3.wor



720000 mE
730000 mE
740000 mE
750000 mE
8030000 mN
8020000 mN
-17°50'
-18°
125°
125°10'
Bulk Sample Location Target ELL4 & ELL5
ELL8 Proposed Drill Hole's Location
ELL27 Proposed Drill Hole's Location
Camarotoeicha Pipe
E04 / 1437
OLD TELEGRAPH LINE ROAD
GREAT NORTHERN HIGHWAY
Leopold Downs
3962
1:100,000 Mapsheet
Locality
Map Area
Caldera Resources Pty Ltd
Existing Tracks
0
5
10 km's

06090_1.wor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718,000 mE
720,000 mE
722,000 mE
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726,000 mE
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8,032,000 mN
8,030,000 mN
8,028,000 mN
Ellendale Mines
Pools
OLD TELEGRAPH LINE ROAD
Pool
Mount
Wynne
Creek
Dams
Stumpy Soak
Spring
OSCAR
RANGE
E04 / 1437
Bulk Sample
Location Target
ELL4 & ELL5
CAMAROTOEICHA TRACK
ELL27
Proposed Drill
Hole's Location
ELL8
Proposed Drill
Hole's Location
Camarotoeicha
Pipe
Locality
Map
Area
Caldera Resources Pty Ltd
0
1
2 km's
06090_2.wor

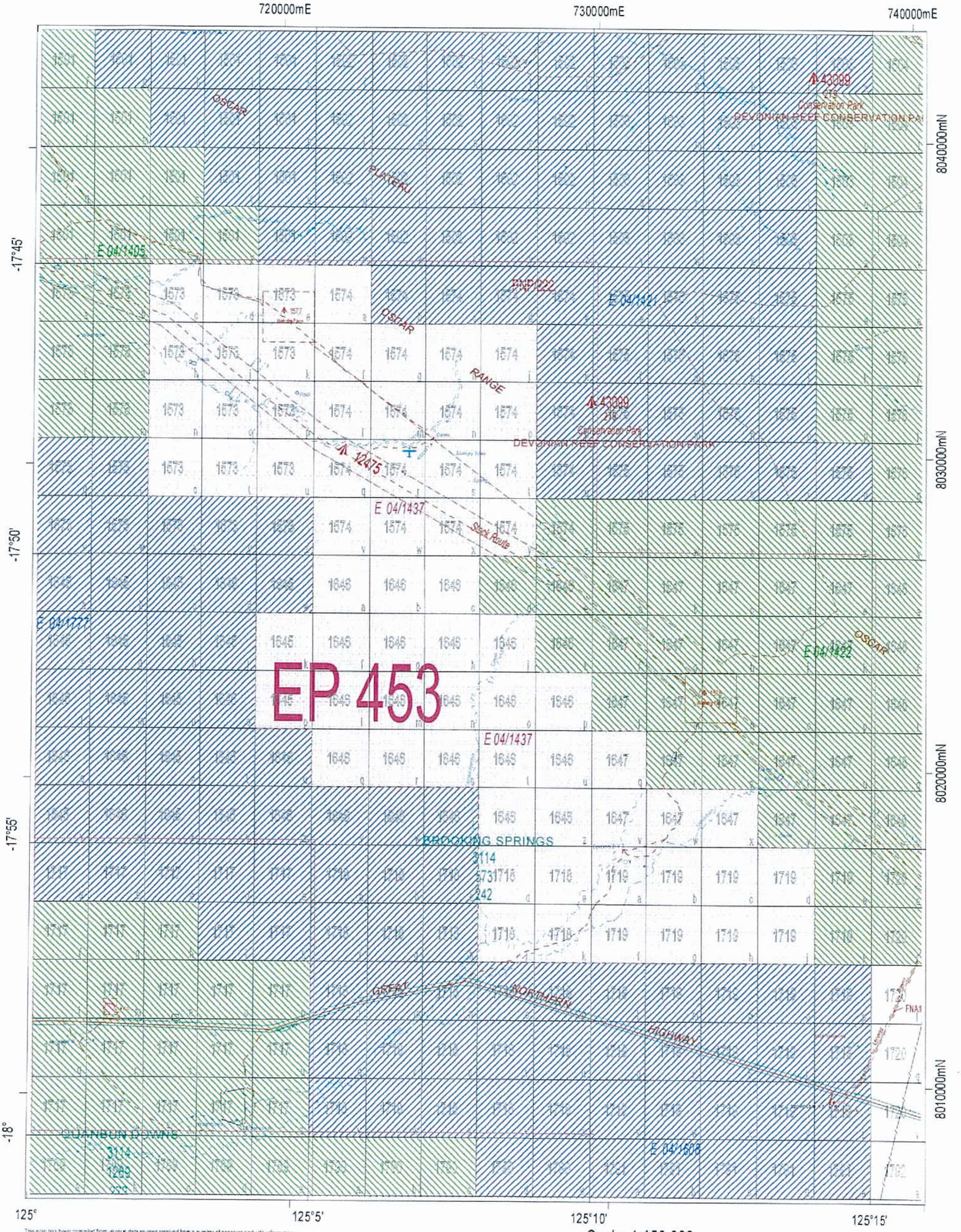
Department of
Industry and Resources

Enquiry System V7 13.4.2

GDA

Map Grid of Australia, 1994 - Zone 51
Broome
SE51

TENGRAPH (c) 1992, 1993
09:17 AM, 22/06/2008
[Customized Screen] EX12444 PERTMX98



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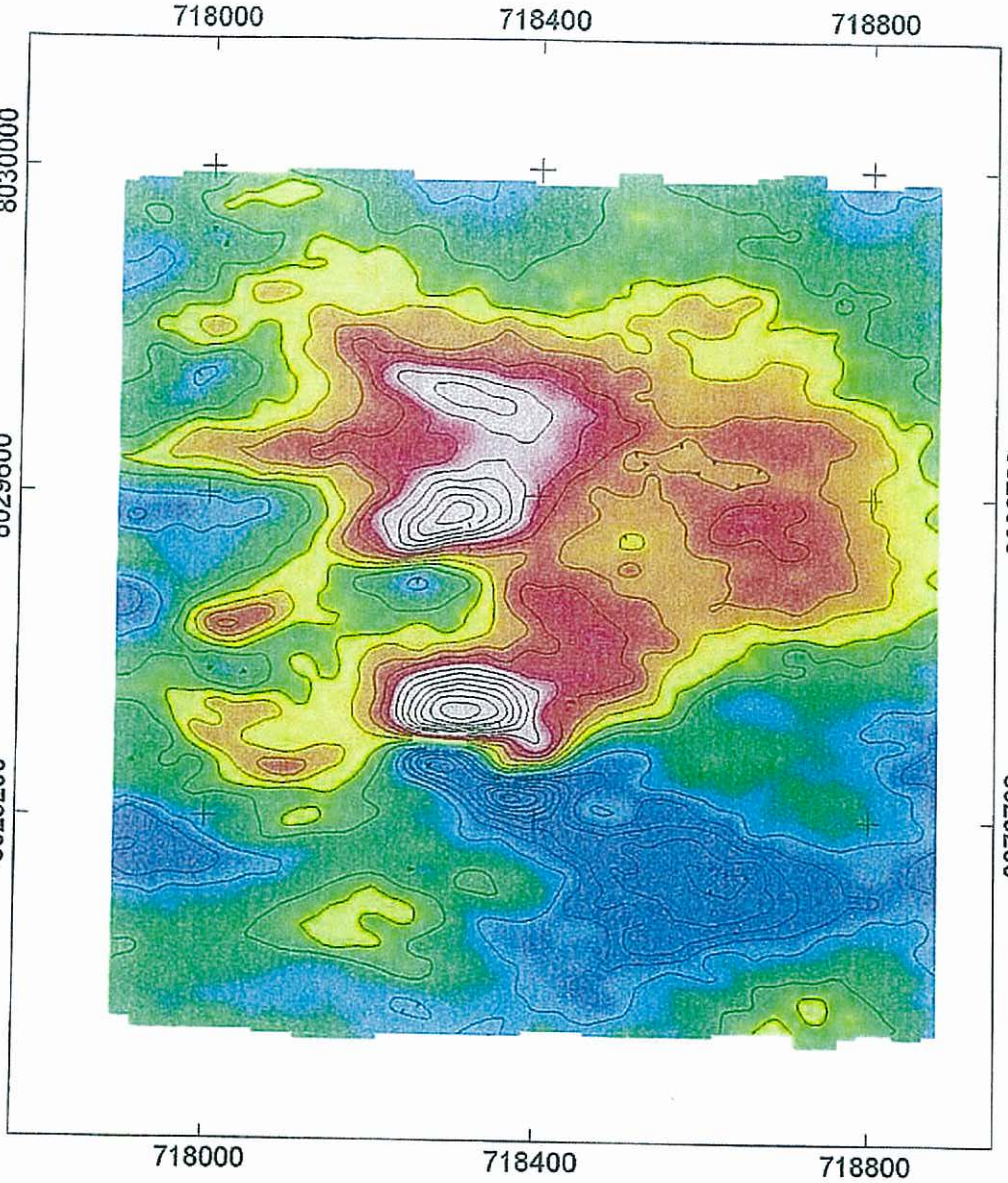
0.0 1.5 3.0 4.5 6.0 7.5 9.0 10.5 12.0 13.5 15.0km



CALDERA RESOURCES PTY LTD

ELLENDALE EAST, WA
AREA 4, ANOMALIES 4 AND 5
FLIGHT LINE SPACING 25 M

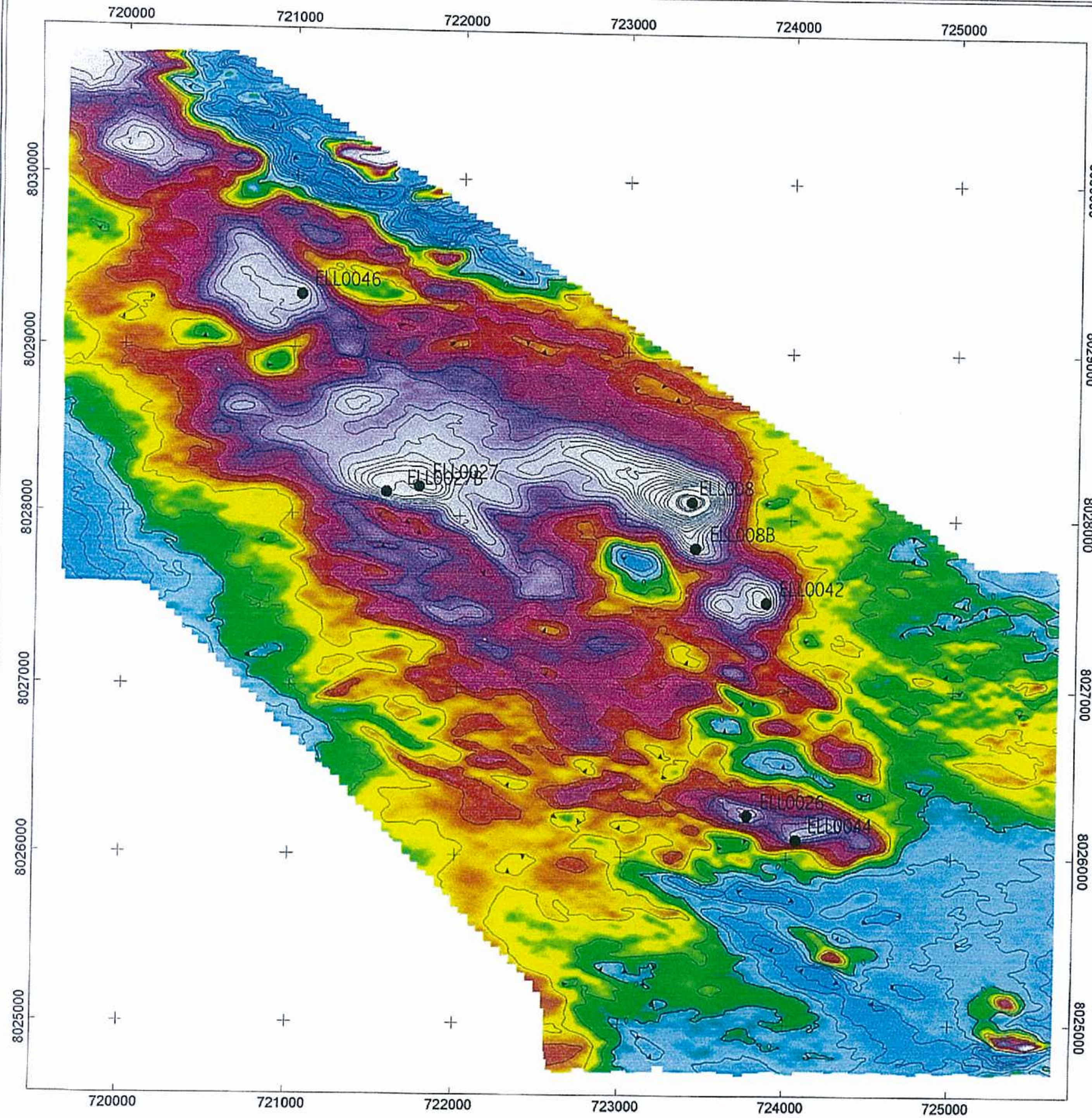
COLOUR CONTOUR MAP OF THE
RESIDUAL TOTAL MAGNETIC INTENSITY
CONTOUR INTERVALS 0.1, 0.5 AND 2.5 nT
DATUM WGS84, PROJECTION UTM ZONE 51

Scale 1:10000

100 0 100 200

metre

Barrett Geophysical Exploration Consultants



NOTES

Survey flown for Caldera Resources
Survey flown by UTS Geophysics
Survey flown June 2005

Aircraft: Fletcher Fu24-954
Magnetometer: Scintrex Model CS2
Navigation: Differential GPS

Flight line direction 000/180 deg
Flight line spacing 25 m
Tie line spacing 250 m
Aircraft height 25 m

Map Datum WGS84
Map Projection SUTM
Zone 51

Processed in Geosoft
Grid cell size 7 m

Scale 1:25000

250 0 250 500 750 1000 1250 1500

metre

WGS 84 / UTM zone 51S

CALDERA RESOURCES PTY LTD

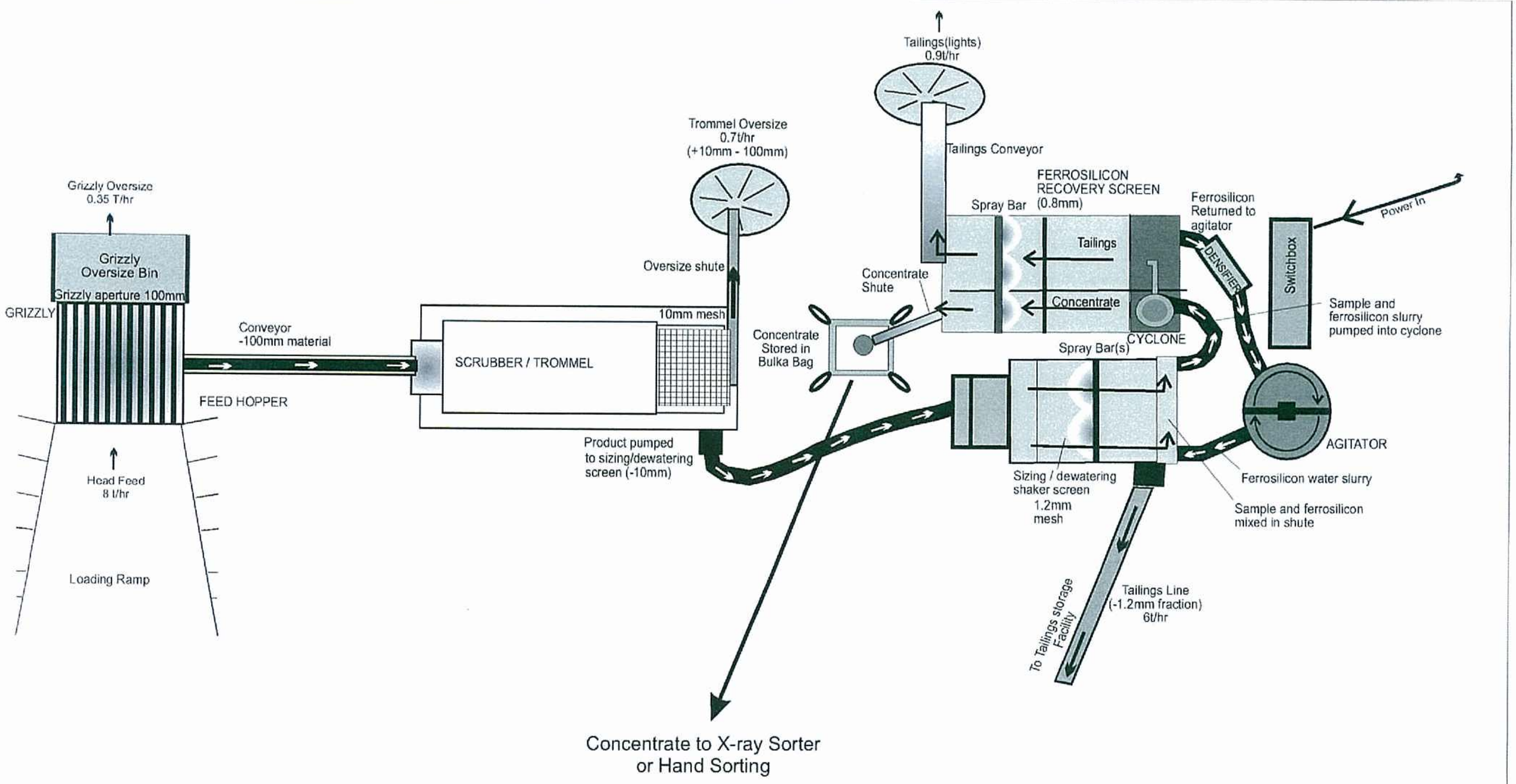
ELLENDALE EAST, WA
HIGH RESOLUTION INFILL SURVEY
COLOUR CONTOUR MAP OF THE

RESIDUAL TOTAL MAGNETIC INTENSITY
CONTOUR INTERVALS 0.2, 1 AND 5 nT

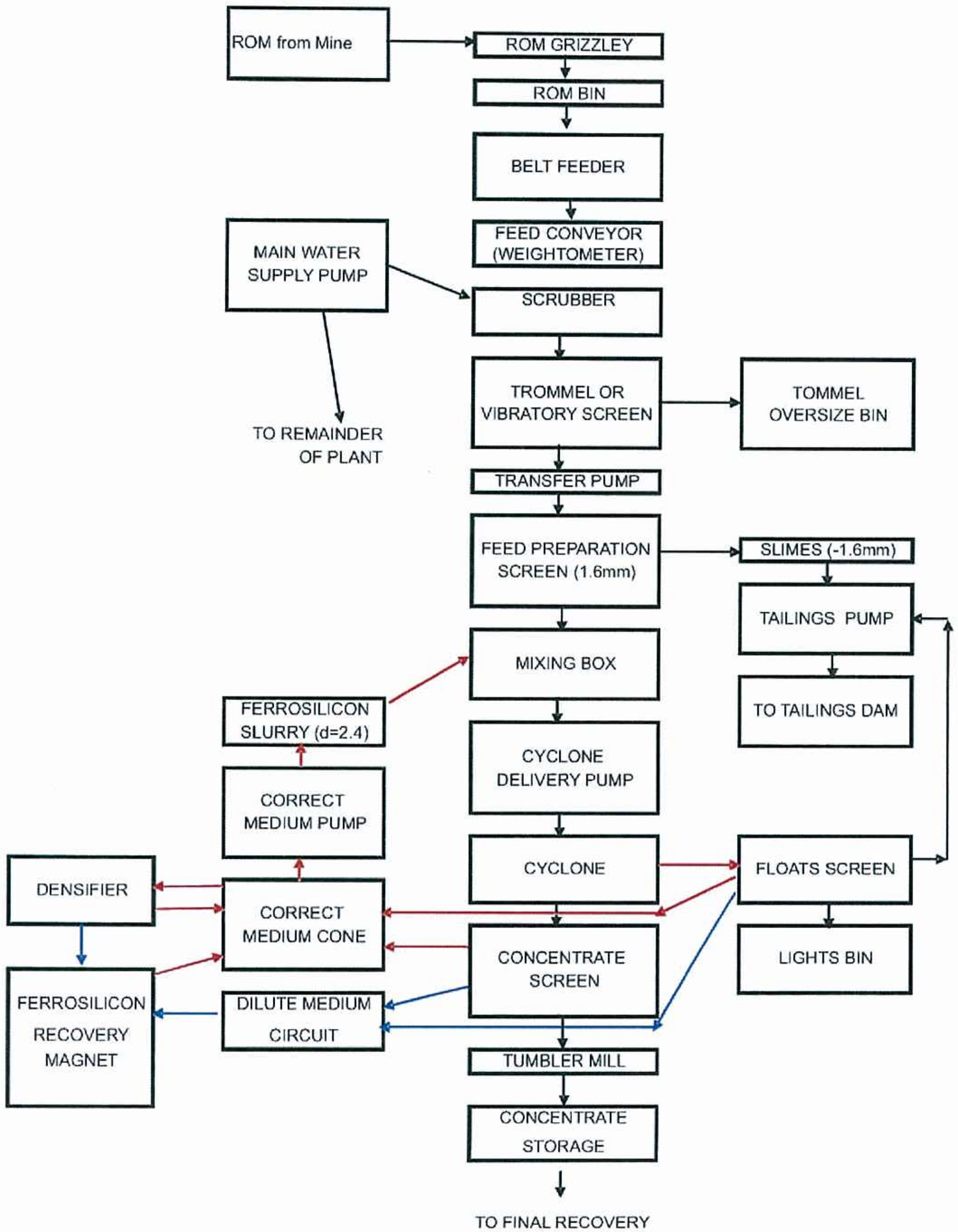
Appendix 2.

Diamond Processing Facility

at Blina Diamonds NL



BLINA DIAMONDS NL
DENSE MEDIA SEPARATION PLANT



FLOWSHEET
BLINA DIAMONDS NL

Appendix 3.

Partial Surrender Document

4

Austwide Mining Title Management Pty Ltd

A.C.N. 064 099 109

Post Office Box 1434
Wangara WA 6947
Western Australia

Telephone: (08) 9409 6951
Facsimile: (08) 9309 9335
Mobile: 041 990 2407
Email: reception@austwidemining.com.au
Web: www.austwidemining.com.au

Our Ref: KC

26th June 2008

Director
Mineral and Title Services Division
Department of Industry & Resources
100 Plain Street
EAST PERTH WA 6004

DEPARTMENT OF INDUSTRY AND RESOURCES
12.35pm
27 JUN 2008
MINERAL AND TITLE SERVICES DIVISION

Dear Sir,

RE: PARTIAL SURRENDER OF EXPLORATION LICENCE 04/1437

This Company acts as Tenement Consultants to Caldera Resources Pty Ltd.

Following the refusal of the exemption from drop off and in accordance with Section 65(1)(a) of the Mining Act please find attached a compulsory Partial Surrender (Form 14) together with a plan of the ground to be surrendered and retained and the original Instrument of Licence.

On registration of the Partial Surrender please forward a replacement Instrument of Licence to this office.

If you have any queries do not hesitate to contact me.

Yours faithfully,
AUSTWIDE MINING TITLE MANAGEMENT PTY LTD

Kevin Connell
MINING TITLE CONSULTANT

Att.

LC/TS entered
File

FORM 14

WESTERN AUSTRALIA
Mining Act 1978
(Ss. 26A, 65, 95; Reg. 45.)

COMPULSORY PARTIAL SURRENDER (SECTION 65(1)(a))

(This form must be accompanied by a map clearly delineating the portion of the tenement being - (i) surrendered; and (ii) retained.)

(a) Type
(b) Number
(c) Mineral field

Details of Mining Tenement

(a) Exploration Licence (b) 04/1437

(c) West Kimberley

(d) Full name and address of each holder

Holder

(d) Caldera Resources Pty Ltd (ACN 062 603 123)
C/- Austwide Mining Title Management Pty Ltd
PO Box 1434 Wangara WA 6947

* If the surrender is a conditional one, add "conditionally on application for... being granted".

(e) Describe the boundaries of the portion being surrendered.

** In ha/km^2 or number of blocks.

THE HOLDER of the abovementioned mining tenement hereby applies to surrender all right, title and interest in that portion described hereunder. *

PORTION BEING SURRENDERED

(e) Broome 1:1,000,000 Map sheet

Primary Block	Graticular Section Reference
1574	a g h j o y
1645	k p
1646	f j l n o p q t u
1647	q v w x
1718	d e j k
1719	a b c d f g h j

Area 33 Blocks

DATED this 24th day of June 2008

(f) Signature of holder
(g) Signature of witness

Holders sign here in the presence of **Witnesses sign here**

Executed by
Caldera Resources Pty Ltd
in accordance with Section 127
of the Corporations Act
in the presence of:

Sole Director

Witness

LODGING PARTY
(h) Full name and address (for return of documents)

(h) C/- Austwide Mining Title Management Pty Ltd
PO Box 1434 Wangara WA 6947

OFFICE USE

Received at ....m.

on..

....
(Mining Registrar)

Department of Industry and Resources

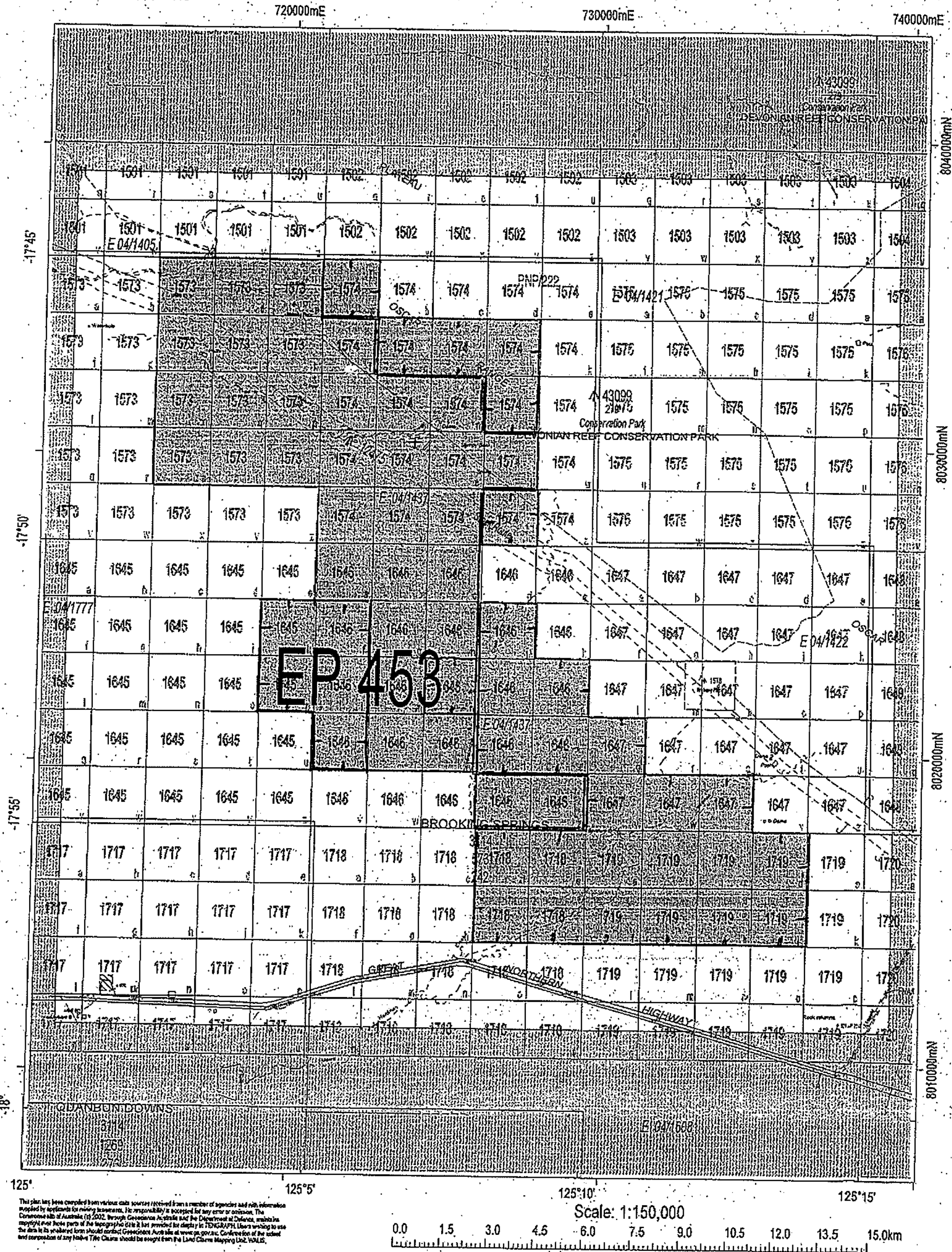
Government of Western Australia

Enquiry System V7.134.2

GDA

Map Grid of Australia, 1994 - Zone 51

TENGRAPH (c) 1992, 1993
08:48 AM, 23/06/2008
[Customized Screen] EX13236 PERTMX8E



Scale: 1:150,000

0.0 1.5 3.0 4.5 6.0 7.5 9.0 10.5 12.0 13.5 15.0km

BLOCKS TO BE RETAINED

BLOCKS TO BE SURRENDERED