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ACC - Rio Tinto Exploration Limited

A member of the Rio Tinto Group

Final Relinquishment Report on Exploration Activities Within The Panna West (MINING/RP-35/2002) Reconnaissance Permit, Madhya Pradesh, India

RIO TINTO Report Number: 27703

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Date: April 06 2006

Copies to:

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- 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

Exploration undertaken by ACC Rio Tinto Exploration Pvt Ltd within the Panna West reconnaissance permit (Mining/ RP-35/2002) of Madhya Pradesh led to identification of 5 new lamproites. Caustic fusion of drill core and surface samples did not yield any diamond.

The Panna West RP area, covering Chhattarpur and Panna districts, totalling 2,600 km^2 was granted to ARTE on November 11th 2002 and subsequently executed on January 06th 2003. 1,600 km^2 of the original Reconnaissance Permit ("RP") was relinquished on second anniversary, January 05th 2005 as per the provisions of the MMDR. In January 2006, all exploration work on the Panna West RP ceased on completion of three-year term pending the grant of Prospecting Licences (Plan1). Exploration work included 380 heavy mineral gravel samples and –80# stream sediment geochemical samples collected at a nominal spacing of one sample per 7 square kilometres providing for complete coverage of the permit area. A further 20493 heavy mineral grains recovered from the gravel samples were subsequently analysed by manual and automated scanning electron microprobe. Analysis of mineral chemistries delineated five catchment clusters of anomalous chromite and pyrope garnet for further prospecting and evaluation.

Prospective areas were further evaluated by 2030.4 line km of ground magnetics surveys, resulting in the definition of 30 targets. Each target was tested by combinations of ground magnetics, soil and rock indicator mineral sampling, (12 samples) and/ or soil and rock geochemistry (1165 samples). A further 6.6 line kilometres horizontal loop (Max-Min) electromagnetic surveys mostly at southern part of the tenement were completed on selected targets. Finally, 8 targets were identified for dill testing. 4 diamond core drill holes totaling of 1105 metres were completed on 4 targets confirming lamproites. One targets was confirmed by discovering lamproite outcrop based on geophysics and soil geochemistry.

Applications for 4 prospecting licenses (PL's) covering the most prospective portions of the former RP areas have been submitted to the relevant government authorities. Further exploration for more lamproites and the evaluation of those discovered is proposed pending grant of these PL's.

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 Panna West RP (Mining/ RP-35/2002). The RP area, covering parts of Chhattarpur and Panna districts, totalling 2,600 km^2 was granted to ARTE on November 11th 2002 and subsequently executed on January 06 2003. In compliance with the requirements of the MMDR limiting the term of reconnaissance permits to a maximum of three years, the RP is recommended for relinquishment. Separately, 4 individual blocks totalling 121.5 km^2 from within the original reconnaissance permit area have been applied for as Prospecting Licences. Applications for these PL's are currently with the government authorities pending approval.

This final relinquishment report details all exploration completed within the RP as summarised in table 1. Complimentary periodic data and maps are further reported in the previous biannual and relinquishment reports including:

- ACC Rio Tinto Exploration Limited (Aug 2003); 1st Bi-annual Progress Report for Exploration of the Panna West (RP 35/2002) Reconnaissance Permits for the period 07/01/2003 to 06/07/2003
- ACC Rio Tinto Exploration Limited (April 2004); 2nd Bi-annual Progress Report for Exploration of the Panna West (RP 35/2002) Reconnaissance Permits for the period 07/07/2003 to 6/01/2004
- ACC Rio Tinto Exploration Limited (Sept 2004); 3rd Bi-annual Progress Report for Exploration of the Panna West (RP 35/2002) Reconnaissance Permits for the period 07/01/2004 to 6/07/2004.
- ACC Rio Tinto Exploration Limited (April 2005); 4th Bi-annual Progress and Partial Relinquishment Report on Exploration Activities Within the Panna West (Mining/RP-35/2002) Reconnaissance Permit for the period 07/07/2004 to 6/01/2005.
- ACC Rio Tinto Exploration Limited (August 2005); 5th Bi-annual Progress Report for Exploration of the Panna West (RP 35/2002) Reconnaissance Permits for the period 07/01/2005 to 6/07/2005.

All the above reports have been submitted with the relevant government institutions and are further archived with ACC Rio Tinto in Bangalore.

ARTE maintained a strong focus on health, safety, environment and community relations in its Madhya Pradesh diamond exploration projects. No lost time injuries and relatively few high-risk health and safety incidents were reported during the exploration period.

There are more than 375 villages within the RP areas. Agriculture is the main occupation for over 90% of the population. Bigger market places are around Chhattarpur and Satai. 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 Panna West RP and scattered all through the central part of tenement. Most the forest is semi arid and includes mixed teak, khair, and mahua. All necessary permissions to complete exploration in forest areas were obtained from District Forest Authorities whereas Madhya Pradesh State forest authorities granted drilling permissions.

2.1 Exploration Work Completed

The exploration work commenced after the execution of RP in January 2003. Table –1 shows the quantum of work completed during the statutory 3 year RP period. The details of work carried out is briefly described below

Between January and October 2003, first pass reconnaissance gravel and stream sediment samples were collected from dry streambeds within the RP area. Based on results of first-pass reconnaissance samples, several 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 catchment areas were delineated over approximately 1,000 km^2 of the original RP area. The most interesting indicator mineral anomalies were at the Baagh, Bakri and Pathreela prospects. Five anomalous catchments were further evaluated with follow-up ground geophysics and soil sampling. The targets were selected and prioritised based on their profile, size and proximity to anomalous drainage samples yielding KIMs. In January 2005, 1,600 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 and Panna districts.

The follow-up work including sampling, ground geophysics, target identification continued over the anomalous catchments during most of 2005. Diamond core drilling commenced over targets of Bakri and Pathreela prospects during end of 2005 and 4 holes were completed by January 06, 2006. Later 4 PL applications were submitted which are pending grant by Government.

Name (District)	Granted RP Area km^2	Date of Execution	Heavy Mineral Samples	Heavy Mineral Chemistry	Geochemical Samples	Geophysics	Drilling	Expenditure (Commitment) Rs Crores
Panna West RP 35/2002 (Chhattarpur and Panna)	2,600 granted 1,000 retained	06.01.2003	368 gravel 11 Loam 1 Rock	20493 grains	211 stream 1155 soil 10 Rock	2030.4 line-km ground magnetics, 6.6 line-km Max min	1,105 m	5.94 (2.20)

Table 1: Summary of exploration conducted from January 2003 to January 2006 by ARTE on the Panna West RP.

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 differentiated granitoid gneiss intruded by dolerite, gabbro, amphibolite and quartz reefs – all of which have been grouped as the 2500Ma Bundelkhand Craton. The Craton occurs mostly towards northern and north central part of RP. Meta volcano-sedimentary rocks of Paleo Proterozoic Bijawar Basin occur to the south central part of the Panna West. The Bijawar group of rocks are overlain by meso to neo Proterozoic platformal sediments of Vindhyans. These rocks are exposed in the southern most part of the RP areas. The Bakri and Pathreela Prospect are 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 Panna West RP is shown in Plan 2.

The permit area is dominated by moderate to rugged topography over Craton and flat stepped plateau of overlying sediments and high-energy dendritic drainage with numerous hillocks composed of the Vindhyans within the permit. Over 50% of the permit including the higher topographic hills are variously designated as reserved and protected forest.

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 line work 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 lamproite 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.

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 368 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 lamproite/ 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 3. Field observation results from each sample site are recorded in Appendix 1.

4.3 KIM Loam Sampling

A total of 11 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 Plan3. Field observations from each sample site are recorded in Appendix 2.

4.4 KIM Rock Sampling

One rock sample of Lamproite from Baagh prospect sent for indicators mineral testing to Belmont laboratory.

Location of rock sample within the RP area is given in Plan3. Field observations from each sample site are recorded in Appendix 3.

4.4.1 Heavy Mineral Sample Diamond Results

Five diamonds of different sizes varying from pale yellow to grey colour, macro, irregular, rounded, occur both as octahedral and dodecahedral forms, mostly stones are translucent.

4.4.2 Heavy Mineral Sample Garnet Results

Kimberlitic pyrope garnet is very rare in the Panna West permit gravel samples with only 8 grains in 7 samples from a total of 1234 probed garnets, being confirmed as kimberlitic pyrope The pyrope mineral chemistries are largely G3 eclogitic a few G9 lhzerolite and a G10 Harzburgite pyrope. The remaining garnets are dominated by almandine, spessartine, grossular and minor uvarovite garnet. Most lamproites yield lherzolitic type pyrope garnets, whereas many diamondiferous lamproites 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 lamproite 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) Appendix 4 and 5.

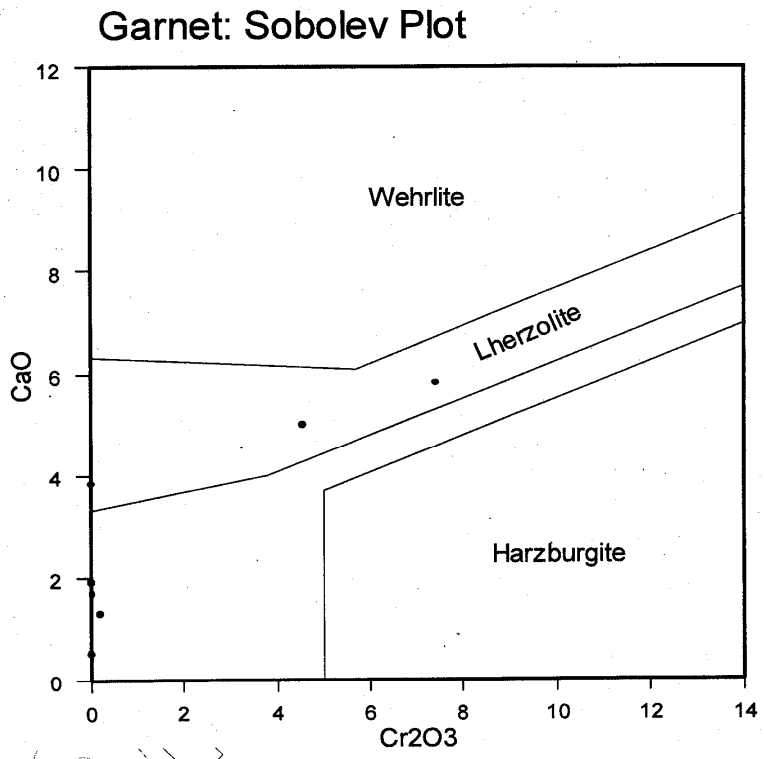

Figure 1: Garnet: Sobolev Plot

4.4.3 Heavy Mineral Sample Chromite Results

Chromites are almost ubiquitous in the Panna West permit with over 90% of the gravel samples returning a total of 16003 probed grains from 205 samples. Further approximately chromites in 60 samples returned potentially kimberlitic chromite compositions of >9% MgO and 20 - 75% Cr_2O_3. Notably there is a large overlap between these kimberlitic chromites and non-kimberlitic sourced species with 35-65% Cr2O3 and 0-20% MgO making differentiation of kimberlitic species from a sample containing mixed populations difficult (figure 2).

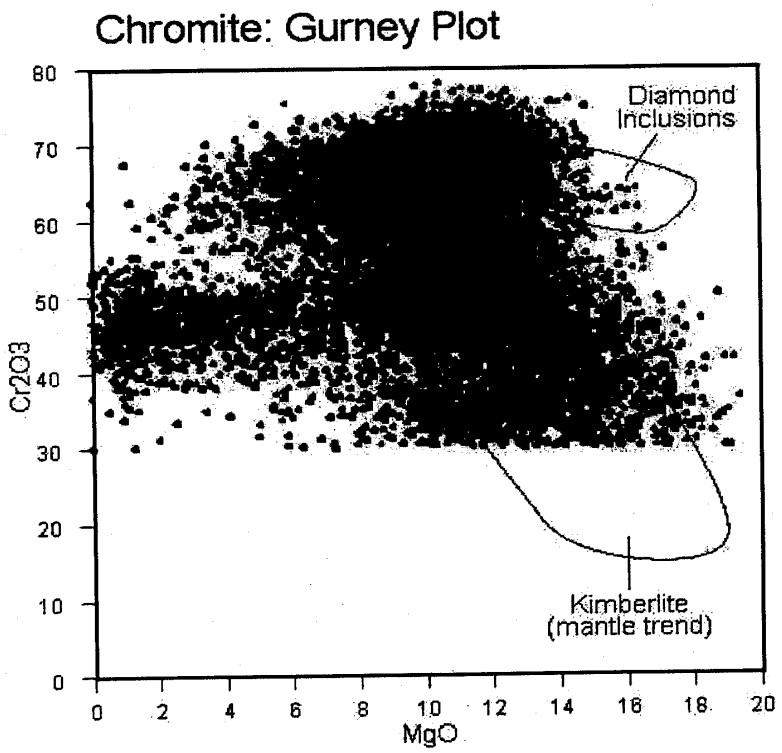

Figure 2: Chromite: Gurney Plot

4.4.4 Heavy Mineral Sample Ilmenite Results

Similar to chromite, ilmenite of crustal composition is almost ubiquitous to the Panna West permit gravel samples 1637 ilmenite grains recovered from 124 samples. Kimberlitic picro ilmenite grains are however rare with only 29 grains in 16 samples returning kimberlitic chemistries.

4.4.5 Heavy Mineral Sample Chrome Diopside Results

Chrome diopside is always rarest among chromite, pyrope and ilmenite. Out of total 1grains from 1 sample shows inclination towards lamproite chemistry.

4.5 Stream Sediment Geochemistry

A total of 211 stream sediment samples have been collected at some of the gravel sample sites. Each sample consists of approximately 100gm of –80# (-180mm) 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 5, and geochemical assays and descriptions are listed in Appendix 6.

The lamproites 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.

	Ag ppm	Al ppm	As ppm	Au ppm	Ba ppm	Bi ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe ppm
Mean	0.81	56370	1.91	0.0001	529	0.20	10127	0.06	138	13	113	3.33	24	31495
Median	0.68	65123	0.25	0.0000	610	0.05	7637	0.05	116	12	79	3.14	22	29032
Mode	0.05	-	0.25	0.0000	716	0.05	13372	0.05	167	9	50	2.86	22	22490
Standard Deviation	0.69	22228	4.00	0.0003	300	0.37	9853	0.04	113	6	121	1.30	11	13532
Minimum	0.05	11112	0.25	0.0000	57	0.05	535	0.05	24	4	24	0.52	8	11018
Maximum	4.03	89122	19.46	0.0010	1762	2.02	71121	0.44	839	60	1198	9.55	65	96357

	Ga ppm	In ppm	K ppm	La ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pd ppm	Pt ppm
Mean	15	0.86	21258	66	4808	525	1.98	8847	14	28	520	22	0.000	0.000
Median	15	0.03	23866	55	4336	482	1.49	10159	12	24	419	18	0.000	0.000
Mode	16	0.03	28984	85	4287	317	0.87	14444	17	26	703	17	0.000	0.000
Standard Deviation	8	1.43	11639	55	5066	258	2.14	6660	11	33	458	16	0.001	0.001
Minimum	3	0.03	1875	12	641	121	0.13	271	3	8	109	0	0.000	0.000
Maximum	58	7.24	46861	398	61139	1747	16.13	21911	86	430	4815	99	0.003	0.003

	Ag ppm	Al ppm	As ppm	Ba ppm	Bi ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Fe ppm
Mean	0.38	47004	4.01	272	0.08	3448	0.05	75	17	203	4.90	39	29560
Median	0.29	47325	1.17	276	0.05	3090	0.05	71	16	167	4.80	37	29062
Mode	0.05	44944	0.25	296	0.05	1481	0.05	59	15	91	3.36	28	24411
Standard Deviation	0.40	11974	4.77	72	0.09	3266	0.02	27	5	159	1.74	18	8052
Minimum	0.01	12661	0.25	85	0.05	474	0.05	20	4	52	1.22	11	9170
Maximum	3.35	111260	32.23	583	1.15	97170	0.29	240	56	1571	17.46	227	72770

	Rb ppm	Sb ppm	Se ppm	Sr ppm	Ta ppm	Te ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
Mean	118	0.25	0.25	132	2.17	0.10	2430	0.42	69	1.16	43	50	254
Median	134	0.25	0.25	147	1.53	0.10	2266	0.36	65	0.88	33	48	204
Mode	137	0.25	0.25	145	0.25	0.10	2556	0.29	77	0.05	23	61	297
Standard Deviation	59	0.03	0.00	84	4.83	0.01	1200	0.26	32	1.54	37	22	220
Minimum	14	0.25	0.25	14	0.25	0.10	836	0.10	22	0.05	7	7	41
Maximum	304	0.54	0.25	583	60.62	0.22	12054	2.12	211	12.00	270	204	1783

Table 2 Basic statistics of stream sediment geochemistry.

4.6 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 1155 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. Plan 6 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 lamproite (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 lamproite outcrop and float in several areas.

	Ga ppm	In ppm	K ppm	La ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Rb ppm
Mean	12	0.03	10333	37	4168	459	1.39	2956	15	44	373	16.89	74
Median	12	0.03	10300	35	4066	439	1.11	2842	12	43	342	16.95	73
Mode	13	0.03	11752	20	4517	334	0.05	2972	15	37	275	0.25	57
Standard Deviation	3	0.00	2705	13	1244	174	1.09	1242	11	12	155	9.36	21
Minimum	3	0.03	3623	11	1162	72	0.05	522	4	13	101	0.25	23
Maximum	30	0.06	29320	115	10655	1116	7.78	7686	158	111	1163	61.30	230

	Sb ppm	Se ppm	Sr ppm	Ta ppm	Te ppm	Ti ppm	Tl ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
Mean	0.25	0.25	67	1.64	0.10	4202	0.47	80	1.42	20	44	140
Median	0.25	0.25	57	1.08	0.10	3947	0.41	76	1.44	20	42	131
Mode	0.25	0.25	43	0.25	0.10	4078	0.05	67	0.05	20	48	98
Standard Deviation	0.00	0.05	39	5.05	0.00	1501	0.56	29	0.92	5	55	56
Minimum	0.25	0.25	14	0.25	0.10	1176	0.05	21	0.05	6	13	47
Maximum	0.25	1.59	340	149.42	0.10	17725	10.82	319	7.59	52	1841	423

Table 3 Basic statistics of soil geochemistry.

4.7 Rock Sample Geochemistry

Rock samples were collected during the course of the exploration program within the RP area. A total of 10 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 7 details the locations of these samples.Similar to soils, lamproites produce distinctly elevated compatible and incompatible elemental signatures.

	Ag ppm	Al ppm	As ppm	Ba ppm	Bi ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm
Mean	0.61	35236	8.64	832	0.14	39633	0.13	282	53	449	1.95	71	0.00	0.00	0.00	54229
Median	0.43	23094	8.10	437	0.05	19786	0.05	192	42	495	1.39	63	0.00	0.00	0.00	65755
Mode	-	-	-	-	0.05	-	0.05	-	-	-	-	-	0.00	0.00	0.00	-
Standard Deviation	0.51	27699	6.18	787	0.21	58852	0.21	289	33	217	2.06	52	0.00	0.00	0.00	21512
Minimum	0.05	11426	0.25	206	0.05	1394	0.05	31	15	99	0.05	16	0.00	0.00	0.00	26391
Maximum	1.41	72245	18.25	2143	0.57	158300	0.55	690	99	698	5.52	168	0.00	0.00	0.00	72568

	Ga ppm	Gd ppm	Ho ppm	In ppm	K ppm	La ppm	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Ni ppm	P ppm	Pb ppm	Pr ppm
Mean	18	0.00	0.00	0.11	8738	144	0.00	64601	996	0.99	2290	82	440	2907	12.35	16
Median	19	0.00	0.00	0.03	7429	93	0.00	31560	1179	0.84	1717	49	235	1316	12.87	2
Mode	-	0.00	0.00	0.03	-	-	0.00	-	-	-	-	-	-	-	-	0
Standard Deviation	7	0.00	0.00	0.20	6575	146	0.00	74364	637	0.63	2275	101	496	3395	11.06	24
Minimum	5	0.00	0.00	0.03	616	19	0.00	1098	142	0.38	199	6	33	322	0.25	0
Maximum	26	0.00	0.00	0.51	20474	355	0.00	165290	1636	1.83	6222	262	1217	8213	27.42	53

	Rb ppm	Sb ppm	Se ppm	Sm ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Ti ppm	Tl ppm	Tm ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
Mean	38	0.25	0.25	0.00	719	3.38	0.00	0.10	12257	0.25	0.00	110	0.91	27	78	316
Median	41	0.25	0.25	0.00	506	1.62	0.00	0.10	12035	0.13	0.00	108	0.54	26	87	169
Mode	-	0.25	0.25	0.00	-	-	0.00	0.10	-	0.05	0.00	-	-	-	-	-
Standard Deviation	29	0.00	0.00	0.00	765	5.02	0.00	0.00	9728	0.36	0.00	63	0.96	12	26	411
Minimum	2	0.25	0.25	0.00	46	0.64	0.00	0.10	2509	0.05	0.00	42	0.05	15	27	78
Maximum	77	0.25	0.25	0.00	1881	13.59	0.00	0.10	21895	0.97	0.00	193	2.53	45	98	1139

Table 4 Basic statistics of rock geochemistry.

4.8 Geophysics

Ground magnetics surveys were employed to cover catchments yielding anomalous kimberlitic indicator minerals. A total of 2030 line km of ground magnetics were completed during the period of the tenure. Ground magnetics grids were established over six catchments with an additional four detailed grids being established over targets defined by the primary magnetic grids.

Surveys were completed using Scintrex Envimag magnetometers operating in "walkmag" mode. Survey line spacing was nominally 100-150 metres, with a reading taken every two seconds, equating to a station spacing of 2-3m. 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 system. The filtered data were then reduced to magnetic pole to remove the apparent effects of geomagnetic inclination and declination on the anomaly geometry.

Baagh

The Baagh grid is situated within mid-Proterozoic Semri group sediments. The grid is characterised by variably active magnetic background, characteristic of the Semri group. Discrete magnetic targets were selected for follow up with soil geochemistry surveys.

Detailed ground magnetics was completed over target B125, defined by anomalous soil geochemistry. The ground magnetics defined the source to be a series of sub-parallel fissure systems. Horizontal loop electromagnetics (Max-Min) surveys were completed over the B125 target. The EM response suggests the target isn't conductive or has limited width.

Bakri

The Bakri grid is situated within the Neo-Proterozoic Rewa group sediments of the Vindhyan supergroup. The grid is characterised by a quiet magnetic background, consistent with the Rewa group cover. The dominant features in the grid are three distinct RTP magnetic high anomalies forming a vague NE trend.

Detailed magnetics grids were established over the defined magnetic anomalies (B099, B100, B102), further constraining the extents of the magnetic source. Subsequent drilling confirmed the source of the magnetic anomalies as lamproite.

Pathreela

The Pathreela grid covered Rewa group sediments where sampling was deemed ineffective. The overall grid is characterised by a quiet magnetic background on a moderate NW-trending regional gradient. Three targets (B120-B121-B122) were identified within the grid, consistent with a source at the contact between the Kaimur group and overlying Rewa group sediments. Detailed magnetics grids were established over the defined magnetic anomalies, further constraining the extents of the magnetic source. Subsequent drilling confirmed the source of the B120 and B121 as lamproite, intersected at the base of the Rewa group sediments.

Mahan

The Mahan ground magnetic grid is characterised by a relatively quiet magnetic background, consistent with the expected signature of the Rewa formation. The ground magnetic grid represents part of a larger grid extending into the neighbouring Damoh East Reconnaissance Permit. The dominant feature of the Mahan grid is target B123, yielding high amplitude RTP dipole interpreted to be sourced by lamproite at the base of the Rewa group at approximately 100m depth.

70022

The 70022 grid is located on Bundelkhand Granite basement and, due to its proximity to the Chhattarpur town-site, the ground magnetics is adversely affected by several cultural features. The background magnetic field is highly variable, typical of the gneissic terrain and is severely disrupted by cultural effects. Two magnetic anomalies, with markedly different magnetic signatures were selected, based on their discrete nature and contrast with the active magnetic background. Follow-up sampling failed to define a kimberlitic source. A summary of magnetic data from each grid is given in the table 5 and Plan 8 to plan13.

Table 5: Geophysical Survey Coverage

Prospect	Ground_Mag	Max-Min
Baagh	245.0	
Baagh B125	43.0	3.6
Chhatarpur 70022	26.0	
Pathreela	811.0	
Pathreela B120	131.0	
Bakri	296.0	3
Bakri B099 - B100 - B102	83.0	
Bhalu	258.0	
Mahan	137.0	
Mahan B123	35.6	
Total	**2030.0**	**6.6**

4.9 Lamproite Descriptions

To date, a total of 5 lamproites have been found within the Panna West RP through a combination of gravel sampling, ground geophysics (both magnetics and EM), mapping and drilling. Out of five lamproites one lamproite (Baagh B-125) was exposed to the surface and rest four lamproites were beneath massive sedimentary cover. Baagh was found by grid soil sampling followed by mapping, other lamproites of Bakri and Pathreela prospect were picked mainly by near surface ground magnetics, further the target was tested by way of drilling. These Lamproites were found to be intrusive into the host sequence of mid-Proterozoic sediments on the margin of the Bundelkhand craton. The location of these lamproites is shown in Plan 14.

Four Lamproites were mainly geophysical discovery; B100, B102, B120 and B121 are RTP mag high features popping up from the ground. All the drill holes intersected weakly magnetic, olivine-rich vent facies lamproite at average depth of about 175m beneath almost flat lying; hard Neoproterozoic sandstone and shale cover rock. As such lamproite at the initial depth is enriched with primary and secondary carbonate and serpentinised matrix giving more appearance of tuff. The olivine in the matrix is almost altering to clay (montmorionite) resulting breaking of rock as contact to water. Lamproite fragments are in the form of Lapilli autolith and a few pelletal lapilli. Lapilli's are ranging from .1 to .5cm size and autolith from .5 to 2cm I size, maxi of 12cm autolith. The altered olivine Macrocryst mainly of two generation one as matrix and other in the form of macrocryst that are observed mainly in between autolith and lapilli. Country rock clasts is mainly of shale but rare in entire log.

4.10 Diamond Drilling

The diamond-drilling program commenced at Bakri and Pathreela prospect (target B-100, B-102, B120 and B-121) during mid December 2005 and was concluded by January 06th 2006. A total of 1,105m of HQ drilling was completed by four drill holes. Drilling was focused on to find out the ore body beneath. Mitchell drilling company of Australia, were contracted to complete the drilling operations using UDR-200 drill rig. The locations of the drill holes, in addition to drilling logs can be found in Plan15, Plan 16 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 drill hole locations were surveyed using handheld gps measurements. The drilling contractor was instructed to ensure maximum recovery of drill core. Typically, 95-100% was obtained. Drilling progress was remarkable due to modern machine. Drilling was carried out in both day and night shift and was under continuous supervision of Rio Tinto staff.

Hole No.	Hole Id	Prospect Name	Total Depth	Lamproite Depth from	Lamproite Depth to	Azimuth	Inclination
1	B-100	Bakri	317.85	173.37	317.85	230	80
2	B-102	Bakri	265.15	146.40	222.33	330	80
3	B-120	Pathreela	323.25	172.10	316.35	0	90
4	B-121	Pathreela	197.75	190.22	197.75	0	90

Table 6: Drilling details of Bakri and Pathreela prospect.

Drill hole B-100, drilled steeply to the southwest testing the 7 Ha target intersected Lamproite from 173m to 317m. The drill hole was terminated within Lamproite at 317m.

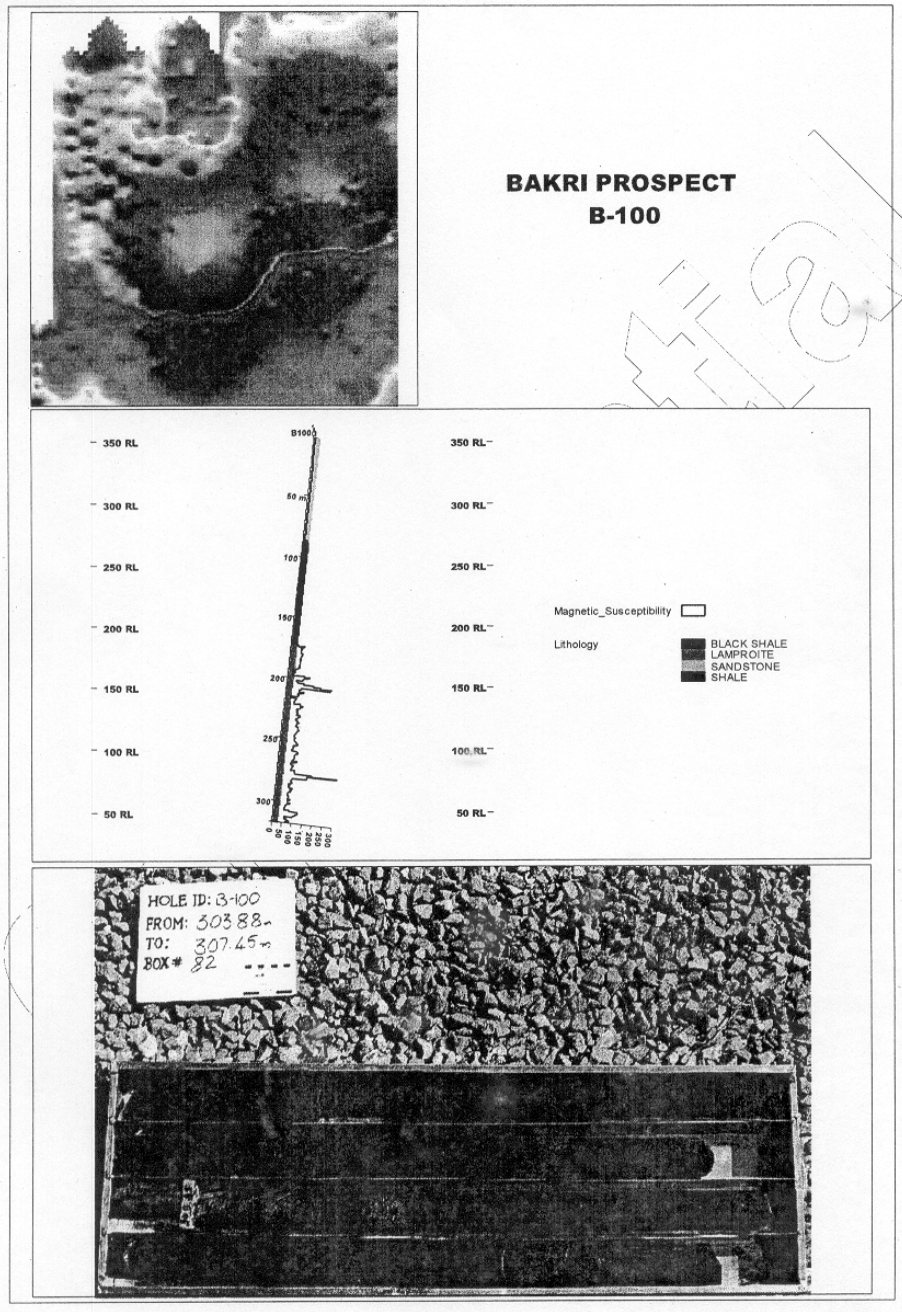

Figure 3 B-100: Slide with Mag image, detailed drill log and a core box.

Drill hole B-102, drilled steeply (-80 degrees) to the northwest testing the approx. 10 Ha target intersected Lamproite from 146m to 223m when it returned to Mesoproterozoic sandstone and shale. The contact was very sharp and almost perpendicular to the core axis. The drill hole was terminated at 265m.

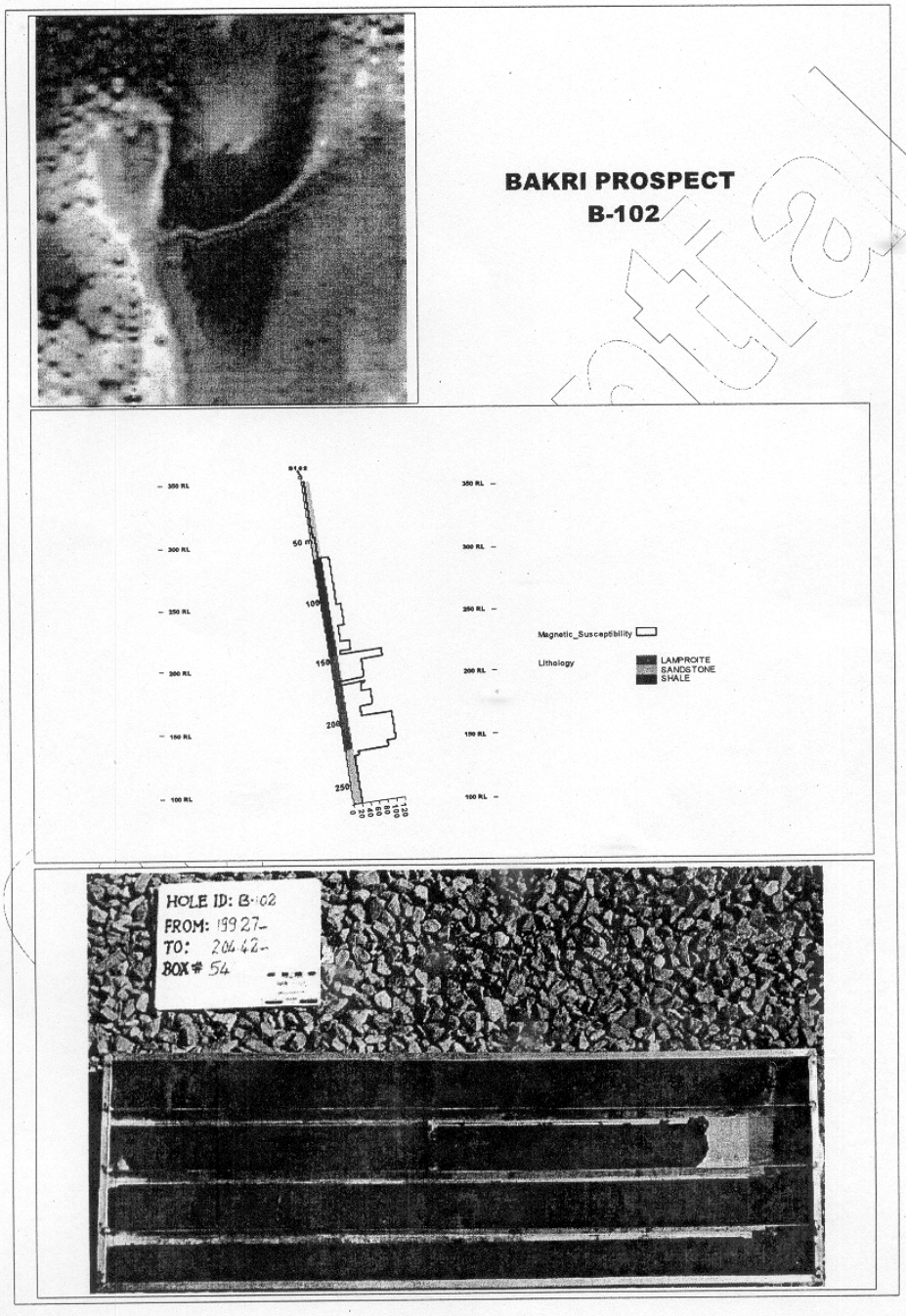

Figure 4 B-102: Slide with Mag image, detailed drill log and a core box.

Drill hole B120, drilled vertically testing the 17 Ha target intersected Lamproite from 172m to 316m when it returned to Mesoproterozoic sandstone and shale. The drill hole was terminated at 323m.

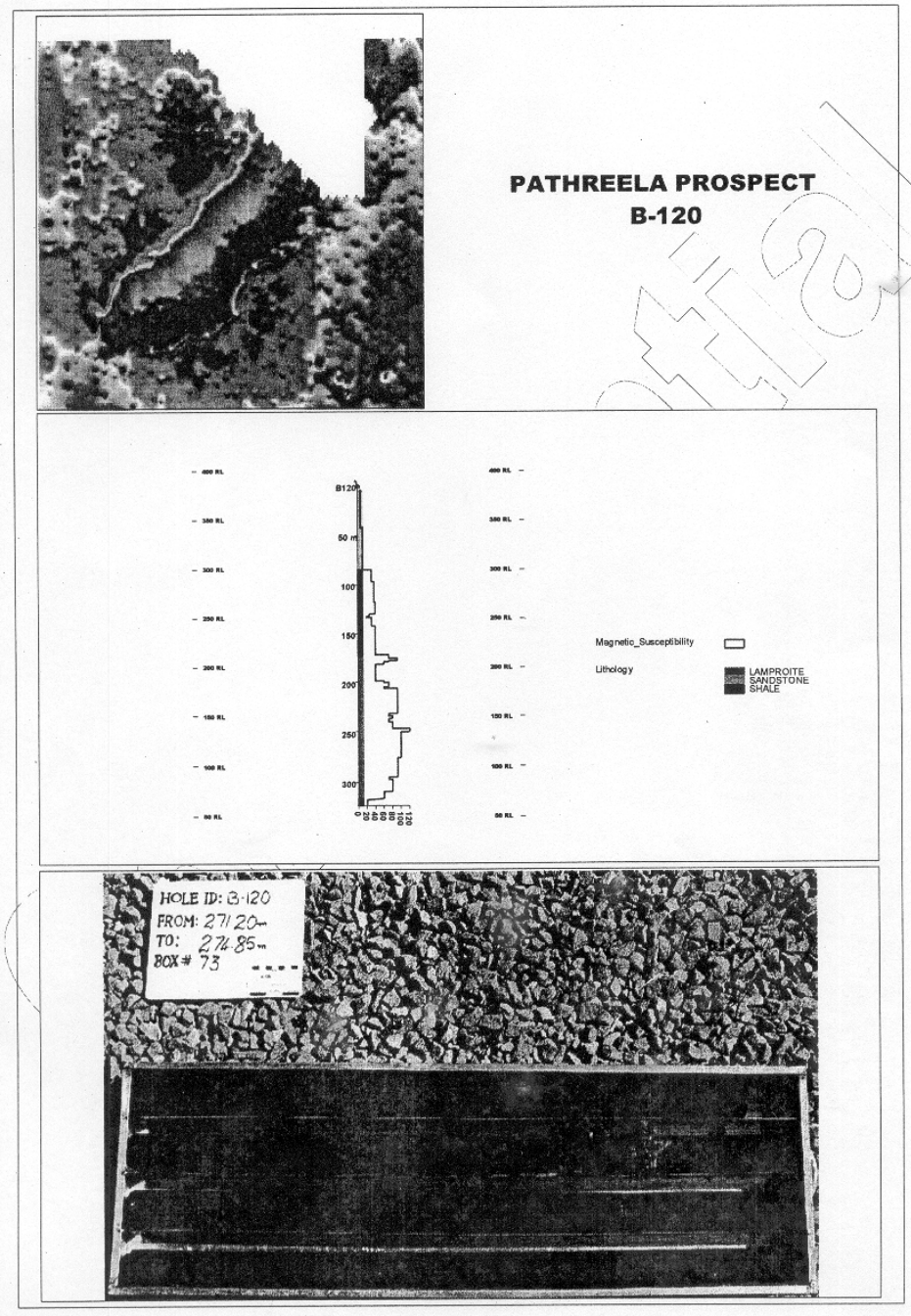

Figure 5 B-120: Slide with Mag image, detailed drill log and a core box.

Drill hole B121, drilled vertically testing the 4 Ha target intersected Lamproite from 190m. 197m on Jan 6 2006, the date the RP expired.

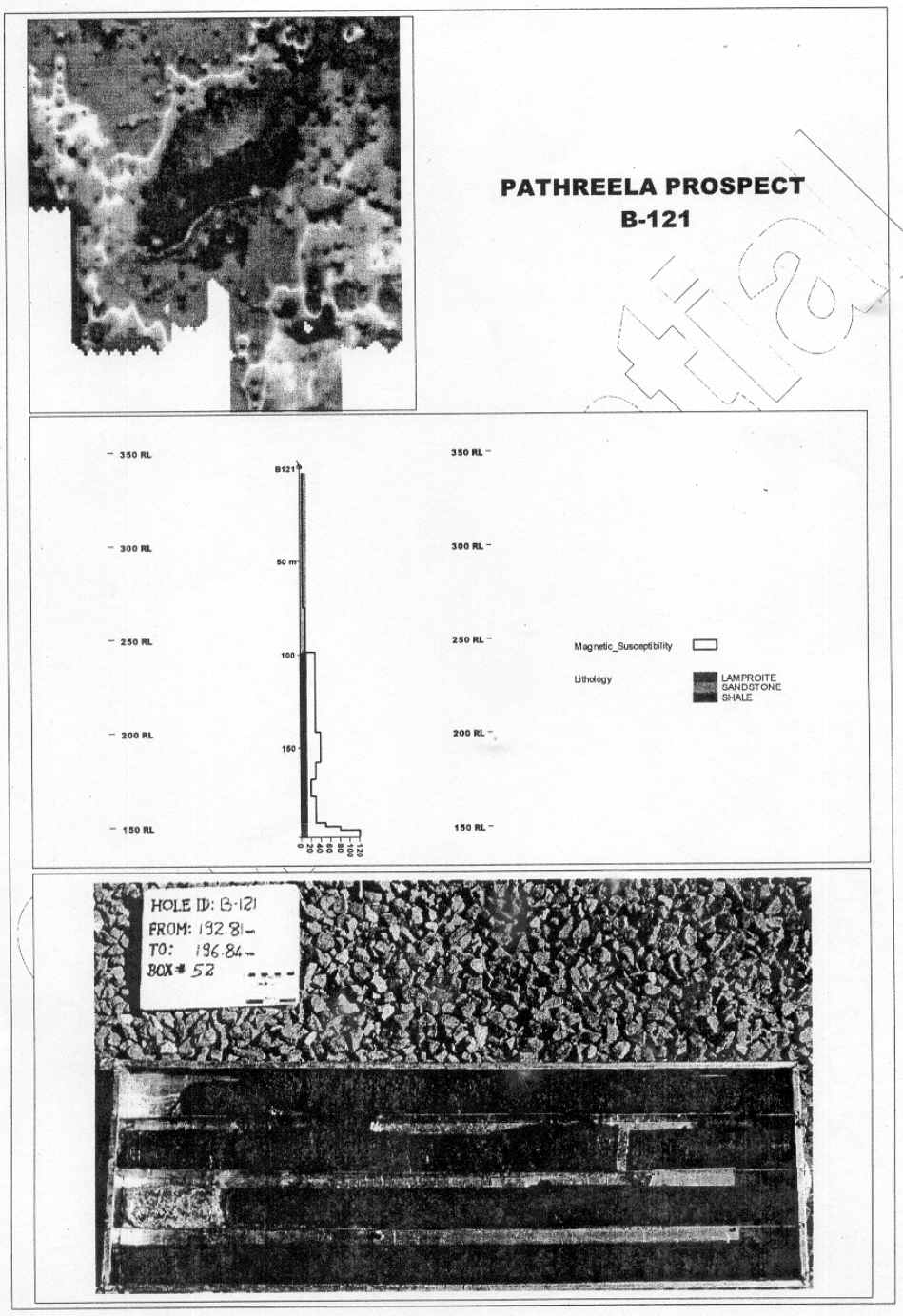

Figure 6 B-121: Slide with Mag image, detailed drill log and a core box.

Magnetic susceptibility measurements on the drill core showed the Lamproite had a magnetic susceptibility averaging $150x10^{-5}$SI, with the host sandstones and shales having a susceptibility averaging $40x10^{-5}$SI. The measured magnetic susceptibility is too low to cause the magnetic response due to an induced magnetic component only, which suggests a significant remnant magnetic component. Petrophysical measurements, including remnant magnetization measurements, are planned for drill-core samples prior to the end of the quarter.

4.11 Caustic Fusion Diamond Results

Approx. 500kg of drill core from target B-100, B-102, B120 and B-121 was sent for caustic fusion. Results received for 175 kg returned zero diamonds. Separately a 347kg sample sent for caustic fusion from Baagh Lamproite also returned negative results for diamonds. Appendix 11.

5 HEALTH, SAFETY, COMMUNITY RELATIONS AND ENVIRONMENT

Rio Tinto recognises that excellence in managing health, safety, environment and community responsibilities is essential to long-term success. Through effective management practices the Group aims to ensure the health and safety of its employees, to minimise any adverse impacts its activities may have on the environment and to make a positive contribution to local community life.

The policies apply to all Rio Tinto subsidiaries and managed by the concerned company including ARTE and the Panna West reconnaissance project. A summary of Rio Tinto's HSEC and other policies are summarized in "The Way We Work", a copy of which is provided in appendix 12.

5.1 Health and Safety

Rio Tinto Group policies on Health and Safety are designed to minimise the risk of injury or occupation illnesses. A minimum management requirement at all of the company-managed operations is to ensure full compliance with the Rio Tinto Standards. The goal is for zero work related injuries or occupation illnesses.

Minimum prerequisites require that all work activities be based on risk assessments ensuring that effective controls and safe work procedures exist for all hazardous activities. Further the standards require a system for ensuring that employees are trained, equipped and where applicable, certified to carry out their work according to the applicable safe work procedures, and that their competence has been tested. On the entire Bundelkhand project the major hazardous activities were assessed to incorporate forest fire, vehicles and driving, manual handling and electrical work. Risk assessments and selective standard operating procedures have been developed for specific tasks associated with each of these and for many other potentially hazardous activities. Safety training and other initiatives have focused mainly on these higher risk areas including but not restricted to the following:

Employment of dedicated drivers for all company vehicles.

- Training of a staff supervisor as an accredited defensive and 4 – wheel driver instructor.

- Annual competency based defensive and 4 wheel driving training for all drivers including for all licensed technical and support staff. All three training programs to date have been undertaken by accredited and experienced Indian field supervisor.

- Annual first aid, accident management and emergency response training to all senior staff. Professional paramedical instructors sourced from various accredited international companies have undertaken four programs.

- Provision, installation and enforced use of drill rig safety accessories including specialised high-pressure air hoses, high-pressure hose whip arrestors and fall from height protective equipment.

- Selected personnel have been trained in managing "work at height", "confined spaces" and in "manual handling" issues by accredited International companies. Knowledge gained from this training has been utilised by the individuals in minimising exposure to such risks and by coaching other personnel to be able to recognise the risk and where appropriate, designed and implemented safe operating procedures.

- Hire of designated field accommodation and office facilities each upgraded to meet company standards including electrical which required significant rewiring and installation of specialised equipment. Local private electrical contractors were identified and trained to maintain the electrical system to international standards.

The corporate systems have a requirement for all employees, including staff and contractors, to report hazards and incidents and for management to have a system for review and analysis of higher risk incidents and for the implementation of appropriate mitigating measures. The objective of having incident reporting system is to avoid the repetitions of any incident through out-group operations and improve up on the safety culture.

Numerous frontline management and three annual Rio Tinto corporate safety audits have been conducted on the exploration groups operations in India. Audits in all cases have found the Indian operations to be of a high standard and compliant with only minor exceptions that have subsequently been rectified. In 2005 the Rio Tinto Exploration –Australasia region, including the Indian operations that contributed significantly, was awarded a Rio Tinto Group Chief Executive Safety award. Over 85 Rio Tinto managed companies from all over the world were reviewed with only three receiving the award in recognition of the excellent safety performance over the proceeding three years. A commendation for the same was received in 2003, 2004 and 2005.

5.2 Environmental

Rio Tinto Environmental Policy aims to prevent or otherwise minimise, mitigate and rehabilitate any harmful effects that the group's operations have on the environment. Although exploration activities including those completed in ARTE Panna West

reconnaissance permits is essentially non-invasive to the environment, the same rigor and level compliance to the standards, systems and procedures is applicable.

For the Panna West reconnaissance permits an Environmental Management Plan was devised prior to the initiation of field activities and subsequently updated as the program developed. The plan evaluated potential environmental impacts associated with the activities and provided procedures to prevent or minimize impacts. In case where an impact was unavoidable or accidental, appropriate rehabilitation procedures were in place. Relevant exploration personnel including those of contractors were inducted and trained in these procedures. Otherwise a competent person supervised the work to ensure minimal environmental impact. Control systems included incident reporting and annual environmental reporting to first-line management and corporate audits.

Identified areas for potential environmental impact on the Panna West permits for which procedures were designed and implemented include the following:

- Ground disturbance due to access tracks: No access tracks were constructed for exploration in the permit areas. Access in all cases was achieved by using the existing infrastructure or during the dry season and when no crops were present, by driving cross-country. In the latter case, care was taken to ensure minimal compaction of ground and minimal potential for soil erosion.

- Sampling: Sampling operations had minimal to zero environmental impact. Gravel and stream sediment samples were in all cases taken from the active streambed load and care was taken to avoid any damage to the stream banks. For soil sampling and auger sampling excess soil was filled back into the excavated hole. In all cases sample sites were accurately located by GPS thus eliminating the need for flagging tape or other tags to mark the sample sites. All sample site photos are incorporated in to the database and a few representative photos are published in annual environmental report.

- Ground Geophysical Surveys; All geophysical surveys were carried out without cutting any trees or bushes with the help of the state of the art GPS facility. Access along prognostic grid lines was by foot and wherever possible trees and other obstacles were avoided by diverting the line.

Most of the forest in the area of operations is dry (arid) deciduous thorny type with dominantly Sal flora. Limited surface sampling was conducted within the forest areas with the permission and cooperation of the relevant forest authorities. No significant environmental incidents were experienced during the period of this survey.

5.3 Community Relations

There are more than 300 villages within the RP areas with a total population estimated to be over 75000. Agriculture is the main occupation for over 80% of the population. Industrial activity is mainly agrarian. Agriculture is mostly single crops restricted to the monsoon season with less than 5% under irrigation.

During the term of the exploration specific community relations policy applications included:

- Brief sheet: About 2500 community brief sheets were distributed among the local community to share with them the exploration process and the results so far. The brief sheet would be revised once in six months and up dated with latest results of our activities.

- Employment to a number of local people to work in various roles in the organisation including camp assistants, community relations staff, drivers technical assistants, cooks and housekeeping staff and others. In total up to 30 employees, the majority sourced locally were employed in the field based out of our operational bases at Chhattarpur, Kishangarh, and Amanganj.

- Established preferred supplier/service relationships with several local businesses for the purchase and supply of most of the required field consumables, notably for food, water and fuel and for service and repair of field equipment.

- Conducted over 1000 consultations with stakeholders including village elders, village leaders teachers, individual landowners and others. The main focus of these consultations was to request access and to keep the community informed of our presence and activities.

Briefing sheets in vernacular summarising the exploration activities were distributed to the community in the RP area. The purpose of these sheets was to keep the community informed of the exploration activities and to minimize rumours and misinformation.

6 CONCLUSIONS AND RECOMMENDATIONS

ARTE has explored its Panna 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 lamproites. Three PL applications have been filed over this area of the known lamproites discovered to date.

The discovery of 5 lamproite and identification of several still to be tested targets within the Panna West RP validates the exploration process used by Rio Tinto in the search for diamondiferous lamproites. The combination of gravel sampling, ground geophysics (especially ground magnetics) and soil sampling has proved to be an invaluable cost effective exploration technique.

The Baagh, Bakri and Pathreela lamproite will be further evaluated for their diamond potential making an affirmative approach that diamonds are present in scattered form within Lamproite and remaining core may contain diamond, regardless of the caustic fusion result with no diamond.