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Final Relinquishment Report on Exploration Activities Within The Damoh West (RP No. 368/F.No. /MINING/RP-1/2002) Reconnaissance Permit, Madhya Pradesh, India

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Author: Dean Pekeski

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Copies to:

Secretary, Department of Commerce & Industries, Government of Madhya Pradesh, Bhopal.

Directorate of Geology and Mining, Government of Madhya Pradesh, Bhopal.

Indian Bureau of Mines, Nagpur.

Geological Survey of India, Calcutta.

ACC Rio Tinto Exploration Limited- Bangalore.

Rio Tinto Exploration – Belmont

Forest Department, Chhattarpur

Forest Department, Bhopal

Volume 1 of 2

1 SUMMARY

This report summarizes all exploration work carried out by ARTE in the exploration for diamonds and other mineral commodities within the Damoh West (368/F.No. /MINING/RP-1/2002) Reconnaissance Permit.

The Damoh West RP area, covering Chhattarpur, Sagar, Damoh and Tikamgarh districts, totalling 2,450 km^2 was granted to ARTE on June 21 2002 and subsequently executed on July 23 2002. In July 2004, 1,450 km^2 of the original Reconnaissance Permit ("RP") was relinquished as per the provisions of the MMDR. On July 22 2005 all work on the Damoh West RP ceased pending the grant of Prospecting Licences.

A total of 530 gravel samples were collected from dry streambeds within the RP. Heavy minerals were extracted from these samples and analysed to delineate several catchments shedding "kimberlite indicator minerals" or "KIMS" characteristic of diamondiferous kimberlite mineralisation. The most interesting indicator mineral anomalies were at the Bunder prospect.

A total of 1095 line km of ground magnetics surveys, 52 line km of horizontal loop (Max-Min) electromagnetic surveys, and 7.2 line km of orientation NanoTEM surveys were completed on eight grids within the KIM anomalous catchments, mostly at Bunder.. More than 75 geophysical targets were identified..

Soil geochemical surveying highlighted several anomalies enriched in key kimberlite pathfinder trace elements (i.e.: Nb, Ce, La, Zr). Loam sampling, rock sampling and geological mapping subsequently led to the discovery of several kimberlite outcrops and float.

Approximately eight kimberlite pipes were delineated at Bunder. Drilling commenced in late January 2005 and by mid July six diamond core drillholes had tested the two largest kimberlites. Caustic fusion diamond analysis results of the Bunder rock and drill core samples is in progress. Results to date are encouraging and suggest potentially economic diamond grades, however much more sampling is necessary. To date 935 diamonds weighing in total approximately 2 carats have been recovered from approximately 2,700kg of kimberlite processed. Obviously these diamonds are very small and have little, if any, commercial value.

The Bunder kimberlites will be further evaluated for their diamond potential once Prospecting Licences are granted. . This would include additional geophysical surveys, surface sampling, delineation drilling, large diameter drilling and mapping.

2 INTRODUCTION

This report pertains to all exploration work completed by ARTE in the exploration for primary diamond deposits and other mineral commodities within the Damoh West RP (368/F. No./MINING/RP 1/2002). Complimentary periodic reporting has been completed and submitted as per the terms of the RP grant and includes:

- 1st Annual Progress Report for Exploration of the Damoh West (RP No. 368/F.No./MINING/RP-1/2002) Reconnaissance Permits for the period 23/07/2002 to 22/07/2003.
- 2nd Annual Progress Report for Exploration of the Damoh West (RP No. 368/F.No./MINING/RP-1/2002) Reconnaissance Permits for the period 23/01/2002 to 22/07/2003.
- 3rd Bi-annual Progress Report for Exploration of the Damoh West (RP No. 368/F.No./MINING/RP-1/2002) Reconnaissance Permits for the period 23 July-03 to 23 Jan-04.
- First Partial Relinquishment Report Damoh West (RP No. 368/F.No. /MINING/RP-1/2002) Reconnaissance Permit.
- Fifth Biannual Progress Report on Exploration Activities Within The Damoh West (RP No. 368/F.No. /MINING/RP-1/2002) Reconnaissance Permit, Madhya Pradesh, India

All the above reports have been submitted with the relevant government institutions.

There are more than 300 villages within the RP areas. Agriculture is the main occupation for over 90% of the population. Bigger market places are around Shahgarh and Bakswaha. Industries are mainly agrarian. Agriculture in the region is mostly single crops restricted to the monsoon season. Less than 20% of the land is irrigated. About 40-50% of the area is covered by forest. Most of the larger forest tracts occur in the southern part of the Damoh west RP and scattered all through the central part of tenement. Most the forest is semi arid and includes mixed teak, khair, and mahua.

The Damoh West RP area, covering Chhattarpur, Sagar, Damoh and Tikamgarh districts, totalling 2,450 km^2 was granted to ARTE on June 21 2002 and subsequently executed on July 23 2002.

Reconnaissance operations commenced during January 2003 after these executions with proper notifications and permissions from various government officials, including the District Collectors and the State forest department. All terms and conditions associated with this

permission were strictly followed, and there were no incidents of non-compliance. To facilitate this reconnaissance work, a base camp was established in the town of Chhattarpur.

Between January and October 2003, several first pass reconnaissance gravel and stream sediment samples were collected from dry streambeds within the RP area. .

Once KIM positive results were received for the first-pass reconnaissance samples, several more follow-up gravel samples were collected at closer spacings in order to delineate areas with anomalous concentrations of KIMs. At the end of this process (around mid-2004) anomalous areas had been delineated over approximately 1,000 km^2 of the original RP area. The most interesting indicator mineral anomalies were at the Bunder prospect.

Anomalous catchments were further evaluated with follow-up ground geophysics and soil sampling. Targets were selected and prioritised based on their profile, size and proximity to anomalous drainage samples yielding KIMs. During ground follow up and prospecting of these anomalies, kimberlite outcrop and float were discovered at the Bunder Prospect. A total of eight kimberlites have been found to date. All kimberlites intrude the mid-Proterozoic sedimentary sequence underlying most of the property.

In July 2004, 1,450 km^2, or approx 60% of the original RP was relinquished as per the provisions of the MMDR Act. The retained area totalling 1,000 km^2 covered portions of the Chhattarpur, Sagar, and Damoh districts.

Upon the discovery of kimberlites at Bunder , a 50-person tent camp was established near the village of Nimani, approx. 15 km from Bakswaho. All subsequent field operations were supported from this camp.

In January 2005, drilling commenced at Bunder ; following permission from the State Forest Department. Drilling focused on micro-diamond grade determination and delineation of two of the known kimberlites. Work was completed by July 22, 2005 and PL applications were submitted.

3 REGIONAL GEOLOGY

Based on a compilation from published 50,000 scale GSI geological maps, the geology of the area is defined by lithologies of the Bundelkhand Craton and overlying Proterozoic sedimentary basins. The oldest rock types include granitoid gneiss with enclaves of dolerite, gabbro, amphibolite and quartz reefs. Meta volcano-sedimentary rocks of Paleo Proterozoic Bijawar Basin occur in the central part of the Damoh West RP area and consist of an unstable rift assemblage of clastics, chert, dolomite units and basaltic flows and sills. The Bijawar group of rocks is overlain by Meso to Neo Proterozoic platformal sediments of the Vindhyan Supergroup. These rocks are exposed in the southern most part of the RP area. The Vindhyan Supergroup is thought to have been deposited from about 1400-600 Ma in a down warped zone between the Bundelkhand Craton on the north, and the early-mid Proterozoic mobile belt known as the Son-Narmada-Tapti lineament zone, or "Sonata" lineament to the south. Dates from glauconite in the Semri and Kaimur Groups metasediments suggest an age of 1400 to 900 Ma. The Supergroup consists of a monotonous sequence of sandstone, shale and limestone. There are a number of minor

unconformities, disconformities and conglomerate units in the sequence indicating episodic rifting. In the west continental food basalt (Deccan Traps) of Palaeocene age cover the craton and sedimentary rocks of Bijawar and Vindhyan Supergroups. The Bunder Prospect is located within the Meso-Proterozoic Kaimur and Semri group platformal sediments extending into the Palaeo-Proterozoic Bijawar group metasediments to the north. The geology of the Damoh West RP is shown in Plan1.

4 RESULTS OF EXPLORATION

4.1 Geologic Interpretation

The interpretation was done on overlays on TM false colour imagery at 1:250K scale. The basic linework was digitised and subsequently a geological/structural compilation overlay was also completed. Published 1;250,000 scale geological maps were then used to support the geological compilation. Interpretation of the RP area was supported by 1:100,000 scale plots of the IRS panchromatic imagery, and merged TM-IRS imagery. The data was interpreted in terms of regolith cover and structural features. Analysis of remote sensed data including LANDSAT TM imagery and the high-resolution IRS panchromatic imagery has not identified any feature that is attributable to kimberlite intrusion.

The IRS imagery could be used to provide a detailed interpretation at 1:50,000 scale or larger, but this would be extremely time consuming because of the fine detail of the Vindhyan stratigraphy that is visible. Interpretation at larger scale would only be cost effective in the Bunder prospect area in conjunction with surface mapping.

4.2 KIM Gravel Sampling

Gravel sampling began in January 2003. Samples were initially collected at a spacing of approximately 1 sample per 10 sq. km. Positive results were further evaluated by additional follow-up gravel samples at closer sample spacings. A total of 630 heavy mineral gravel samples sieved to –1mm were collected by hand evacuation of gravel from trap sites within streambeds. All samples were processed by magnetic and heavy liquid techniques to recover kimberlitic indicator minerals (KIMs). The +0.3-0.85mm paramagnetic heavy mineral concentrates are observed in full with individual KIM grains, namely pyrope, chromite, picro ilmenite, chrome diopside, and diamond being manually sorted counted and described. Frequently less than fifty KIMs would be recovered from a 30kg sample that typically may contain several tens of millions of other non-KIM grains. Suspected KIMs were subsequently probed by scanning electron microscope and/or Mass Analysing SEM, with the data plotted on standard mineral chemistry plots to establish any kimberlite/ diamond association. The +0.3-0.85mm non-magnetic fraction of samples returning positive indicator minerals were further processed and observed for diamonds. All samples were dispatched to the Rio Tinto Laboratory in Bangalore and/or Belmont, Australia for processing, observation, and analysis.

Locations of all indicator mineral samples within the RP area are given in Plan 2. Field observation results from each sample site are recorded in Appendix 1.

4.3 KIM Loam Sampling

A total of 6 heavy mineral loam samples sieved to –1mm were collected by hand evacuation of soil at select sample sites. All samples were processed by the same techniques and laboratories as used for gravel samples.

Locations of all loam samples within the RP area are given in Plan2. Field observations from each sample site are recorded in Appendix 2.

4.4 KIM Rock Sampling

A total of 14 rock samples were collected for KIM analysis from kimberlites discovered within the RP area (see further detailed descriptions below). Samples submitted for KIM analysis only were first crushed, and then processed using the same techniques and laboratories as used for gravel samples. Samples of rock collected for diamond analysis were processed by caustic fusion and are reported below. Locations of all rock samples submitted for KIM analysis within the RP area are given in Plan 2. Field observations from each sample site are recorded in Appendix 3.

4.5 Indicator Mineral Results

KIM results from the laboratory include mineral grain counts for garnet, chromite, ilmenite chrome diopside, and diamonds. KIM observation results for the key diagnostic minerals (i.e. pyrope garnet, high MgO chromite, picro ilmenite, and chrome diopside) available at the time of writing this report are shown in Appendix 4. SEM probe results of all probed grains to date are presented in Appendix 5.

Plan 3 shows the location of the various KIM species within the RP (observation results only). In contrast to samples in the relinquished permit areas, kimberlitic indicator mineral samples within the retained area are enriched in kimberlitic chromite and pyrope. Several anomalous samples (kimberlitic pyrope and chromite) were recovered. A discussion of the various KIM species is presented below.

4.5.1 Pyrope Garnet Results

The majority of the samples in the area are devoid of garnets. Garnets that have been recovered are dominated by non-kimberlitic varieties like almandine and spessartine with minor andradite and grossularite. Within the Bunder prospect however, several lherzolitic and a few harzburgitic pyropes have been recovered from select catchments.

Most kimberlites yield lherzolitic type pyrope garnets, whereas many diamondiferous kimberlites yield harzburgitic type pyrope garnets. Pyrope garnet from diamondiferous harzburgite typically is chromium-rich, depleted in calcium and plots within the harzburgite (H) field of Figure 1. These are also similar in composition to pyropes found as inclusions in diamonds, which equilibrated at the same temperatures and pressures

as the diamond during its formation and growth. Hence harzburgitic composition pyropes recovered from kimberlite concentrate indicate a potential for diamonds from a peridotitic source. The greater the number of pyrope grains with harzburgitic compositions, the greater the peridotitic diamond potential, particularly if the harzburgitic pyrope population has very subcalcic pyropes (<2.5% CaO).

The distribution of pyropes recovered from gravel samples within the Bunder prospect area of the Damoh West RP suggests a kimberlitic and likely diamondiferous source for these grains. This was verified by the discovery of the Bunder kimberlites (see below). It should be noted that no pyropes have been recovered from the Bunder kimberlites sampled to date.

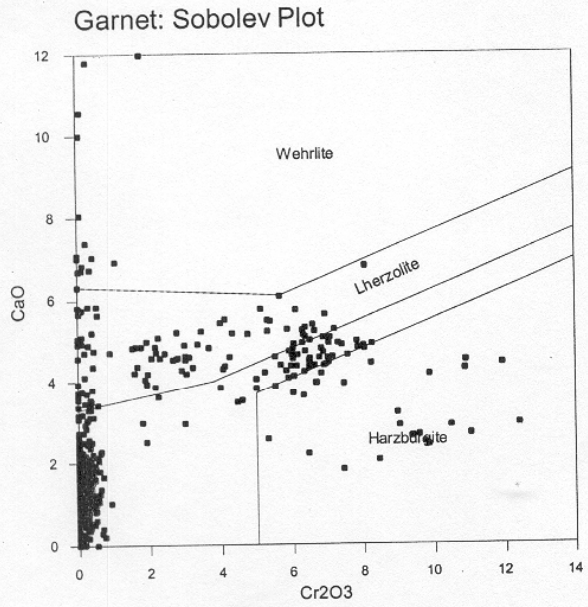

Figure 1: Garnet Sobolev Cr2O3 vs. CaO plot for all garnets in the Damoh West RP

4.5.2 Chromite Results

Chromites recovered from samples outside of the Bunder Prospect area are dominated by shallow magmatic non-kimberlitic varieties, the chemistries of which overlap with the kimberlitic fields making the interpretation of the chromite results in some cases difficult. Many samples from the southern part of the RP area have large number of chromites that display basic fractionation trends on plots of MgO vs Cr2O3 chromite plots. These grains are most likely derived from the Deccan volcanic rocks exposed within their host catchments.

Chromites from gravel samples within the Bunder prospect area, and rock samples of the Bunder kimberlites themselves, show a wide range of compositions. Many plot within the mantle stability trend of figure 2, with some spilling over into the diamond stability field, and suggest that these chromites have compositions that have crystallized at the same temperatures and pressures as diamond. The presence of xenocrystic chromite of similar diamond inclusion compositions in these samples suggests the

source kimberlite tapped chromite bearing mantle material (lherzolite and/or harzburgite) from within the diamond stability field. The close spatial distribution and similarities in chromite mineral chemistry of the grains from gravel samples and kimberlite indicate that the source of chromites in gravel samples is the Bunder kimberlites themselves.

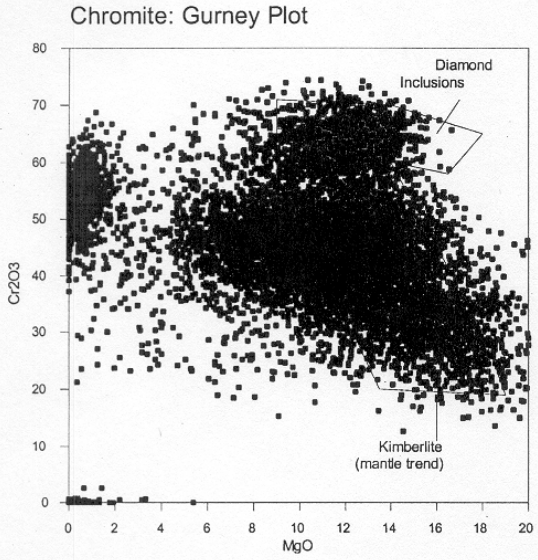

Figure 2: Chromite Gurney MgO vs. Cr2O3 plot chromites from the Damoh West RP. Red = Bunder, Black = outside Bunder

4.5.3 Ilmenite Results

4.5.4 Ilmenite recovered from the gravel samples is dominated by low MgO/ low Cr2O3 crustal associated varieties kimberlite associated picro ilmenite are also present, mostly within the Bunder prospect and downstream from the kimberlites. These grains display MgO and moderate Cr2O3 contents indicating a primitive source and little oxidation. Similar picro ilmenite from kimberlites of the Kaap Vaal craton, is interpreted to indicate excellent diamond preservation potential with predominance of dodecahedron forms. Chrome Diopside

No chrome diopside was recovered from any of the samples collected.

4.5.5 Diamond Results

A total of nine micro diamonds were recovered from seven individual samples within the reconnaissance area, all downstream from the kimberlites at Bunder. The largest diamond recovered sat on the + 0.85 mm sieve. Due to their small size none of the stones are of economic value. The results are presented in Appendix 11.

4.6 –80# Stream Sediment Geochemistry

A total of 299 stream sediment samples have been collected at some of the gravel sample sites. Each sample consists of approximately 100gm of –80# (-180□m) silt collected from the active streambed in the centre or lowest part of the stream. All samples have been analysed at the Shiva Laboratory in Bangalore to analyse for a suite of 32 lithophile, chalcophile and precious metals by Multi-acid digest including both ICP-MS & ICP-ES finish to fully optimize detection limits. Elements and detection limits for each are as follows: Ag (0.1 ppm); Al (10 ppm); As (0.5 ppm); Ba (10 ppm); Bi (0.1 ppm); Ca (10 ppm); Cd (0.1 ppm); Ce (0.5ppm); Co (2 ppm); Cr (2 ppm); Cu (2 ppm); Fe (100 ppm); K (10 ppm); La (0.5ppm) Mg (10 ppm); Mn (5 ppm); Mo (0.1 ppm); Na (10 ppm); Nb (0.2 ppm); Ni (2 ppm); P (5 ppm); Pb (0.5 ppm); Sb (0.5 ppm); Sr (2 ppm); Ta (1ppm); Te (0.2 ppm); Ti (10 ppm); V (2 ppm); Y (0.05ppm); W (0.1 ppm); Zn (2 ppm); Zr (10 ppm).

Locations of these samples are presented in Plan 4, and geochemical assays and descriptions are listed in Appendix 6.

The kimberlites are associated with only background stream sediment geochemistry. Minor potential for base and precious metal mineralisation is indicated within the RP area with several point sources returning anomalous results, however, the lack of continuity and lack of multi element signatures suggest associated mineralisation to be minor or the anomalies themselves to be non-mineralisation associated.

4.7 Soil Sample Geochemistry

Soil samples were collected within anomalous catchments, and over geophysical targets identified during the course of the ground geophysics program in this area. Soil samples consist of approximately 100 grams of –80# (-180□m) C – horizon soil typically collected from a shallow 10 - 20 cm deep pit or at the bottom of an auger hole. Soil samples have been variably sampled either in a nominal 150 metre line spacing and 50m sample spacing grid or as crosshair or single line traverses with sample spacings varying from 25 – 100metres. A total of 3,590 soil samples sieved at -80# were collected. Samples were analysed by ICP-OES and ICP-MS (*=ICP-MS) techniques at Shiva Laboratories in Bangalore. Elements and detection limits for each are as follows: Ag* (0.1 ppm), Al (10 ppm), As* (0.5 ppm), Ba (10 ppm), Ca (10 ppm), Cd* (0.1 ppm), Ce (0.5 ppm), Co (2 ppm), Cr (2 ppm), Cs (0.1 ppm), Cu (2 ppm), Bi* (0.1 ppm), Fe (100 ppm), Ga (0.1 ppm), K (10 ppm), In (0.05 ppm), La (0.5 ppm), Mg (10 ppm), Mn (5 ppm), Mo* (0.1 ppm), Na (10 ppm), Nb* (0.1 ppm), Ni (2 ppm), P (5 ppm), Pb* (0.5 ppm), Rb (0.1 ppm), Sb* (0.5 ppm), Se (0.5 ppm), Sr (2 ppm), Te (0.2 ppm), Th (0.2 ppm), Ti (10 ppm), Tl (0.1 ppm), U* (0.02 ppm), V (2 ppm), W* (0.1 ppm), Y (0.05 ppm), Zn (2 ppm), Zr (10 ppm). Locations and results of these samples can be found in Appendix 7. Plan5 details the locations and Nb results for soils collected within the Bunder Prospect Area.

The results highlighted discrete soil geochemical targets enriched in key pathfinder trace elements for kimberlite (eg: Nb, Zr, La, Ce). These elements are relatively immobile, and

indicate a close proximity to source in this residually weathered environment. Further ground follow-up of these positive results identified kimberlite outcrop and float in several areas.

4.8 Rock Sample Geochemistry

Rock samples were collected during the course of the exploration program within the RP area. A total of 68 samples were collected. Rock samples wherever possible are composited either as rock chips for any outcrop or as composites of similar lithology for float samples. Samples were analysed by ICP-OES and ICP-MS (*=ICP-MS) techniques at Shiva Laboratories in Bangalore. Elements and detection limits for each are as follows: Ag* (0.1 ppm), Al (10 ppm), As* (0.5 ppm), Ba (10 ppm), Ca (10 ppm), Cd* (0.1 ppm), Ce (0.5 ppm), Co (2 ppm), Cr (2 ppm), Cs (0.1 ppm), Cu (2 ppm), Bi* (0.1 ppm), Fe (100 ppm), Ga (0.1 ppm), K (10 ppm), In (0.05 ppm), La (0.5 ppm), Mg (10 ppm), Mn (5 ppm), Mo* (0.1 ppm), Na (10 ppm), Nb* (0.1 ppm), Ni (2 ppm), P (5 ppm), Pb* (0.5 ppm), Rb (0.1 ppm), Sb* (0.5 ppm), Se (0.5 ppm), Sr (2 ppm), Te (0.2 ppm), Th (0.2 ppm), Ti (10 ppm), Tl (0.1 ppm), U* (0.02 ppm), V (2 ppm), W* (0.1 ppm), Y (0.05 ppm), Zn (2 ppm), Zr (10 ppm). Locations and results of these samples can be found in Appendix 8. Plan 6 details the locations of these samples.

Similar to soils, kimberlites produce distinctly elevated compatible and incompatible elemental signatures. The results show that the Bunder kimberlites are enriched in ultramafic elements and incompatibles. The low levels of Sr, K, and Rb are most likely the result of leaching during alteration or weathering. The chemistry of the Bunder kimberlites is similar to that displayed by the diamondiferous Majhgawan kimberlite, located approx. 85 km to the northeast of Bunder.

4.9 Geophysics

1095 line km of ground magnetics surveys, 52-line km of horizontal loop (Max-Min) electromagnetic surveys, and 7.2 line km of orientation NanoTEM surveys have been completed over eight grids, as shown in Plan 7, and as summarised below.

Table 1: Geophysical Survey Coverage

Grid	Line Spacing (m)	Ground Mag Line km	Targets Selected	Max-Min Line km	Nano-TEM Line km	Comment
Bunder	100	773	65			Grid covers anomalous catchments.
Bunder detail	25	105		52	7.2	Detailed definition of kimberlites
Ber	100	86	7			Grid covers anomalous catchments.
B50	50	20				Follow-up to elevated K-suite soil geochemistry results.
70808	100	41	1			Grid covers anomalous catchments.
B78	50	35				Covers area of suspected kimberlite float

Nimani	100	35				Structural targeting for camp water supply
	TOTAL:	**1095**	**73**	**52**	**7.2**	

Ground magnetic surveys were completed using Scintrex Envimag magnetometers operating in "walkmag" mode with a reading taken every two seconds, equating to a station spacing of 2-3m. On the Bunder grid, additional Scintrex MP-3 magnetometers were utilised to increase production whereby readings were taken at 10m intervals along the traverse lines. Navigation was by hand-held GPS, providing a positional accuracy of +/- 10 meters. A magnetic base station, positioned central to the individual grids, measured diurnal variations at 20-second intervals.

Raw field data were corrected for diurnal variations and manually filtered to remove "movement noise" inherent to the Envimag "walkmag" system. The filtered data were then reduced to magnetic pole (RTP) to remove the effects of geomagnetic inclination and declination on the anomaly geometry. Anomalies were selected and prioritised based on their profile form, size and proximity to anomalous drainage samples yielding kimberlitic indicator minerals.

The Bunder Prospect grid is background magnetic signatures vary from a subdued magnetic background of the Kaimur group to highly active magnetic domains within the Bijawar group. Deccan trap basalts are characterised by zones of incoherent short wavelength, high amplitude anomalies, as observed in the south-central edge of the grid (see Plan9). Details pertaining to the magnetic responses of the Bunder kimberlites may be found following this section. Sixty-five targets were identified within the Bunder ground magnetics grid and were followed up by prospecting and / or soil geochemistry surveys.. Detailed ground magnetics surveys and horizontal loop electromagnetic surveys have also been completed over the known kimberlites to refine their extent and to ascertain their geophysical signatures.

The Ber grid is located within Bijawar metasediments. Outcropping dolomites are recorded in the southern region of the grid. Background magnetic signature is relatively quiet showing a NW-regional trend (see Plan10). Several small discrete RTP magnetic high anomalies have been identified on the grid. Targets followed up with soil geochemistry to date have failed to confirm a kimberlitic source.

Detailed ground magnetics was completed over the B50 target, within the Bunder Grid, as follow-up to elevated kimberlitic suite soil geochemistry results. The grid is dominated by a broad wavelength elongate RTP magnetic high, with a short wavelength elongate anomaly located on the flank of the broader wavelength feature as shown in Plan 11. The detailed survey failed to directly delineate a kimberlitic source. It is recommended to complete Max-

The 70808 grid is located in the Bijawar group metasediments. The anomalous catchment is defined by a single sample yielding low counts (<10 grains) of kimberlitic chromites. Two distinct magnetic domains are evident within the grid, representing two separate lithologies within the Bijawar group, as shown in Plan12. The southeastern half of the grid is characterised by high amplitude active background, contrasting with the northwest of the grid, which has lower amplitude, more subdued background. No magnetic anomalies of sufficient size were identified within the grid.

Detailed ground magnetics (50m line spacing) were completed over an area where suspected kimberlite float was recovered south of the Kasera village. The immediate grid area encompasses the village, which sources several cultural anomalies on the grid. Complex, short wavelength, high amplitude anomalies were identified in the vicinity of the suspected kimberlite float (see Plan 13).

The Nimani ground magnetics grid was established around the field operations camp in order to differentiate any structures, which may host a sufficient water supply for the camp. Structural features represent the best potential for a reliable water source within this platformal sedimentary terrain (see Plan 14).

Horizontal loop (Max-Min) electromagnetic surveys were carried out using the Apex Parametric Max-Min instrumentation, with a transmitter-receiver coil spacing of 100m. The surveys were designed to characterise the electromagnetic signature of the kimberlites, discovered from the ground magnetics and soil geochemistry surveys, and to map the extent of "weakly-magnetic" components of these known kimberlites.

12 lines totalling 7.2 line km of orientation NanoTEM surveys were completed over five kimberlites located within the Bunder grid, as shown on Figure 18. Survey specifications were as follows;

Receiver:	Zonge GDP-32, SN 3265
Receiver loop size:	5m x 5m square loop, effective area 250m^2
Frequency:	32Hz
Read:	3 repeats of 1024 stacks (32 seconds per reading)
Transmitter:	Zonge NT20, SN ZT-66
Transmitter loop size:	20m x 20m square loop
Station spacing:	20m

The effective depth of exploration, using the above specifications, was in the order of 80-100m, dependant on the background resistivity. Decay curves at each station were assessed for repeatability and then averaged, prior to applying a smooth model inversion. The smooth model inversion process (StemInv) produces a vertical section of conductivity versus depth along each line as shown in figures 19 to 26. The NanoTEM survey was very effective in delineating the extent of the kimberlites as summarised in the following section. Additional conductive targets, south of B08 and B48, have been identified and have yet to be drill tested. Lack of any significant soil geochemistry anomaly over these targets may be due to the thick scree cover, masking any bedrock geochemical signature. The orientation survey was curtailed due to malfunction of the GDP-32 instrumentation.

4.10 Kimberlite Descriptions

To date, a total of 8 kimberlites have been found within the Damoh West RP through a combination of gravel sampling, ground geophysics (both magnetics and EM), soil sampling, and prospecting. Two of these kimberlites have been further delineated and tested by way of drilling. All are found to be intrusive into the host sequence of mid-Proterozoic sediments on the margin of the Bundelkhand craton. The location of these kimberlites is shown in Plan 7.

Kimberlite B28 is approximately 15 hectares in size based on a combination of soil geochemistry, geologic mapping, and ground geophysics. The pipe has a shallow cover except for outcrops of volcaniclastic diatreme facies kimberlite on the west and southern margins. B28 is a complex, NS-trending elongate anomaly, bounded to the south by a high amplitude, short wavelength, crescent shaped anomaly most likely due to a contact metasomatic effect, and to the north by a broader wavelength RTP dipolar anomaly. The magnetic signature within the kimberlite is highly variable, suggesting the presence of several different phases of kimberlite intrusion and possible inclusions of country rock rafts within the kimberlite (see Plan 14), although not confirmed by the limited drilling to date. The conductive response of B28 is strongest in the southern half of the kimberlite, where exposure and subsequent weathering has increased the conductivity of the surficial kimberlite (see Plan 17). This portion of the kimberlite exhibits the classical kimberlite signature, with a strong surficial conductor sourced by weathered kimberlite overlying a resistive body at depth, sourced by the fresher (unweathered) kimberlite. Drilling has confirmed strongly weathered kimberlite to a depth of 13m.The northern half of the kimberlite is overlain by up to 20m of colluvial cover, and hence the degree of recent surficial weathering is reduced in this part of the kimberlite. The base of the scree cover adjacent to the kimberlite is slightly conductive, possibly due to water accumulation at the scree / bedrock interface. The lack of a significant surficial conductor in the central portion of B28 may be attributed to recent scouring of the conductive kimberlite by present day drainage. The resistivity at depth in the central portion is comparable to the rest of the kimberlite. Full coverage of the kimberlite with Max-Min and NanoTEM electromagnetics wasn't possible, due to extreme topography peripheral to the southern half of the kimberlite.

Kimberlites B8 and B38 measure 2.5ha and 1ha respectively and are located 700m north of B28. B8 is a hypabyssal kimberlite manifested by a variable amplitude NNW-trending linear anomaly, showing apparent thickening at its southern extent, where it intersects an EW-trending linear RTP anomaly. It is coincident with a broader zone of anomalous soil geochemistry, suggesting the presence of a weakly magnetic kimberlite component. B8 exhibits a variable moderate to weak electromagnetic response. The southern end of B08 exhibits a typical kimberlite response (surface conductor overlying resistive response) semi-coincident with anomalous soil geochemistry, whereas the northern part of the inferred kimberlite (based on soil geochemistry) exhibits a very subtle conductive response, coincident with the anomalous soil geochemistry values. The lack of a significant conductive response at the northern end of the kimberlite may be attributed to a reduced weathering profile and/or thickness of the kimberlite. B38 displays a conductive response coincident with a weak magnetic high, yet lacks any significant soil geochemical anomaly due to the thick scree cover in the area masking any bedrock geochemical signature. This kimberlite has not been sampled for KIM or diamond potential.

Kimberlite B48 was discovered by follow-up prospecting of an EW-trending elongate mag target semi-coincident with B8. The B48 kimberlite exhibits a moderately conductive response, coincident with the magnetic anomaly. The lack of a coincident conductive response with the remainder of the linear magnetic anomaly extending between B8 and B48 may be due to a factor of limited source width and a variable weathering profile. Previous soil geochemical surveys (50m spacing) failed to positively confirm this kimberlite, due to alluvial/scree cover, masking the geochemical signature. The inferred area of B48 is 0.7Ha.

Kimberlite B41 is characterised by two separate discrete RTP magnetic highs (see Plan 16). The combined area of the two magnetic sources is less than 1 Ha, although soil geochemistry results suggest the two lobes coalesce forming a NW-trending elongate kimberlite. B41 exhibits a very strong electromagnetic response, directly coincident with the magnetic anomalies. B41 exhibits the strongest conductive response at surface. The smooth model inversion sections suggest a source body of 60m width and a weathering profile of approximately 20m. A sub-horizontal conductor adjacent to the kimberlite is interpreted to be the water table or a conductive horizon in the flat-lying sediments. No outcrop or float has been identified to date.

Kimberlite B58 is a sub-cropping breccia, discovered through prospecting in the vicinity of B41. There is a distinct soil colour change between B41 and B58, suggesting they are separate bodies. B58 is characterised by a discrete RTP magnetic high anomaly. The size of the magnetic anomaly suggests a magnetic source is no greater than 20m in width. Due to its limited size, there is no discernible electromagnetic anomaly coincident with the B58 kimberlite.

Kimberlites B70 and B73 are subtle, low amplitude RTP magnetic highs, coincident with single point soil geochemical anomalies and rare kimberlite float. B70 is located within a NS-trending linear Max-Min electromagnetic anomaly, extending north to the B41 kimberlite. The extension of the linear conductor to the south of the interpreted kimberlite may be attributed to a NS-trending structure hosting the kimberlite. The surface area inferred from soil sampling and mapping is 0.2 and 0.3 hectares respectively.

4.11 Diamond Drilling and Downhole Logging

Drilling focused on micro-diamond grade determination and delineation of two of the larger known kimberlites within the Bunder prospect, namely B28 and B8. A total of 6 drill holes totalling 1,296m of HQ reducing to NQ at depth were completed within the RP, testing and delineating the B28 and B8 kimberlites. The diamond drilling program commenced in January 2005 and was completed in mid July 2005. Mining Associates of Asansol, WB, were contracted to complete the drilling operations using two skid mounted LY38 drill rigs. The locations of the drill holes, in addition to drilling logs can be found in Plan7, and Appendix 9 and 10.

Prior to drilling, permission was obtained from the State forest department to complete this work. ARTE complied with all terms and conditions of this work.

All drillhole locations were surveyed using handheld gps measurements. The drilling contractor was instructed to ensure maximum recovery of drill core. Typically, 90-100% was obtained.Drilling progress was slow due to mechanical problems and driller inexperience.

Drilling was limited to day shift only as part of ARTE's voluntary obligation to limit drilling activities inside the forest area. Two planned drillholes, testing the northern part of B8 and the central part of B41, were not completed within the term of the RP due to the onset of monsoon.

Scintrex Geophysical Services (India) were contracted to carry out downhole geophysical logging on the drillholes intersecting kimberlites on the Bunder Prospect. A summary of holes logged is included in Table 2.

The physical parameters measured included natural gamma, magnetic susceptibility, resistivity, single point resistance and hole deviation. Initial plans to log the holes with neutron porosity and density tools were cancelled due environmental and safety concerns if the active source probes were lost in the open holes.

In general, there was significant variation in the magnetic susceptibility and resistivity values, related to different phases within the kimberlite. The variation in natural gamma values within the kimberlite was negligible, although it clearly defined the contact between kimberlite and host sediments. A summary of the geophysical logs follows;

B28002- the natural gamma log clearly delineates the contact between kimberlite and the host sediments, although shows very little variation within the kimberlite itself, averaging approximately 90 API units throughout the kimberlite. Zones of high magnetic susceptibility (max. 5000 x 10^{-5}SI) with coincident low resistivity, and conversely, zones of high resistivity (max. 3000ohm-m) and negligible magnetic susceptibility are identified in the geophysical log, although these zones aren't visually recognized in the drill core. These zones possibly represent different facies within the kimberlite and may be significant with respect to diamond grade. For details see Figure 27.

Table 1: Summary of Logging Completed

Hole	Drilled Depth	Logged Interval	Comment
B28001	260.22	n/a	Hole open to smaller diameter (44mm) probes. Blocked at casing depth (13m) for SGSI probes.
B28002	178.34	1-172m	Logs completed
B28003	151.75	n/a	Blocked at 21m
B28004	216.16	16-190m	Logged to casing depth. Incorrect calibration on deviation tool
B28005	268.73	30-176m	Logged to casing depth. Incorrect calibration on deviation tool
B8001	220.72	n/a	Blocked at surface
TOTAL		**491m**	

B28004- the geophysical logs in hole B28004 reveal one distinct magnetic zone (max. 1000 x 10^{-5}SI) within the kimberlite. The natural gamma log, once again, shows very little variation within the kimberlite, with absolute natural gamma values of the kimberlite averaging 120 API units. In general the absolute values of resistivity and magnetic susceptibility are an order of magnitude lower than that measured in B28002. The difference in absolute physical property values is a reflection of the different facies between the southern and northern portions of the kimberlite, as observed during logging of the drill core. For details see Figure 28

B28005- the geophysical logs show a similar variation as observed in B28002, with the major difference being the absolute magnetic susceptibility values being significantly less in B28005. Once again, this variance highlights the heterogeneous nature of the kimberlite. For details see Figure 29

Hole Deviation- Unfortunately, the hole deviation tool was incorrectly calibrated, producing azimuth data that weren't within accepted tolerances. The probe was re-calibrated in the field and re-run on B28002 only, due to time constraints on the drilling program.

Physical Property Measurements- Magnetic susceptibility and specific gravity measurements were carried out on the drill core at regular intervals throughout the length of all holes.

The specific gravity of the kimberlite was highly variable ranging between 2.3 -2.8 g/cc, averaging 2.6 g/cc, as compared to the average of the host sediments of 2.7 g/cc. Representative core from each lithology intersected have also been submitted for laboratory physical property measurements, including magnetic susceptibility, resistivity, density an acoustic velocity.

4.12 Caustic Fusion Diamond Results

A total of 146 samples of kimberlite rock and drill core have been submitted for caustic fusion micro-diamond analysis at Rio Tinto's Laboratory in Australia. Rock samples were collected from bedrock exposures using hammers and other hand tools. Drill core was logged, photographed, and spilt in half prior to sampling using a diamond core saw. Core was sampled after being washed in water at intervals that varied between 3-7 metres, or approximately 20kg. All samples were stored at ARTE secure field facilities prior to shipment within cotton sample bags. Drill core sample bags were sealed with wire ties and secure numbered sample locks prior to shipment via courier to Australia. Chain of custody forms were used to track drill core transport from the drill site to courier office in Delhi. From there, the shipments were tracked using internet-based information supplied by the courier company. All recovered diamonds were sieved using standard square mesh sieves. The results were tabulated on a per sample basis, and each individual diamond described. Where several small diamonds were recovered per sample, group descriptions were produced.

To date, a total of 935 diamonds, totalling approximately 2 carats have been recovered from 125 processed samples (2696 kg), including 39 stones greater than 0.85mm. These diamonds have zero commercial value. Additional samples remain pending at the time of writing this report. The results are presented in Appendix 11, with diamond descriptions presented in Appendix 12.

At B28, a total of 2,264 kg of rock and drill core has been submitted for caustic fusion. 90 kg of this material remains pending at the time of writing this report. To date, a total of 28 > 0.15mm stones/100kg of kimberlite have been found, including 26 +0.85mm stones weighing 0.853 cts. The largest stone sits on the +1.70 mm sieve. There has been no correlation between diamond content and geologic facies observed to date. At B8/48, a total of 472 kg of rock and drill core has been submitted for caustic fusion. To date, a total of 36 > 0.15mm stones/100kg of kimberlite have been found, including 13 +0.85mm stones weighing 0.339 cts. The largest stone sits on the +1.70 mm sieve. The diamond size/frequency distribution from B28 and B8/48 shows these kimberlites have the potential for larger size diamonds, and could be potentially economic. Larger samples must be taken in order for further assessment to be made.

At B58, 100 kg of float submitted for caustic fusion returned 18 +0.15mm stones. The largest stone sat on the +0.425 mm sieve.

5 HEALTH, SAFETY, COMMUNITY RELATIONS AND ENVIRONMENT

Rio Tinto seeks to discover mineral resources that will contribute to the growth to our company, and meet the increasing global demand for minerals. It's search covers a wide range of environmental and cultural settings and is guided by the need to minimize risks to the health and safety of it's employees and adverse impacts on the communities and environment in which we work. The Rio Tinto HSEC Aims and Actions are highlighted in Appendix 13.

To that end, ARTE has maintained high HSEC standards during exploration within the RP. ARTE has constructed a medical clinic at the Bunder Camp, equipped with a trained medical doctor, first aid and basic trauma equipment, and a dedicated ambulance available at site at all times. All employees and contractors receive thorough inductions, health checks, and training prior to the start of work. Many staff and contractors have received hazard identification training, and are involved in daily and bi-weekly safety reviews and meetings. All employees and contractors are issued personal protective equipment relevant to their conditions of working. Australian specialists have provided several first aid, accident management and driving safety courses to the Indian team.

ARTE has a strong commitment to maintaining good relations with the community amongst which it works and to respect the laws, customs and traditions of these societies. A number of local people have been given employment in the exploration team to work as field assistants, drivers and other staff positions. The exploration geologists have visited many of the villages prior to sampling to explain to seniors, elected representatives and others from the village about the work being carried out by ARTE. In other areas, local field assistants have been coached in regard to exploration in order that they can communicate our activities in the field. A series of "brief sheets" detailing the nature and results of our work, in both English and Hindi , have been widely distributed. Several community initiatives have been completed during this phase of exploration within the Damoh West RP. A total of 16 initiatives were undertaken at a cost in excess of 3.5 lakh Rs., A listing of initiatives is provided in table 3. A summary of community related incidents is presented in Appendix 13.

In order to collect samples and conduct diamond-drilling operations within forest areas of the RP, formal applications were submitted to District Forest Officers of Chhatarpur, Damoh and Sagar district. Written permissions were obtained from Chhatarpur, Sagar and Damoh Forest Divisions prior to accessing the sample/drill site locations within forest areas. ARTE fully complied with all environmental legal obligations related to the exploration work within the RP. Baseline studies commenced prior to drilling, and environmental monitoring was also completed duringthe operations. All sample and drill sites were fully rehabilitated upon completion of the work. No trees were cut during the course of the exploration activities within the RP area.

Internal and independent external auditors have confirmed the team's excellent HSEC track record over the duration of the RP life without significant findings or non-compliance issues.

6 CONCLUSIONS AND RECOMMENDATIONS

ARTE has explored its Damoh West RP with maximum speed, safety and efficiency in a technically competent manner. As a result of these diligent efforts it has been able to delineate a relatively small area that is prospective for economically viable diamondiferous kimberlites. Two PL applications have been filed over this area of the known kimberlites discovered to date.

The original Damoh West RP totalling 2450 km^2 has been aggressively reduced to slightly over 1% of its original size since July 2002. The area covered by the Prospecting Licence applications requires continued intensive exploration.

The discovery of 8 kimberlites within the Damoh West RP validates the exploration process used by ARTE in the search for diamondiferous kimberlites. The combination of gravel sampling, ground geophysics (especially ground magnetics) and soil sampling has proved to be an invaluable cost effective exploration technique.

The Bunder kimberlites will be further evaluated for their diamond potential based on their results to date. This may include additional geophysical surveys (both airborne and ground based mag/EM/gravity), delineation diamond drilling for kimberlite size, shape, and diamond content, large diameter drilling for obtaining larger samples of kimberlite for grade determination, and mapping. Mini-bulk samples (approx. 10 tonnes) chould also be collected from outcrops at B8, B48, and B28 to assess diamond grade. Pending additional favourable results, much larger samples may be taken to ascertain value of the diamonds present in these kimberlites.

During the three-year RP term ARTE has demonstrated excellent exploration progress, an ability to consistently apply world best-practice exploration techniques and technical experience and now requires sufficient land access to continue its activities.