

**GEOLOGICAL REPORT
ON
EXPLORATION OF DIAMONDS
BUNDER PROJECT AREA AT VILLAGE SAGORIA, TEHSIL
BUXWAHA, DISTRICT CHHATARPUR, MADHYA PRADESH
(AREA 364 HECT OUT OF 954 HECT)**



**RECAST BY
DIRECTORATE OF GEOLOGY AND MINING MADHYA PRADESH,
BHOPAL**

**FROM
PROSPECTING REPORT**

**SUBMITTED BY
M/s RIO-TINTO EXPLORATION INDIA, PVT. LTD.
2006-2011
May 2017**

DISCLAIMER

Government of Madhya Pradesh, in the year 2006, has granted Prospecting License for a period of 3 years with further extension of 2 years in favour of M/s Rio-Tinto Pvt. Ltd. over an area of 25 km² for exploration of diamonds in Buxwaha tehsil district Chhatarpur. The PL period expired in 2011. The In-principle sanction had been given by the state for grant of Mining Lease over an area of 954 hectare in forest land after RTEI submitted PL report. IBM has conditionally approved the Mine Plan, over an area of 954 hectare in favour of RTEI, the approval was subject to condition that RTEI shall carry-out detailed Exploration at Angiras and submit the revised scheme within a period of first five years, RTEI in absence of Environmental Clearance from MoEF, decided to relinquish the area in the mean time.

The enactment of Mineral (Auction) Rules 2015 and MEMC Rules 2015 has resulted in deciding the issue that the Atri block shall be e-auctioned as M.L.(G-2 Level). However the Angiras shall be put for detailed exploration at G-2 level through NMET Fund, by outsourcing agency. The committee constituted for deciding matters has accorded approval on dt.22.04.2017 to state D.G.M. to recast geological report out of prospecting report of RTEI and Mining Plan Approved by IBM. The recast GR shall be submitted before aforesaid committee for perusal and taking appropriate decision by the state govt. Any matter arising out of recast GR shall be subject to PL report of RTEI regarding exploration of diamonds in Buxwaha tehsil district Chhatarpur and thereafter information/data synthesized in Mining Plan, the DGM/ state govt. shall not be held liable or responsible for any such dispute/claim regarding the same

Contents

Abstract	5-7
1. Introduction	8-11
2. Geology Settings	12-13
3. Exploration Work	13
3.1 Surface Pitting	14
3.2 Drilling	15
3.2.1 Delineation Drilling	15
3.2.2 Grade Drilling	15-16
3..2.3. Large diameter core (LDC, 8 inch core) Drilling	16
3..2.4. PQ Core Drilling	17
3.3 Bulk Sampling	18
3.4Project Block Model / Resource Model	19-20
3.5 Block Model	23-26
3.6 Incidence of diamonds Estimation	26
3.7 Geotechnical Assessment Study	27
4. Results and Recommendations	27
5. Reserves	28-30
5.1 United Nations Framework Classification (UNFC)	30
5.1.1 Overview	30
5.1.2 Economic Axis	31
5.1.2.1 General and Detailed exploration	31
5.1.2.2 Specific end-use grades (above economic cut-off grade).	31
5.1.2.3 Land use Data	32
5.1.3 Feasibility Axis	32
5.1.3.1 Geology	32
5.1.3.2 Mining	32-33
5.1.3.3 Environmental Aspects	33
5.1.3.4 Processing	33
5.1.3.5 Infrastructure	33
5.1.3.6 Costing	33
5.1.3.7 Marketing	34
5.1.3.8 Economic Viability	34
5.1.4 Geological axis	34
5.1.4.1 Geological Survey	34
5.1.4.2 Geochemical Survey	34
5.1.4.3 Geophysical Survey	35
5.2 Reserves Summary	35
6. Conclusions and Recommendations	35
7. Bulk Samples Processing Report	36

LIST OF ANNEXURES

Ann. No.	Description
1.	Lithologs of Boreholes
2.	Details of slim Drillholes
3.	Details of large Dia (203 mm) drilled holes
4.	Details of PQ & GT (small dia) Boreholes
5.	Details of 9 shallow pits
6.	The domainwise and levelwise estimated ore Reserves
7.	Classification of estimated Reserves as per MeMc rules 2015

LIST OF PLATES

PLATE NO.	TITLE
PLATE-1	KEY PLAN
PLATE-2	LOCATION PLAN
PLATE-3	LOCAL GEOLOGICAL PLAN
PLATE-4	SURFACE AND CONTOUR PLAN
PLATE-4.1	GEOLOGICAL CROSS SECTION I
PLATE-4.2	GEOLOGICAL CROSS SECTION II
PLATE-5	FOREST COMPARTMENT WISE SURFACE PLAN

ABSTRACT

This report summarizes the work completed by Rio Tinto Exploration India Private Limited within Bunder Prospecting License during the period of September 2006 and September 2011. The PL was executed on 6th September 2006 for a period of 3 years. A PL renewal application was submitted for a period of an additional 2 years and granted to enable additional prospecting work within the prospecting License area. With the PL renewal grant received on 29 December 2009 and executed on 25th February 2010. Soon after the drill rigs were mobilized for additional drilling on the already approved locations. The drilling on the already approved locations started on 13th March 2010. This drilling on the already approved locations continued upto April 2011, when the approved locations for drilling were exhausted, causing the drilling to stop.

Permission for additional drilling on 143 locations, applied early in 2010 with the Forest Department, was received in June 2011 leading the resumption of the drilling program which was finally culminated on 5th September 2011, when the Prospecting License has expired. All the drilling and field activities ended on 5th September 2011 with all the drilling equipments removed from the PL area. Meanwhile, the activity of sample processing in the DMS plant was taken up during this period

The area is bounded between N Lat Lat24°18'28.794"to N Lat24°20'04.981"andELong79°16'56.818"toE long79°18'04.343"forming part of toposheet number 54P/7 of SOI covering an area of 364 hectare out of 954 hectare within forest land .The area is located within the Chhatarpur District, Madhya Pradesh, India. Chhatarpur the administrative capital of the district by the same name is located approximately 500km southeast of New Delhi and 225 km northeast of the state capital Bhopal. Primary road access is via National Highway 72 connecting Chhatarpur to Sagar. The highway is in good condition and generally drivable between 50 and 80 km per hour. The Bunder project is located the village of Nimani, approximately 20 km southeast of the Daruwan/ National

highway junction on a road connecting to Bijna and Buxwaha. Access to the kimberlites can be made by driving WSW along un-metalled road and series of road and series of trails from Jagara, a small village on the Buxwaha-Bajna road. the basal unit comprises of Bundelkhand gneisses which in turn are overlain by Bijawar and Vindhyan Super Group of rocks. Vindhyan sediments particularly sandstone and shale and limestone of kaimur's host the kimberlite and is known to be the key bed horizon in the prospect area.

The Prospecting work conducted within the tenure of the Prospecting license include dominantly drilling and bulk sampling from pits at approved locations which was conducted in multiple phases since September 2006 from the grant of the Prospecting license. The drilling was conducted for the following purposes, undertaking the grade, volume delineation of the ore body, Geotechnical studies, testing of kimberlite targets and sterilization of the infrastructure within the PL area. The bulk samples were collected to get an understanding of the value of the deposit. The bulk samples collected from the pits and the samples collected from the bore holes were processed at the processing plant earlier in Bangalore and later at the project site after establishing the plant in 2009. All the prospecting work has ended on 5th September 2011. Total of 9 trenches at six locations were laid down with a bulk sample of 36000.85 tonnes of kimberlite extracted from trenches which have yielded 1876.43 carats of Diamond recovery. In view of the exploration schedule, total of 95 numbers of bore holes in the area were drilled with total meterages of the order of 24708 m drilling. The drilling was designed to assess the diamond incidence of kimberlite ore body vis-à-vis to delineate the geometry of the pipe. Out of 95 bore holes 60 number of bore holes were of HQ/NQ size, 23 number of bore holes were of 8 inch large dia size and rest 12 number of bore holes were of PQ size. The 60 number of bore holes were drilled for the purpose of volume delineation and rest 23, 12 bore holes were aimed at for grade estimation of the kimberlite ore body.

Total resources upto depth of 345 / 350 m (100 m RL) are 53.70 Mt as under:

South Atri 41.56 Mt @ 0.78 ct / t

North Atri 12.14 Mt @ 0.13 ct / t

These are classified as under:

Proved- upto 200 mRL - 36.46 Mt UNFC Classification 111

Probable from 200 mRL to 100 mRL -17.24 Mt UNFC
Classification 122

As on date MEMC rules 2015 has been enacted by GOI, as per MEMC rules 2015, based on exploration work the estimated resources of Atri block has been ascertained to be of the order G-2 category and has been enumerated above and deserves for auction as M.L.

1. INTRODUCTION

This report summarizes the work completed by Rio Tinto Exploration India Private Limited (RTEIPL) within Bunder Prospecting license (PL) during the period beginning September 2006 till 5th September 2011. Work during this period includes drilling for grade, delineation, target testing, geotechnical studies, ground sterilization and bulk sampling from approved locations. All the work was conducted in phases since the beginning. The other work outside the Prospecting license area, conducted at the Bunder Project during the PL period, is the sample processing at the sample processing plant at Bunder Project.

The Bunder PL is located within the Chhatarpur District, Madhya Pradesh, India. Chhatarpur the administrative capital of the district by the same name is located approximately 500km southeast of New Delhi and 225 km northeast of the state capital Bhopal. Primary road access is via National Highway 72 connecting Chhatarpur to Sagar. The highway is in good condition and generally drivable between 50 and 80 km per hour. The Bunder project is located at village of Nimani, approximately 20 km southeast of the Daruwan/ National highway junction on a road connecting to Bijna and Buxwaha. Access to the kimberlites can be made by driving WSW along un-metalled road and series of road and series of trails from Jagara, a small village on the Buxwaha -Bajna road.

Mean elevation in the area is 400m above sea level ranging between 350-500 meters. For the most part, topography is gentle and flat with the most of topography being accommodated in moderately steep escarpments defining the margins of gently dipping sedimentary units that define the central and northern parts of the project area. Drainage within the higher topographic level Proterozoic sediments is well developed and active with the Kalidahar and Ken Rivers and their tributaries being the predominant drainage. The creeks and rivers may frequently over flow in monsoons, and most of the water courses flow in the north direction.

The climate in the project area is semi-arid/ monsoonal with hot, frequently exceeding 45°C, and dry summers between April and July and temperature, ~5-35 °C winters from the remainder of the year. Rainfall is typically monsoonal totaling 90 to 120 cm/ annum occurring between middle June- middle September.

The Bunder area is a part of Narmada Valley dry deciduous forests Eco Region. This Region is neither exceptionally species- rich nor high in numbers of endemic species. But it does shelter several large vertebrates, including Asia's

largest and most charismatic carnivore, the tiger. The forest type is the eco-region has been classified into four types:

- 5A/C-1-B Southern Tropical dry deciduous Teak forest
- 5A/A-C-3 Southern Tropical dry deciduous Mixed forest
- 5A/E Dhawra Forest
- 5A/E Salai Forest

Most of the forests are open scrub influenced by human activities. In many areas, intensive livestock grazing, fire, and non-timber forest product harvest have converted the habitat to scrub. Most of the eco-region's natural habitat has been cleared or degraded.

Almost all of the forest in the Bunder PL are part of Buxwaha subdivision of Chhatarpur Forest Division of Madhya Pradesh. The Forest of Bunder Prospect are of dry deciduous type, with Teak, Mixed, Salai and Khair forest. Factors controlling the forest flora include the Geology, soil type and soil organics, topography, and elevation from the mean sea level, slope and slope direction, temperature and humidity.

There are small natural Teak Forests in the Prospect. Teaks have a preference for hilly sectors, particularly in the wind shadow zones. Regeneration is rare due to intensive livestock grazing and fire. Chief climbers are makor and chilati and grasses such as lampa and bhurbhusi are sparsely distributed. Bamboo forest is found on the general slopes, along the creek flanks of the hills where drainage conditions are good.

Most of the forests are mixed in the prospect; live stock grazing is very common. Normally these are of IV-B, IV-A series of forest and are found in patches, with average density from 0.3 to 0.6 and natural regeneration being patchy and not up to the mark. Thorny shrubs are dominant and grasses are rare. The top canopy includes saja, bija, lendia, haldu, dhawra, kusum, tendu, achar, tinsa, papda, amaltas, amla, ghont, dhudi, teak, palas, rawjha, moyan, and salai. The lower canopy includes amla, achar, khair, amaltas and bamboo. Marodphal, dhawda, Baikar, karonda and jharbari (from the under story). Important climbers are bhurbhusi, doob and marvel, among others.

Sallai and Bomboo Forest are less in the Prospect. They grow in adverse conditions, protecting the soil from erosion and creates favorable environment for other species to grow. These are forest of dry and rocky areas with quartz rich (siliceous) regolith. The roots of salai can penetrate into a solid rock mass

Bamboos forest is found with Teak and Mixed forest, appears in small bunches and has been declared protected.

These low density forest are characteristic for the area of maximum soil erosion in the prospect. Trees attain the height of 30m, which are knocked and distorted. The associated species with khair are salai, dhawra, saja, ghont, rewjha, makor, teak.

Wildlife is found in the Buxwaha Forest subdivision. No wildlife sanctuary, tiger reserve or national park exists in the Prospect. The faunal assemblage includes both carnivores and herbivores. Common species are jungle cat, sloth bear, jackal, striped hyena, Indian fox and wild dog. Primates found in the Prospect include common langur and rhesus macaque ungulates include blue bull, found in the most of the forest area. Indian wild boar is fairly common. Rodents found in the Prospect include the common Indian hare, rats and porcupines. Common bird species found in the area are peafowl, brown fish owl, blue rock pigeon, koel, Bengal vulture, common pariah kite, gray quail, and crested hawk eagle. Reptile list includes cobra, and krait.

There are about 20 villages within and around the PL and the total population of the prospect area would be around 8000. Children and Youth (below 18) make up more than 50% of the population. Majority population is Yadav 's and Lodhi's ~50% (milkman by tradition) followed by scheduled caste that make up 30%. Rajput and Brahmins make up about 10-15% of the population. Muslims are <2% and tribes are about 5%. Density of population approx 135 per sq km.

Literacy is poor (54%). Most of the villages have a primary school (up to class 5th). Govt. sponsored free noon meal scheme is common in the schools. Dropout cases are common due to poor health of children in many primary schools.

Generally people are tolerant and social. Elders are respected. Caste factor is deeply entrenched. Man to women sex ratio is 1000:850 (less than national average) People have sentimental attachment to land. Many rear cattle. Human: Cattle ratio is almost 1:1.

Economically, the local community survives on primitive agriculture, collection of (non timber forest produce, NTFP) forest products and contractual labour that are the limited opportunities for the community. Nearly 8% of the community depends on this form of livelihood. The lack of proper irrigation, infertile land and small holdings keep the agriculturists on the verge of

subsistence. A single crop, usually a lentil or soyabean a year is commonly achieved immediately after the monsoons. Thereafter the communities rely on forest produce like Mahua and the Tendu leaves. The Mahua flower is picked in March and April for country liquor, whilst the Mahua seeds are collected in May and June for oil extraction. The Tendu leaves used for manufacture of local cigarettes (Beedi) are collected in Summer. Beedi rolling provides employment to many families. Minor quarries employ a few locals. Barter system is practiced in interior area. Seasonal asset in the family and are given during marriages.

Natal mortality and infant mortality rates are higher than the national average. There are no basic medical facilities in the villages. A health centre located in Buxwaha caters to the medical needs in the Buxwaha Nayab Tehsil. More than 55% infants under 4 years of age are underweight for their age. Seasonal outbreak of diseases and water borne diseases are common. Extreme hot and cold conditions affect the old.

A few environmental and community development NGOs are working in Chhatarpur District. Religious NGOs (education and health care) are found in tribal and socially weaker pockets.

Given below the Rio Tinto project assessment process. The progression of study is as follows:

Conceptual → Order of Magnitude → Pre-Feasibility → Feasibility

At the completion of each stage critical decisions are made on whether to progress the project. A decision to not proceed will, in most cases end or halt the project. As a project moves through each stage, the level of detail required to be included in the assessment studies increases, as does the effort and cost of complete.

2. GEOLOGICAL SETTINGS

2.1 Regional setting

Based on the 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 type includes granitoid gneiss with enclaves of dolerite, gabbro, amphibolite and quartz reefs. Meta volcano- sedimentary rocks of paleo Proterozoic Bijawar Basin 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 PL 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 mobil 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 consist 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 flood basalt (Deccan Traps) of palaeocene age cover the craton and sedimentary rocks of Bijawar and Vindhyan Supergroup. The Bunder West prospect is located within the Meso-Proterozoic Semri and Kaimur group platformal sediments extending into the Palaeo- Proterozoic Bijawar group metasediments to the north. The geology of the Bunder West PL is shown in plan no.3

Historically, in Panna Diamond Belt diamonds are recovered from three sources (i) Majhgawan and Hinota Kimberlite pipes, (ii) Diamondiferous conglomerates towards the top of Lower Rewa Sand Stone and base of Jhiri Shales, and (iii) along the Quaternary alluvium of streams draining the diamond belt.

The Panna (Majhgawan) mine is located around 60km to the east north east of the Bunder Project area. The Majhgawan mine is the only hard rock diamond mine in India that produced diamonds from early 19th century until 2007. The mine was ordered closed in 2007 due to environmental concerns as it is within the Panna Tiger Reserve, a Wildlife Conservation Park. Annual production from Majhgawan is estimated to be 70,000 – 80,000 carats from ore grading around 0.1-0.14 carats per tonne (cpt) (Chatterjee, pers comm, 2007). There are

extensive alluvial diamond activities downstream of the Majhgawan mine, which has been the site of similar activities of hundreds of years.

2.2 Project Setting

The Bunder project is located within the Vindhyan sedimentary basin. The Vindhyan basin is an intra-cratonic synclinorium which abuts the Bundelkhand granite to the north and is truncated by the Narmada-Son Lineament in the south (Anand and Rajaran, 2004). The basin comprises sandstone-shale-limestone sequences which outcrop across Uttar Pradesh, Madhya Pradesh and Rajasthan (Soni et al, 1987). The Vindhyan Supergroup of rocks are divided into the Semri, Kaimur, Rewa and Bhandar Groups on the basis of lithology.

In the Bunder project area a series of mainly of vent-facies olivine-kimberlite pipes are hosted within sediments of the Kaimur group comprising sandstones and shales. The kimberlite pipes are converted with a variable, through shallow thickness (4.5 to 23.5m) of colluviums comprising dominantly uncemented sandstone cobbles and boulders.

3. EXPLORATION WORK

During the prospecting operation a total 95 number of bore holes were drilled with a total meterage of 24708 mt. Out of these 60 number of volume delineation holes of HQ/NQ were drilled, 23 (8" LDC grade estimation) boreholes were drilled, and 12 grade estimation bore holes of PQ size were drilled in the prospecting area. Besides this 9 trenches / pits at six locations have been made in the area of interest.

3.1 SURFACE PITTING

A total of 36000.85tonnes of kimberlite samples have been collected which resulted in recovery of 1876.43 carats of Diamonds from nine pits situated at six locations (fig.4). Each individual pit was of 40m² surface area. Samples were collected and separately by lithotype (i.e surface overburden and gravels, highly weathered kimberlite, and relatively fresh kimberlite).

Samples were collected in appropriately rated bulk bags. Bags were designed with a bottom “chute” in order to facilitate unloading of the sample. Bags were clearly labeled and sealed with drawstrings, steel wires ties, and uniquely numbered chain of custody seals.

Pits were mapped at 1:2000 scale to facilitate interpretation. Pit dimensions were measured at 1m intervals along the pit.

Geological logging and sampling procedures for pits have been internally reviewed by the registered CP Resources for the project and found to be in compliance with project objectives and documented protocols.

Chain of custody records were maintained from the excavation site to the processing facility. Storage of samples was in the secured areas, fenced, under constant supervision and well lit conditions. All staff working within the sample storage area is required to sign a register.

A complete record of samples coming out of forest using appropriate “Forest Transit Permit” was maintained and verified by forest officials. Similarly, samples sent to Bangalore lab were under “Transit Permit” issued by District Mining Officer after necessary physical verification.

The samples collected from the pits are from a maximum depth of 5 m. These provide data on diamond count and approximate indicative value for the stones recovered from the surface only. In order to test the deposit parameters at depth, Large Diameter Core drilling was employed.

3.2 DRILLING

3.2.1 DELINEATION DRILLING

The delineation drilling program is an integral part of the study of an ore deposit, as it is aimed at defining the shape of the ore body to give a tonnage estimate to specific depth below surface.

A total of 14574 m drilling is completed in 60 (NQ/QH core) holes on the B28 kimberlite in the granted PL. These delineation holes were aimed at to know the geometry of the kimberlites.

3.2.2 GRADE DRILLING

During the PL tenure, 8 inch Large Diameter Core (LDC) was considered most suitable method for assessing the grade of the B28 kimberlite body and adopted. This LDC drilling was expected to generate information to enable the estimation of the grade, size/frequency distribution and price of the diamonds in B28 in the drill profile below surface. These are key inputs in determining a resource status at various stages of the project. Achieving these objectives enables a decision on advancing the project to the next stage of work.

In the LDC drilling program a total of 23 holes were completed in the PL tenure which finished in 2008, drilling 5205 m. Large diameter drilling has been designed to generate information to enable the estimation of the grade, size/frequency distribution and price of the diamonds in B28 in the drill profile below surface. Large diameter drilling has been predominantly carried out over B28 kimberlite, with a few holes in B8-48 kimberlite. After the renewal of prospecting license, a revised scheme of prospecting was submitted to the Indian Bureau of Mines, Nagpur to conduct additional prospecting work within the PL area.

This additional study work involves among other things, better evaluation of the resource at B28 kimberlite to a greater confidence level ($\pm 15\%$). This resource evaluation requires conducting sampling (drilling) to get large samples. Taking various factors into consideration, like the size of the samples generated, the pace of drilling, the geology of the deposits, a detailed study of the drilling methods were made and numerous methods including the 8 inch LDC drilling, and PQ-sized core drilling were considered. At last, a combined hybrid method of LDC-PQ method was chosen to test a hypothesis to predict grade by developing a size frequency distribution curve of the macro-micro diamonds. This method was adopted for the first stage of the study for the grade drilling in 2010. Based on the results of the first phase, the same LDC-PQ

hybrid sampling approach was adopted for the second phase. The type and number of drill holes for the second stage of the grade drilling were determined based on the results of the first phase. For the first stage, the existing approved locations were for drilling. The second stage of the LDC grade drilling started only after receipt of the forestry approval to drill additional drill holes in June 2011.

3.2.3 LARGE DIAMETER CORE (LDC, 8 INCH CORE) DRILLING (fig-1)

The large Diameter drilling program was conducted for evaluating the grade below the surface up to 250m. The drilling program has since stopped with expiry of the prospecting license on 5th September 2011. South West Pinnacle Exploration Pvt. Ltd. From New Delhi, were contracted to complete the drilling operations using two drill rigs, one a track-mounted LF-230 drill rig, and another Hanjin P7000 rig, for holes with lesser expected depth. (Fig-2&3)

LDC drilling conducted during the PL period with 23 holes on B28 kimberlite totaling 5205m.

A total of 349 samples from LDC holes on Atri weighing 208 tonnes were collected and processed for diamonds yielding 147.16 cartons)

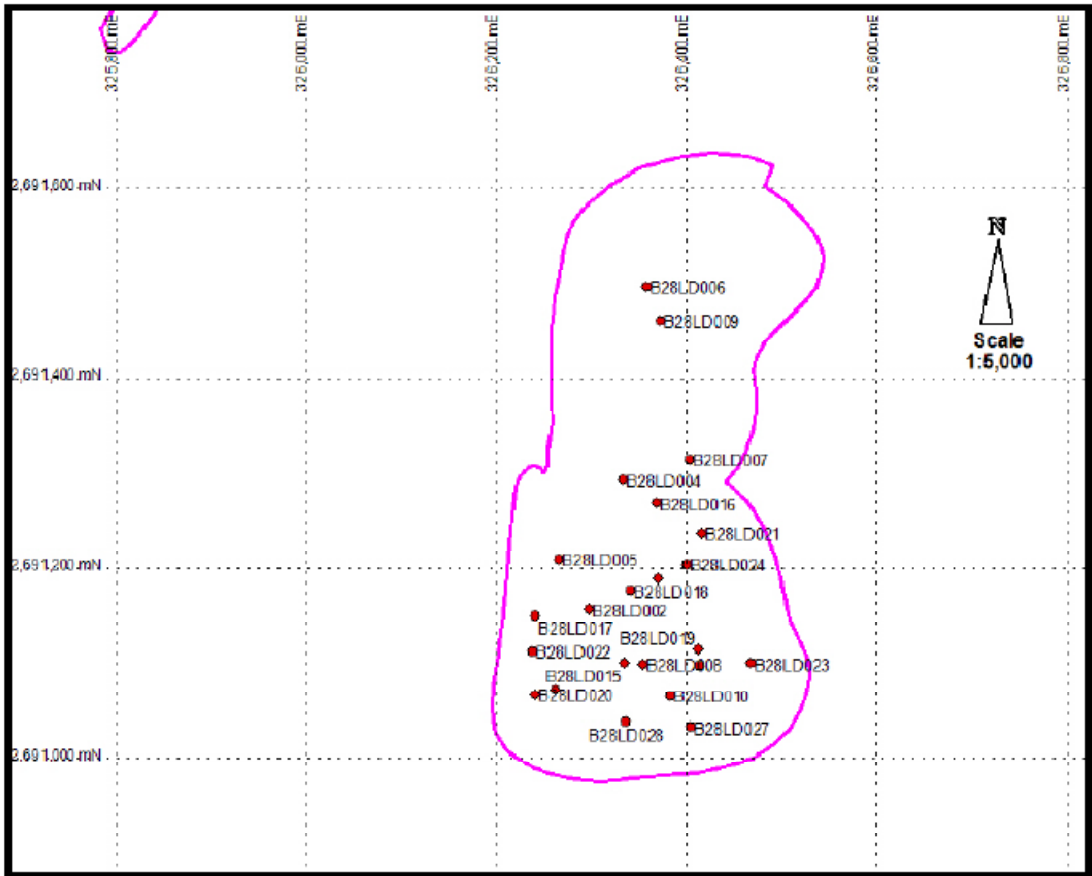


Fig.-1 Location of LDC Boreholes at Atri

3.2.4 PQ CORE DRILLING

The PQ size drilling was also conducted at the Bunder Project as a part of the hybrid grade-drilling program to determine the grade of B28 kimberlite. This type of drilling was completed as planned for earlier this year in the month of February 2011. South West Pinnacle Exploration Private Ltd., from New Delhi, were contracted to complete the drilling operations. (fig-2)

PQ size drilling was conducted at Bunder project to delineate the boundary of ore body and to support the estimation of incidence of Diamonds from the recovery of fine (Micro) Diamonds. During the PL period 4929 metrage of drilling in 12 holes on B28 kimberlite has been carried-out. (Fig-6B)

* Lithologs of boreholes are given in ~~Annexure 1~~ and details of different types of boreholes drilled are enclosed as ~~Annexure 2,3 and 4.~~



Figure 2 Drill Rig doing PQ drilling



Figure 3 Drill rig doing HQ Delineation Drilling

3.3 BULK SAMPLING

Total 9 shallow trenches have been completed at B28, to determine sample grades, preliminary diamond size/frequency distributions (with re-crushing to - 6 mm and a lower cut-off size of 0.85 mm), and a preliminary diamond price estimate. Each individual trench/pit was of 40m² surface area (20m long×2m wide×5m deep trenches), as specified in Forestry and Government approval.

In total 9 shallow trenches were tested for mini bulk samples. A total of 36000.85 tons of kimberlite was collected during 2006 and 2011 programme. A total 29 samples have been tested from 9 trenches at B28, Details of shallow pits are given in (Fig-4)

These samples were processed at the sample processing plant near the project area. The results of this processing assists in further evaluating the value and grade of the Bunder deposit. This is critical to the development of a world-class diamond mine.

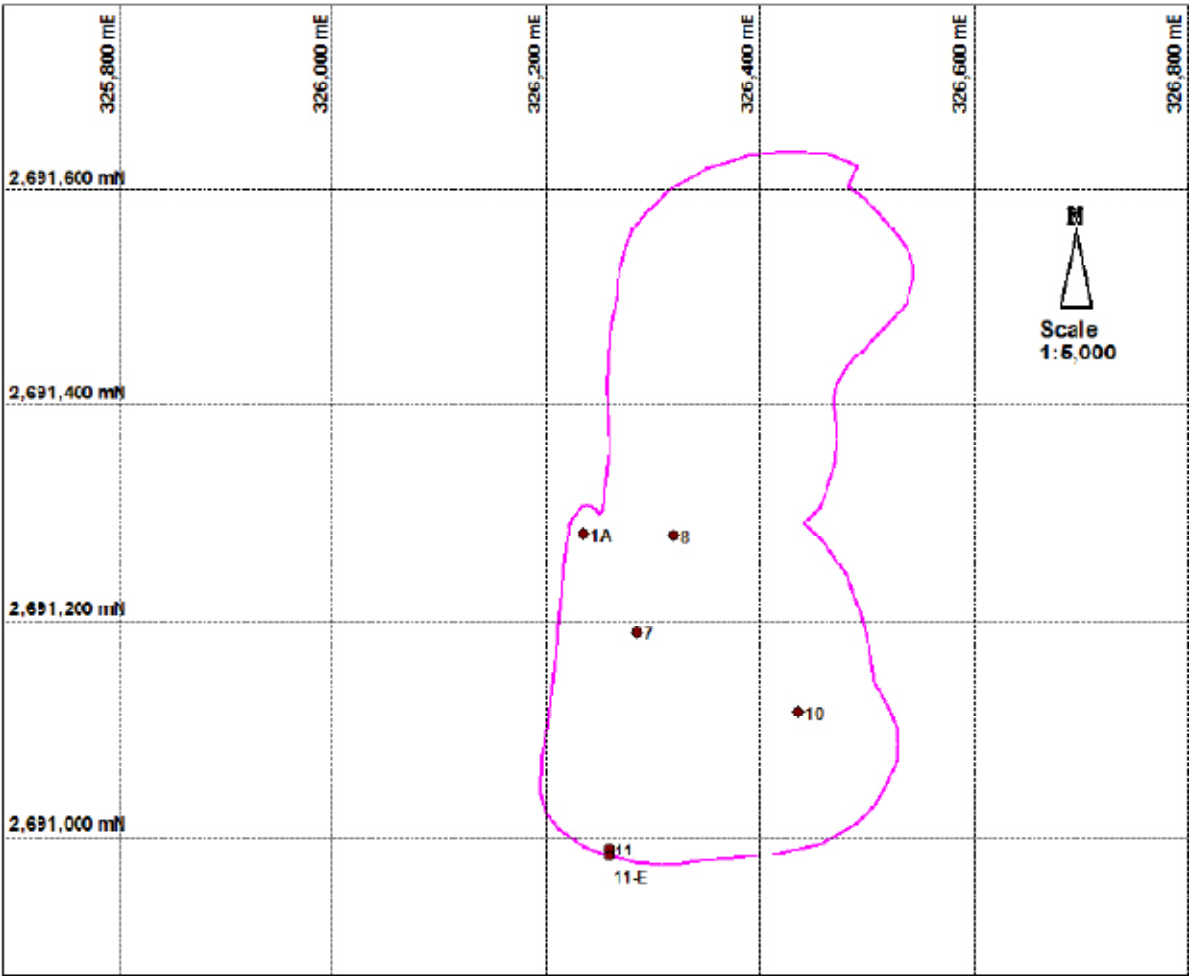


Figure 4 Locations of Atri Prospecting trenches

A total of 36000.85 tonnes of kimberlite sampled from these trenches , yielded 1876.43 carats of diamonds. The results of samples Processed in DMS Plant at Bunder are given as table4.

3.4 PROJECT BLOCK MODEL / RESOURCE MODEL

The quantities of resource / reserves and overburden / waste to be removed, is calculated through a computer programme which utilizes modified slice plan method. The area between two consecutive slices is divided into a blocks with dimensions of 50 m × 50m. The height of the blocks is 10 m, the interval between two consecutive slices. The height of the blocks has been chosen to match bench height. The blocks are further subdivided into sizes of 12.5 m × 12.5 m × 10.0 m height, at the edge of the resource or slice or at boundaries of faults and at boundaries between different geological domains. The blocks are assigned density and quality by geostatistical method through a computer programme.

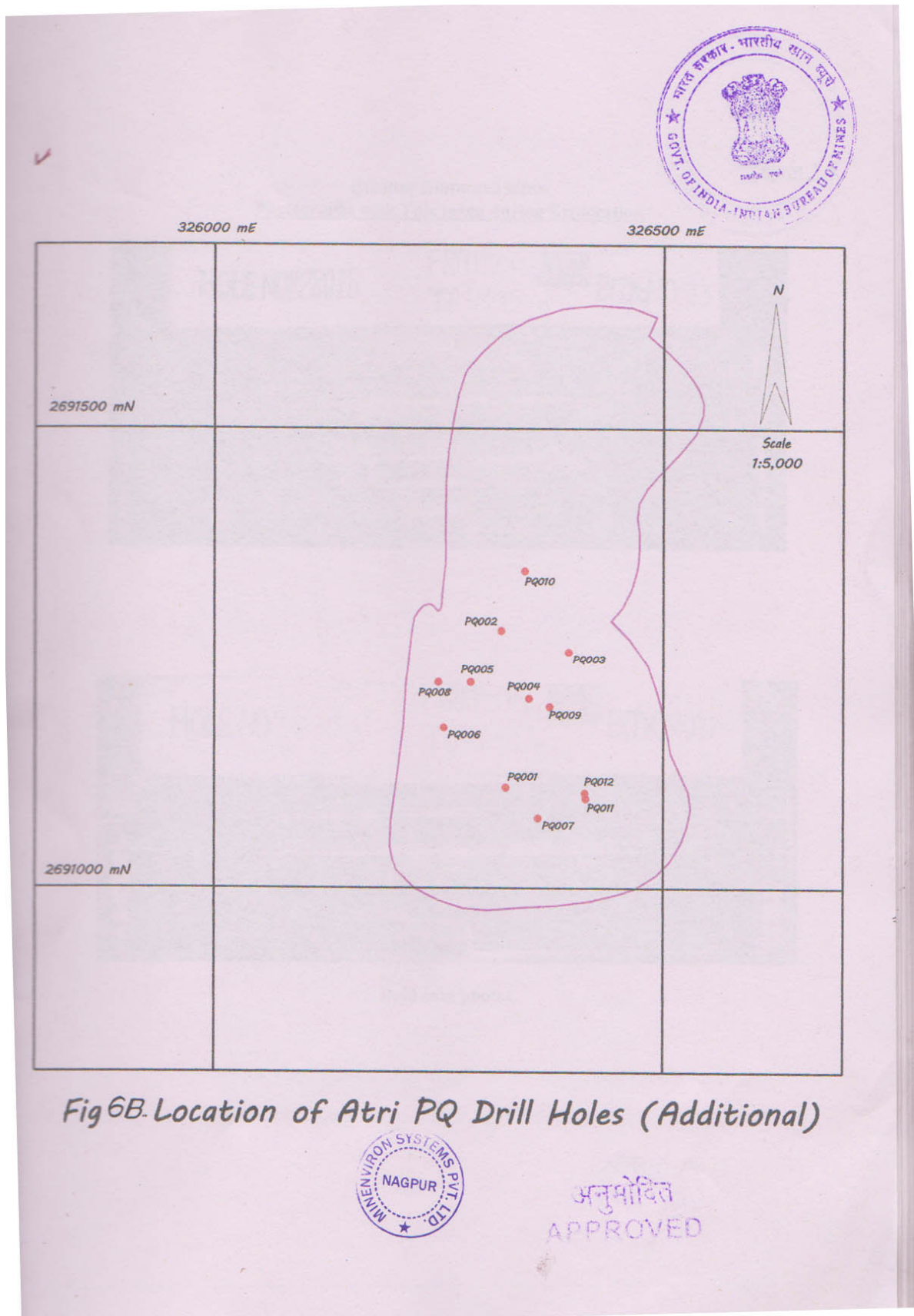
To explain, slice plans at two consecutive levels of South Atri namely 360 m and 350 m are attached at **Figure 7 D/1 & 7 D/2** respectively. The areas of kimberlite of South domain shown in the figures are 72775 sq. m. and 73394 sq. m. The volume and tonnage of kimberlite is calculated as under:

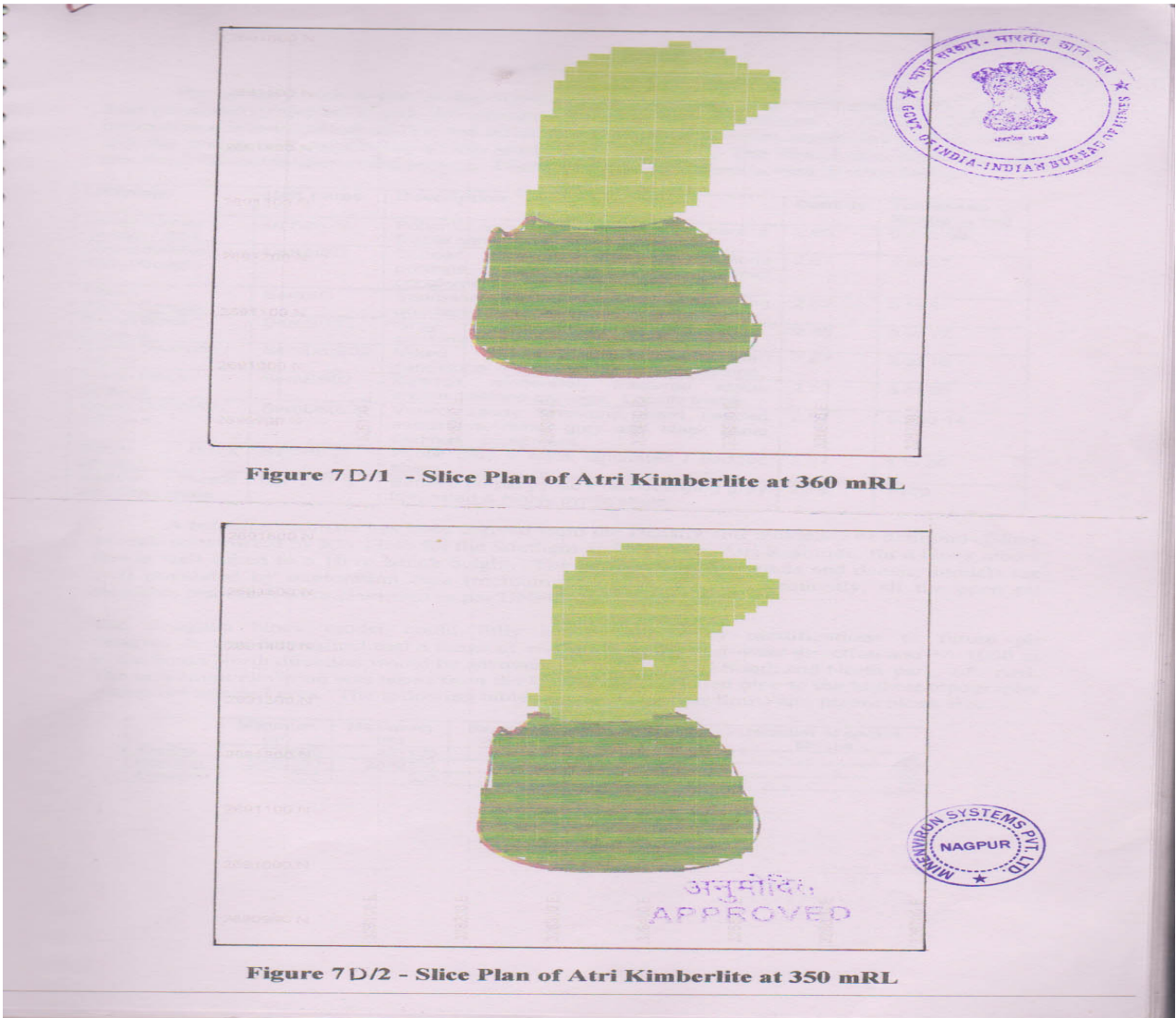
$$\begin{aligned}\text{Volume} &= \frac{1}{2} (\text{Area of slice at 360 m} + \text{Area of slice at 350_m}) \times 10 \\ &= \frac{1}{2} (72775 + 73394) \times 10 = 730845 \\ \text{Tonnage} &= 730845 \times 2.6 = 1900197\end{aligned}$$

As against thus, the tonnage calculated by block method through computer modeling is 1892161.

The slice wise reserves calculated along with waste to be excavated are given in fig and table below.

The geological, engineering, and metallurgical rock characteristics were integrated into project block models to reflect 'ore type' and country rock models, constructed by the project geology team.





The country rock model groups the host rocks into nine rock ‘packages’ on the basis of their perceived geotechnical and environmental geochemistry parameters. These units have been incorporated into the block model, and influence pit wall angles in the prefeasibility mine design, and the design and sequencing of the waste rock stockpile. The model also captures major structural discontinuities at the project. These rocks type are summarized in table below.

Lithology	Unit name	Description	Density	Thickness Range in (m)
Upper Kaimur Conglo / SST	UpKaiCS	Polymict sandy conglomerate on hard & friable sandstones, shale partings	2.60	0.4 to 60
Lower Kaimur SST / Conglo	UpKaiSC	Bedded sandstone, green siltstone partings, on graded polymict conglomerate Carbonate matrix.	2.67	1 to 57
Semri SST / Conglo	SemSC	Sandstone with shale parting on quartzite. Competent	2.67	5 to 8
Semri Black	SemBS03	Gray / green-black chloritic shale, siltstone	2.65	3 to 12

Shale 3		partings. Locally friable,		
Semri Dolomite / SST 2	SemDstS02	Mixed conglomerate, shale-parted sandstone, discontinuous hard limestone.	2.67	2 to 16
Semri Black Shale 2	SemBS02	Bedded, moderately fractured shale, Cream siltstone parting. Locally friable	2.52	8 to 56
Semri Dolomite / SST - 1	SemDstS01	Varied sandy limestone, hard bedded sandstone, minor grey and black shale partings – competent	2.67	0.2 to 14
Semri Black Shale 1	SemBS01	Pyritic grey – black laminated / bedded shale	2.67	1 to 50
Bijawar Purple and Gray shale	BijP & G S	Bedded purple pyritic shale overlying grey laminated & highly pyritic shale	2.78	>100

A resource estimate has been derived from the Density and Incidence of diamonds Block Models constructed by Rio Tinto for the Southern and Northern Atri Resource, for a block model that is well suited to a 10 m bench height. The incidence of diamonds and density models are well populated by exploration data (including geophysical). Subsequently, all the open pit mineable resources were classified as per UNFC.

The designed block model could fully accommodate any modifications to future pit designs. It was determined that a range of +/- 750 m in the east-west direction and +/- 1000 m in the South North direction would be adequate for both the Atri South and North part of Atri. The maximum elevation was taken from the base of the modeled pipe to the highest topography within the selected area. The following tables detail the models limits and parent block size.

	Minimum (m)	Maximum (m)	Range (m)	Parent block size (m)	Number of parent blocks
Easting	325600	327100	1500	50	30
Northing	2690300	2692300	2000	50	40
Elevation	-200	500	700	10	70

3.5 BLOCK MODEL

3.5.1 Considering the pipe size and the sampling / drilling density covering the pipes, a parent block size of 50 m (East-West) by 50 m (North-South) by 10 m (height) was selected. The resultant number of parent blocks in each direction is shown in the table above.

Twenty-two discreet rock types and / or lithological units have been modeled as a wire frame surface or solid, as listed in the following table :

S. N.	Domain	Unit / Lithology	Model fields			
			Domain code	Geol code	Numeric Geol code	Density
1	Country Rocks	Upper Kaimur CONG/SST	0	UKAICS	31	2.60
2	Country Rocks	Lower Kaimur CONG/SST	0	LKAICS	32	2.67
3	Country Rocks	Semri SST/CONG	0	SEMSC	33	2.67
4	Country Rocks	Semri BLACK SHALE 3	0	SEMBS3	34	2.65
5	Country Rocks	Semri DOL/SST 2	0	SEMDS2	35	2.67
6	Country Rocks	Semri BLACK SHALE 2	0	SEMBS2	36	2.52
7	Country Rocks	Semri DOL/SST 1	0	SEMDS1	37	2.67
8	Country Rocks	Semri BLACK SHALE 1	0	SEMBS1	38	2.67
9	Country Rocks	Bijawar PURPLE & GREY SHALE	0	BIJ	39	2.78
10	Country Rocks	Country Rocks undifferentiated	0	CRx	1	2.67*
11	Country Rocks	Internal waste within pipe	0	XENO	3	2.67
12	Atri South Pipe	South pipe-pyroclastic Kimberlite 1	1	SP1	14	Kriged
13	Atri South Pipe	South pipe-high mag pyroclastic Kimberlite 2	1	SP2MAG	15	Kriged
14	Atri South Pipe	South pipe-pyroclastic Kimberlite 3	1	SP3	16	Kriged
15	Atri South Pipe	South pipe-pyroclastic Kimberlite 4	1	SP4	17	Kriged
16	Atri South Pipe	South pipe-19roclastic Kimberlite 5	1	SP5	18	Kriged
17	Atri South Pipe	South pipe-pyroclastic Kimberlite 6	1	SP6	19	Kriged
18	Atri North Pipe	North pipe-pyroclastic Kimberlite 1	2	NP1	10	Kriged
19	Atri North Pipe	North pipe-pyroclastic Kimberlite 2	2	NP2	11	Kriged
20	Atri North Pipe	North pipe-volcaniclastic Kimberlite 1	2	NV1	13	Kriged
21	Atri North Pipe	North pipe-pyroclastic Kimberlite 3	2	NP3	12	Kriged
22	Colluvium	Colluvium	3	COLV	2	1.90

* Below the Bijawar unit, undifferentiated waste was assigned the density 2.78

3.5.2 The country rock stratigraphical units (Numeric’ Code 31 to 39 m in the table above) were each modeled as solids, in three separate regions (North, Southwest and Southeast). The Atri pipe complex was modeled as two intersecting solids and the internal pipe geology and the base of the colluviums were modeled as surfaces. Each of these wire frame models was exported from MICROMINE and imported into DATAMINE via DXF format.

3.5.3 The wire frames were coded and inspected in the datamine visualize to ensure the integrity of the shapes and confirm that they had been correctly imported.

3.5.4 A datamine script was written to fill each wire frame with blocks and sub blocks and to apply the relevant geological coding to each block. the atri pipe shapes were filled and confined, with north pipe having precedence over south in the overlying region. the internal pipe geology surfaces were filled and added to the pipe block model to code the latter with internal pipe geology (numeric codes 10-19). the blocks lying above the colluviums surface were coded separately (code 2), all blocks above the topographic surface were removed.

3.5.5 Two sections of the model that remain uncoded were located below the bijawar (i.e. mainly below – 150m elevation) and a mall wedge to the far south of the model. neither of these regions is likely to lie within any pit design and therefore, these blocks were assigned to undifferentiated country rock (numeric code1).

3.5.6. Density within Atri pipe

a) The datamine software package trafil was used to select all density measurements from the dataset that lay within the volume of the pipe shapes. this gave a sub set of 2648 readings, with a mean density of 2.60. summary statistics for density data from within pipe wire frames is shown in the following table.

Density Figures in t/m ³					
	No. of records	Minimum	Maximum	Mean	Standard deviation
Atri North	875	1.38	3.65	2.58	0.12
Atri South	1773	1.81	3.66	2.60	0.08

b) **Density of the country rock (side burden)**

916 density records lie outside Atri pipe wire frame solid and were therefore, furnished with measurement of the country rock density. The mean value of these was 2.67 which was used as a default density within the waste rock unit, with the following exceotions:

i) **Density of Colluvium:**

Only 16 density reading with a main value of 2.55, were available from colluviums samples which is considered to high. A value of 1.9 was therefore assigned to this unit in the model.

ii) **Upper Conglomerate /sandstone (Upper Kaimur)**
For the upper Kaimur unit a value of 2.6 was assigned.

iii) **Semri Block Shale three and two**
These are considered to be less dense than the surrounding units, and were therefore assigned density of 2.65 and 2.52 respectively.

iv) **Bijawar Purple and Gray shale**
These are thought to be denser than the overlying rocks and we have therefore assigned a density of 2.78 in the model. Any undifferentiated rocks below this were also assigned this density value.

3.6 INCIDENCE OF DIAMONDS ESTIMATION

A total of 257 samples weighing 187.18 tonnes have been processed from large diameter (8”) Core for incidence for diamonds estimation. These samples yielded 88.976 carats of diamonds. Each sample was 10m in length (Probable Bench height) with a mean sample weight of 0.725 tonnes. Sample incidence of diamonds was calculated as “Stones Per Tonne” (SPT). The SPT was multiplied by the “Mean Stone Size” (MSS) for the domain to convert the SPT incidence of diamond to “Carats Per Tonne” (Ct/T).

For the purpose of incidence of diamonds estimation 27 samples, were coded either as “colluvium” and / or “waste” and have not been utilized. The remaining samples (230 No.) are treated as two separate domains. The samples from South domain have a mean incidence of diamonds of 0.78 Ct/T, those from the North domain have a mean incidence of diamonds of 0.13 Ct/T.

The summary stations of incidence of diamonds estimate are shown in the following table.

Domain	No. of samples	Mean samples WT / T	Mean grade (Ct/T)
Waste	21	0.646	0.01
South pipe	159	0.747	0.78
North pipe	71	0.701	0.13
Colluvium	6	0.850	0.25
Total	257	(Avg) 0.728	(Avg)

3.7 GEOTECHNICAL ASSESSMENT STUDY

a desktop study for providing an indicative geotechnical assessment was also conducted in the earlier part of the PL tenure focusing on the Geotechnical parameters for mining particularly focusing on the pit wall slope and waste dump design. The pit wall slope study was based on the Geotechnical data collected during that stage on the drill core of both the kimberlite and the host rocks, which includes the parameters like distribution of the joints sets, bedding plans etc. and the rock mass characterization. As can be seen from the table below, by verifying the slope angle according to the rock type the stability of the pit slope can be addressed effectively.

Rock Type	<u>Batter Angle</u>		Overall Slope Angle
	Pre Split	Not Pre Split	
Sandstone	80°	70°	80°
Shale	70°	60°	40°
Kimberlite	80°	70°	50°

Table 2 Possible preliminary pit slope design angles

To conduct a geotechnical assessment of the pit wall slope stability a Geotechnical drilling program was initiated. Eleven such geotechnical holes were completed within PL period.

4. RESULTS AND RECOMMENDATIONS

The grade drilling work completed so far, the samples collected from the grade drill holes for grade and the bulk samples processing completed for the price estimation provide an improved confidence in arriving at the decision to move the project forward. In addition to this, slim line holes drilled for delineating the margins of the deposit near the surface has aided in improving the confidence about the volume of the ore deposit. The analysis of the geotechnical properties of the rocks in the holes drilled near the ore body and within the proposed mining pit limits provides a better understanding pit slope stability. The holes drilled on the are proposed for the mine infrastructure has helped in sterilization of the area. The analysis of the above mentioned parameters enables development of an effective mine layout.

5. RESERVES

The southern and northern domains of the Atri deposit have been considered for resource estimation. The reserve estimation is based on the highly sophisticated “Block Model” of the project developed on the basis of extensive data (geophysical, bulk sampling, drill core etc.) by Rio Tinto.

Confidence in tonnage estimates is a function of the drilling density upon which the volume model is based and the reliability of the bulk density estimate of the kimberlite material.

The density of drilling (LDC, PQ/ HQ/ NQ) in Southern Atri supports a high level of confidence in tonnage and grade estimates for this part of the Resource. The confidence in tonnage and grade estimates in northern Atri is lower because of the reduced sample density.

The density estimate in the southern part of Atri is considered to be adequate for entire depth investigated due to large data set and the QA/QC protocols employed during data collection. Therefore the modeled tonnage from surface to ‘359’ m can be categorized as 1 for geological axis up to a depth of 250 and 2 beyond this depth. Atri North is populated by a significantly lower number of drill holes which leads to lower confidence in density estimates in this part of the ore body.

An open pit mine with a projected diameter of 920 m and a depth of 345 / 350 m, with overall slope angles of 38° - 40° would contain 41.56 million tonnes of ore in the south and 12.14 million tonnes in the north. The average grade of the ore will be 0.78 carats of diamond per tonne of ore reserves in the south and 0.13 in the north. The domain wise and level wise ore reserves estimated are given in Annexure 7.

The confidence levels in the tonnage and grade estimations are sufficient to classify the resource as economically viable under the UNFC classification system.

The southern and northern domains of the Atri deposit have been considered for reserves estimation. The reserve estimation was based on a highly sophisticated “Block model” of the project developed on the basis of extensive data (geophysical, bulk sampling, drill core etc.) by Rio Tinto. ~~The Block model was explained in para 3.6~~

Confidence in tonnage estimates is a function of the drilling density upon which the volume model is based and the reliability of the bulk density estimate of the Kimberlite material.

The density of drilling (PQ, LDC, HQ) in Southern Atri and Northern Atri is as under:

Domain	PQ	LDC	HQ
Southern Atri	36	21	11
Northern Atri	13	02	-

This supports a high level of confidence in tonnage and incidence of diamonds estimates for Southern Atri part of the Resources. The confidence in tonnage and incidence of diamonds estimates in Northern Atri is lower because of the reduced sample / borehole density.

The density estimate in Atri is considered to be adequate for entire depth investigated due to large data set and the QA/QC protocols employed during data collection. Therefore the modeled tonnage from surface to 210 mRL can be categorized as 1 for geological axis up to a depth at 235 m due to higher density of boreholes upto 210 mRL. Below 210 mRL, the density of borehole is lesser. Hence, the reserves of Atri South below 210 mRL upto 100 mRL are categorized as 2 for geological axis. In case of North domain, the reserves upyo 420 mRL are categorized as 1 for geological axis due to sufficient borehole data available. Below that level, the reserves are categorized as 2 for geological axis. The benchwise / slicewise reserves of North & South domain, with average grade along with waste to be handled from 440 mRL to 100 mRL is given at the table below:

Ore, Reserves & Grade							
Between Slice mRL	South domain			North domain			Waste (Tonnes)
	Tonnes	Grade Ct/t	UNFC Code	(Tonnes)	Grade Ct/t	UNFC Code	
Above - 440	-	-		-	-	-	4816
430 – 440	-	-	-	269357	0.13	121	11395
420 - 430	561215	0.837	111	747694	0.13	121	11927
410 – 420	2108176	0.729	121	1,134931	0.13	122	9236
400 – 410	2078502	0.723	121	1,150648	0.13	122	8597
390 – 400	2041710	0.704	121	1,142080	0.13	122	7954
380 – 390	1997789	0.688	121	1,121097	0.13	122	7354
370 – 380	1953639	0.678	121	1,035508	0.13	122	6810
360 – 370	1908253	0.677	121	934669	0.13	122	6271
350 – 360	1892161	0.679	121	818770	0.13	122	5626
340 – 350	1848974	0.702	121	719496	0.13	122	5065
330 – 340	1781789	0.719	121	647213	0.13	122	4589
320 – 330	1736576	0.736	121	580795	0.13	122	4138

310 – 320	1701762	0.744	121	463098	0.13	122	3741
300 – 310	1650933	0.743	121	379000	0.13	122	3355
290 – 300	1596146	0.751	121	318026	0.13	122	2991
280 – 290	1535923	0.741	121	250287	0.13	122	2639
270 – 280	1448249	0.777	121	180114	0.13	122	2371
260 – 270	1413667	0.76	121	122391	0.13	122	2078
250 – 260	1355448	0.778	121	64653	0.13	122	1813
240 – 250	1303005	0.784	121	38890	0.13	122	1520
230 – 240	1227659	0.814	121	15037	0.13	122	1281
220 -230	1166269	0.817	121	3782	0.13	122	1023
210 -220	1096215	0.804	121	-	-	-	810
200 – 210	1052728	0.818	122	-	-	-	589
190 – 200	997969	0.834	122	-	-	-	389
180 – 190	937181	0.879	122	-	-	-	227
170 – 180	865332	0.885	122	-	-	-	93
160 – 170	727412	0.854	122	-	-	-	35
150 – 160	572212	0.847	122	-	-	-	10
140 – 150	417229	0.855	122	-	-	-	-
130 – 140	285160	0.812	122	-	-	-	-
120 – 130	186655	0.813	122	-	-	-	-
110 – 120	98976	0.842	122	-	-	-	-
100 – 110	16861	0.842	122	-	-	-	-
Total Tonnage	41561775			12137536			118756.179

An open pit mine with a projected diameter of 920 m and a depth of 345 m, with overall slope angles of 38° - 40° would contain 41.56 million tonne of ore in the south domain and 12.14 million tonnes in the north domain. The average incidence of diamonds of the ore will be 0.78 carat of diamond per tonne of ore reserves in the south and 0.13 carat/t in the north. The estimated recovered Diamond from 53.70 million tonne ore material will be approximately 34.20 million carats.

The confidence levels in the tonnage and incidence of diamonds estimations are sufficient to classify the Resources as economically mineable reserves under the UNFC classification system.

5.1 United Nations Framework Classification (UNFC)

5.1.1 Overview

The UNFC is a universally applicable scheme for classifying / evaluating mineral reserves/resources . The classification consists of three dimensional axial systems which include geological assessment, feasibility assessment and economic viability, expressed as a three digit code based system. The economic viability of project presents the first digit, the feasibility axis the second digit and the geology axis the third digit. Three main category are used to describe the economic viability, three to describe feasibility and four to describe the level of geological knowledge.

The status of Bunder Diamond project may be assessed as follows:

5.1.2 Economic Axis

The Atri Resource is considered to be economic (E1) under current competitive market conditions, satisfying the UNFC classification for this axis in the following areas:

5.1.2.1 General and Detailed Exploration.

General and detailed exploration has been conducted for the Atri Resource. Geological studies have sought to assemble the relevant ore body knowledge for Atri. Evaluation campaigns have been targeted at establishing tonnage and grade supplemented by data collection relevant to metallurgy, geotechnical engineering and mine environment issues. These geological investigations include extensive mapping, detailed geochemical and geophysical surveys, close space drilling and trenching. The details of these investigations are provided in the summary of the Geological Axis in section 5.1.4.

Price has been estimated from diamonds recovered from LDC and trench samples processed at the Bulk Sample Processing Plant. The recovered Diamonds are sorted into size, colour and quality categories that have an associated price based on accurately recorded market values.

5.1.2.2 Specific end-use grades (above economic cut-off grade)

Sensitivity analyses has been undertaken to test economic viability against key input variables of price, grade, operating cost and pit slopes. The worst anticipated combination of these inputs has still delivered a viable project, also demonstrated in the difference between the calculated marginal cut-off grade and the average grade of the resource.

The marginal economic cut off grade calculated for the Atri Resource is 0.1 carats per tonne (Cts/T) which is well below the average grade of the resource. The cut off grade is based on operating cost estimates around a highly mechanized technically advanced Rio Tinto Diamond operation in India. The average grade of southern Atri from which the majority of ore will be mined (41.56 Million Tonnes) is 0.78 Cts/T the average grade for the North Arti from which 12.14 Million Tonnes will be mined is 0.13 Cts/T.

5.1.2.3 Land use Data

The area is fully situated in a protected forest area, the cost of purchasing compensatory land of the same size as the mining lease has been considered during the evaluation of the economic viability of the project.

5.1.3 Feasibility Axis

A detailed prefeasibility study has been completed for the project. Geological , engineering, environmental, legal and economic information has been evaluated during the course of the study. The resource has been categorized at F1 upto 200m RL & 100m RL on the Feasibility axis of the UNFC classification. A summary of the work completed against the requirements for the classification is provided below:

5.1.3.1 Geology

General and detailed exploration has been conducted for the Atri Resources. The ore body limits and surrounding host rocks are well defined on the basis of extensive drilling. The Geotechnical properties of surrounding host rocks have been assessed and numerically modeled to determine the optimal slopes angles for the proposed open pit in the different litho logical units.

5.1.3.2 Mining

The scale of the operation and economic viability has been confirmed over a wide range of anticipated costs, diamond price, pit slopes, recoveries and process throughput rates using pit optimization software and detailed Mining Planning.

An open pit containing 54.04 Mt of ore, measuring 920m in diameter and 345m in depth from the floor of first bench has been designed. The open pit will be developed in phases to optimize cash flow by deferring waste movement within permissible safety limits.

The current operating life of the Atri open pit is anticipated to be 11 years life, however additional mineral resources have been identified at depth beneath Southern Atri and in the Angiras ore body would add an additional 13 years of mining, extending the overall mine life to 24 years potential for additional resources with the mining lease also exist from Geophysical exploration targets not yet fully explored. A detailed exploration programme has been developed to further evaluate resources and exploration targets with the Mining lease during first two years of start of mining operation.

A mine fleet comprised of 100t capacity trucks and 18m² face shovels has been specified as optimum for the material movements required. Ancillary equipments to support mine production has also been defined. A detailed breakdown of Capital and Operating cost estimates relating to mining have been developed based on the company's experience of similar operations in Australia, Africa and Canada.

5.1.3.3 Environmental Aspects:

Baseline environment data has been collected in 2008-2009 and again in 2010-2011. No potential environmental constraints to the project have been identified.

5.1.3.4 Processing

A production process plant has been designed on the bases of information gathered from the processing of large diameter drill core and bulk samples excavated from trenching at the bulk Sample Processing Plant located at the project site. The information obtains indicates that the ore is amenable to processing using traditional process plant designs used in other diamond operations by the Company. Additional metallurgical studies based on spatially representative slim hole drill core has also provided information to support large scale Production Process Plant design. A detailed breakdown of Capital and Operating cost has been evaluated during the course of the design.

5.1.3.5 Infrastructure:

Infrastructure requirements supporting the mine's operations have been considered for the project and are detailed as follows. The process plant, maintenance workshop and administrative building are proposed to be located within the mining lease area. Access road, to and from the mine operation; have been selected to minimize the impact on local communities. Power demand requirements for the operations are understood, sufficient power supply for the operation is available from the utility grid. An application has been made to the Madhya Pradesh State electricity Board to supply the required electrical power to the project.

5.1.3.6 Costing:

A detailed breakdown of capital, Operating and Working Capital costs relating to infrastructure development, mining, processing, closure and support services has been considered for the operation.

5.1.3.7 Marketing:

Three studies assessing diamond quality and marketability of the diamonds recovered from exploration samples have been completed by experienced diamond experts from the parent company's sale and marketing teams in 2007, 2010 and 2011. The reports indicated that the size, shape, clarity and colour distribution of the diamond recovered from the samples pose no marketability risks in the current market.

5.1.3.8 Economic Viability:

Cash flow studies for the project have considered the impacts of key economic variables such as inflation, currency fluctuations, taxes and royalties. Sensitivity analysis indicates that the project is viable over a wide range of diamond prices, capital and operating costs.

5.1.4 Geological Axis

The geological understanding of the Arti orebody is considered to be reasonably assured based on the exploration work completed. An accurate three dimensional model of the orebody and surrounding host rocks has been developed from extensive surface mapping, geophysical survey, drill hole and trenching information. The resources have been categorized at G1 up to 200m RL and G2 from 200m RL up to 100m RL on the geological axis of the classification system. A summary of the work completed against the requirements for the classification is provided below.

5.1.4.1 Geological Survey:

Detailed surface structural and geological mapping has been undertaken, maps include surface geological features, the locations of the trenches and the collar coordinates of boreholes drilled.

5.1.4.2 Geochemical Survey:

A comprehensive regional stream sediment sampling programme to identify indicator minerals commenced in 2002, 530 samples were taken over the Domah west Reconnaissance Permit area covering 2450 km². The results of the programme subsequently prompted a localized soil geochemical sampling programme over the Atri area in 2003/04.

5.1.4.3 Geophysical survey:

Ground geophysical surveys and downhole geophysical surveys have been conducted over the Bunder mine area. A total of 1095 line km of ground magnetic surveys, 7.2 line km of orientation Nemo TEM surveys were completed on 8 grids within the kimberlite anomalous catchments, which identified a number of magnetic anomalies in the project area which include the Arti orebody. Down hole Gamma, resistivity, seismic and acoustic televiwer surveys were subsequently conducted on selected drill holes over the Atri Resources.

5.2 Reserves Summary

Total reserves up to depth of 345 / 350 m (100 m RL) is 53.70 Mt as under:

South Atri 41.56 Mt @ 0.78 ct / t

North Atri 12.14 Mt @ 0.13 ct / t

These are classified as under:

Proved – upto 200 mRL – 36.46 Mt UNFC Classification 111

Probable from 200 mRL to 100 mRL –17.24 Mt. UNFC Classification 122

*UNFC Classification of estimated reserves is given in Annexure 8.

6. CONCLUSIONS AND RECOMMENDATIONS

RTEI has explored its Bunder PL area with maximum speed, safety and efficiency in a technical competent manner. As a result of these diligent efforts it has been able to delineate a definitive area that is prospective for economically minable diamondiferous kimberlites.

The Bunder kimberlite are being evaluated for their diamond potential based on their results from the samples processed in the Bunder DMC Plant.

Additional work is required to obtain more confidence in the reserves below 200 mRL and to increase the reserve.

7.0 BULK SAMPLES PROCESSING REPORT

7.1 Introduction

Rio Tinto Exploration India Private Ltd. is engaged in drilling a grid of large diameter core holes (8' diameter) on the Bunder Atri lamproite, with the objective of determining global grade for the resource within the confidence limits required by the Prefeasibility Study. Diamonds recovered from the core sample will contribute towards estimation of the diamond size-value distribution for the resource. The results of the sample treatment will also provide valuable information to enable the ore at depth to be characterized for future mining and plant treatment design purposes.

Core was logged on location, sampled for density determination, and manually broken to a maximum size of 80mm. the material was aggregated into 10m intervals and transferred into 1m³ bulk bags. Aluminum tags inscribed with the sample number were placed inside each bag, and the sample number written on the sides of the bag. Sample bags were sealed on top with numbered security sealed and were then transported to Sample processing plant (SPP) at Bunder by road.

Samples from LD holes are transported to the processing plant. The samples were accompanied by Log-sheets detailing sample numbers, hole description, depth and seal details. A chain of custody sheet also accompanied the consignment, and was verified and signed off as the samples were unloaded.

Unusually the first samples from all the holes it are logged as black silty soil and colluviums with sandy silty soil and big boulders of sand stone. There is a zone of extremely weathered lamproite to depth of upto 8-10m. This is followed by more fresh lamproit.

7.2. Plant Description and Flowsheet

The mineral processing facility at Bunder is equipped with a DMS plant with 10tph capacity, based on proprietary Rio Tinto design specifications and supplied by ADP. The planned was commissioned in Jan 2010 and has been in use for processing of bulk samples and LDCs since then. The plant flowsheet described below was used for the processing of 8-inch Large Diameter Core samples. A diagrammatic flowsheet of Sample Processing Plant (SPP) is shown in (Figure 1). Note that all screen sizes represent square aperture sizes.

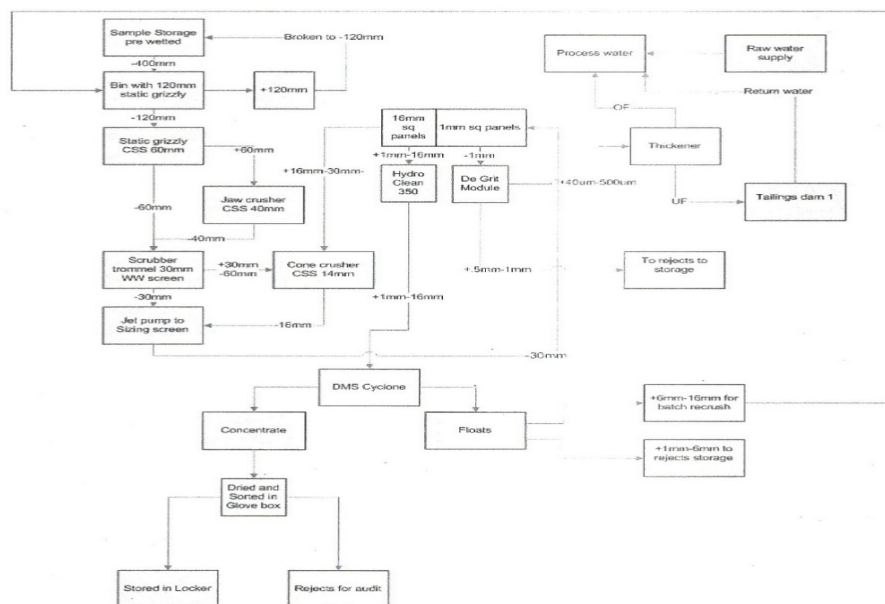


Figure 1: Diagrammatic flowsheet of Sample Processing Plant

7.3. Security

In terms of the standard of the standard hierarchy of security controls, physical separation of personnel from product provides the greatest level of protection for employees as well as product. This is achieved at all stages following the preparation of a concentrated DMS through use of caging or dock-lock containers, and final diamond recovery in locked glove boxes. A second level of protection is provided through direct surveillance by independent security personnel and camera surveillance.

Security guards were stationed within the processing area of at all times of oversee the exchange and sealing of concentrate containers and collecting of samples for data capture work. In addition to that all critical containers like the concentrate sizing screen, dewatering, X-ray Glove box containers remain locked at all times and would opened for the work only on request to the security control room in the presence of security guards. Fixed and PTZ cameras are fitted in the DMS plant area to monitor activities, with particular focus on the DMS sink screen, concentrate locking area and X-ray rejects paddock.

- The concentrate drying area, including the infra-red drier is fitted with multiple fixed cameras. Cameras are also installed within the recovery

glove boxes. All equipment used for processing of concentrate is caged off to prevent access to product.

- Cameras are also provided in the cleaning and valuation containers and a security guard is stationed at all times during the cleaning process.
- All camera feeds are routed to a surveillance room with restricted access. Data is stored for 30 days.

7.4. Plant decontamination

Prior to commencing sample treatment, the plant was fully decontaminated. This process involves wash-down of all conveyors and chutes, scrubbing and spray-down of all screens with high-pressure water. On completion of each 10m interval sample, the plant was flushed with water and all conveyors and screen washed down with high pressure water hoses. The wash down of the feed preparation section commenced as soon as the sample treatment was completed, ensuring that all spillage or material held up in the feed bin, scrubbed and primary crusher was flushed through to the DMS. Any material recovered during full decontamination was added to the concentrate from the final recrush interval.

7.5. DMS Calibration

The Bunder facility operates a 10tph DMS plant built by ADP according to proprietary specifications. Prior to initiating sample processing, a full Tromp curve determination was completed using 4mm Partition Enterprises tracer over the SG range of 2.50 to 3.53. this determination was repeated at the start of every week or after a break in processing.

Daily quality control procedures conducted on the mini-DMS include the following:

1. Daily tracer tests are performed using 3.4 and 3.53 SG tracers. Full tracer recovery is required prior to initiating sample processing.
2. The Degrit cyclone underflow is monitored for +1mm material to identify wear or damage to the 1mm screen panel on the prep screen and

3. Regular measurement of cyclone differentials and underflow densities to ensure the cut points remains below 3.1RD.

7.6. Feed Preparation

Bulk bags were weighed, hoisted over the plant feed-bin, and slit to discharge into the feed hopper. A grizzly (120mm) with a tipping ramp is fixed over the feed bin, to ensure that only <120mm material goes into the bin. +120mm material falling over the grizzly is contained in the over size material area and is crushed by a 400m BHP Bazer make crusher.

A sample of approximately 2kg was collected off the primary conveyor for each bulk bag for determination of the moisture content of the feed, and the dry headfeed weight was calculated. (the dried moisture sample was returned to the primary conveyor for processing with the parent sample). Material was fed from the feed hopper onto the primary conveyor via variable speed belt feeder. The discharge from the primary conveyor goes onto the primary jaw crusher (Osborne Telesmith SA 128, 305×203mm crusher, CSS`40mm) followed by a scrubber & trammel (@30mm), with the +30mm material from the scrubber going to the cone crusher (Osborne 24S Gyrasphere crusher) Water was added into the scrubber, in the approximate ratio of 1:1 sample: water. The scrubber/trammel arrangement is tyre-mounted, with the scrubber measuring 2.60m in length and 1.35m in diameter, followed by a 1.0m long trammel with a 30mm opening. The scrubber is fitted with lifters for proper scrubbing of material. Residence time in the scrubber varied from sample to sample depending on the plant feed rate. The over-size from the trammel passes on to the cone crusher chute, discharge of which is controlled with a knife valve. The undersize passes on to a jet pump, and get pumped to the DMS feed preparation screen. The feed preparation screen has panels with two different size openings, 1mm followed by 16mm. on the feed preparation screen, the <1mm material gets screened and passes onto the degrit module and +1mm material gets screened on to the 16mm panel, where the <16+1mm material gets passes on to the DMS module. The oversize from the feed preparation screen falls onto the crusher chute, from where it gets to cone crusher for further crushing. The CSS setting of the cone crusher was set to approximately

14mm. at the end of processing the scrubber was reversed to ensure complete discharge of material to the cone crushed feed chute.

7.7 DMS Concentration

Feed to the DMS plant was pumped via the jet pump at the cone crusher discharge onto the feed preparation screen, fitted with 1mm square aperture Multototes (giving an effective cut size of 0.85mm).under from the feed preparation screen was pumped to a Degrit cyclone, with the overflow to draining to thickener feed tank. The under size discharge over the @0.5mm where the +0.5mm is discharges onto the course rejects paddock and then <0.5mm to the thickener feed tank below it from where it gets pumped to the thickner. The discharge from the degrit cyclone is measured to ensure that the > 1mm percentage in this fraction doesn't exceed more than 5% of the total underflow. This is then to ensure that the prep screen panels are intact and have no damage.

The thickener is dosed with an appropriate amount of flocculent to ensure proper setting of fines in the water for getting the water back for process. The thickener under flow pump is operated based on the quality of process water, the thickener pump is operated to dump the slimes to the dam, when the process water turns murky.

The <16mm material from the feed preparation screen is pumped to a 250 mm Multotec Cast Iron cyclone. The cyclone sink product (concentrate) discharge onto the sinks screen fitted with 1mm square mesh. Water sprays are used to wash medium off the concentrate prior to discharge into 20 liter plastic drums [with perforated bases (0.85) to allow drainage]. The concentrate discharge area is covered by a surveillance camera and also a security guard is physically present to restrict access. The plastic concentrated drums were weighed, labeled, and sealed when full, or on completion of a sample. The cyclone floats product discharged onto a double deck screen with 6mm and 1mm square mesh vibrating screen fitted with water spray to wash medium off the ore. The +6mm material gets discharge into the course floats paddock and <6+1mm floats onto the fine floats paddock. Samples are collected from both the fractions to determine the moisture content and for sizing. The course floats

were taken off from the paddock and stored in a bay for processing after recrushing it to <6mm. the fine floats are stored in bulky bags for audit purpose.

7.8. Recrush Circuit

The +6mm-16mm DMS floats from primary processing of each sample were treated as a separate sample in order to determine the degree of Diamond liberation through secondary crushing and scrubbing of the ore. Cone crusher is reset with the CSS set to 5mm and the 16mm panel from the feed prep screen is replaced by a 6mm panel for the recrush operation. For optimal performance, the cone crusher is required to be run under choke-fed conditions. When the headfeed rate was insufficient for chocked operation, a knife-valve on the feed-chute to the cone crusher was closed to allow built-up of material. Sizing of the -6+1mm fraction of the double deck screen was performed daily to monitor crusher performance. In addition to this the moisture of the feed and presence of +1mm material in the degrit cyclone underflow are also monitored to ensure that the plant is operating at optimum condition.

7.9. Recording of Processing Data

All monitoring and processing data were recorded on daily log-sheets signed-off by the shift supervisors. Processing data were transferred to an Excel workbook, with independent checking for transcription errors performed. On completion of processing all samples from a drill hole the final data for entry into database.

7.10. DMS Concentrate Processing

The DMS concentrate is weighed and dried into an infra-red drier for drying. The concentrate is then sized into- 4+2mm and -2+1mm fractions. The -4+2mm fractions are observed in sealed glovebox by trained sorters.

7.11. Diamond Recovery: +2mm Concentrate Hand-Sort

The recovered diamonds are stored in an on-site diamond safe, which always remains sealed by Directorate of Mining and Geology (DMG) officials. These

seals are opened only on request and record of material taken out by us is made and signed-off by a DMG official and a RT representative.

7.12 Diamond Recovery: -2mm Concentrate Fusion and Hand-Sort

The -2mm concentrate is subjected to concentrate fusion and then the residue is then picked again, by the same trained sorters.

7.13. Sample Results Summary

All of 349 samples totaling 262.66 tonnes from LDC holes and 29 samples totaling 36000.85 tonnes were collected from pits (details of these samples are provided in the table below) were chosen for processing. There was no blending involved with the samples as these were collected for the grade and price assessment. A total of 22115 commercial sized² stones weighing a total of 2020.40 carats were recovered.

The inferences drawn from the entire study are that the grade varies to a significant amount between the samples from LDC holes with a maximum of 3.56 cts/tonne and minimum is 0.01 cts/tonne, with an average sample grade of 0.55 cts/tonne. This is a different for bulk samples where the maximum is 1.99 cts/tonne and the minimum of 0.03 cts/tonne, with an average sample grade of 0.95 cts/tonne.

The major stages of processing are : Primary Circuit, Recrush Circuit, and -2mm concentrate fusion (-2mm CF)

The table 1 & 2 below summarize the details of the diamond recoveries at these stages of processing of each sample processed are given below:

Annexure-1 Drill Hole Lithology

HoleID	From	To	Code	Lithology
B28-001	0	4.5	COLV	Colluvium
B28-001	4.5	11.2	SPRK	Saprock
B28-001	11.2	13.5	SPRK	Saprock
B28-001	13.5	26.35	SPL	Southern Pyroclastic Lamproite
B28-001	26.35	37.4	SPL	Southern Pyroclastic Lamproite
B28-001	37.4	59.5	SPL	Southern Pyroclastic Lamproite
B28-001	59.8	64.1	SPL	Southern Pyroclastic Lamproite
B28-001	64.10	73.00	SPL	Southern Pyroclastic Lamproite
B28-001	73.00	86.20	SPL	Southern Pyroclastic Lamproite
B28-001	86.20	110.50	SPL	Southern Pyroclastic Lamproite
B28-001	110.50	147.90	SPL	Southern Pyroclastic Lamproite
B28-001	147.90	149.65	MgL	Magmatic Lamproite
B28-001	149.65	191.00	SPL	Southern Pyroclastic Lamproite
B28-001	191.00	210.00	SPL	Southern Pyroclastic Lamproite
B28-001	201.00	229.00	SPL	Southern Pyroclastic Lamproite
B28-001	229.00	248.90	SPL	Southern Pyroclastic Lamproite
B28-001	248.90	260.22	SPL	Southern Pyroclastic Lamproite
B28-002	0.00	6.20	COLV	Colluvium
B28-002	6.20	14.50	SPLT	Saprolite
B28-002	14.50	15.70	SPRK	Saprock
B28-002	15.70	21.70	SPL	Southern Pyroclastic Lamproite
B28-002	21.70	29.00	SPL	Southern Pyroclastic Lamproite
B28-002	29.00	35.40	SPL	Southern Pyroclastic Lamproite
B28-002	35.40	42.45	SPL	Southern Pyroclastic Lamproite
B28-002	42.45	59.60	SPL	Southern Pyroclastic Lamproite
B28-002	59.60	94.30	SPL	Southern Pyroclastic Lamproite
B28-002	94.3	98.7	SPL	Southern Pyroclastic Lamproitr
B28-002	98.7	100.8	SPL	Southern Pyroclastic Lamproitr
B28-002	100.8	130.6	SPL	Southern Pyroclastic Lamproitr
B28-002	130.6	149.4	SPL	Southern Pyroclastic Lamproitr
B28-002	149.4	149.85	SPL	Southern Pyroclastic Lamproitr
B28-002	149.85	150.68	SHLE	Shale
B28-002	150.68	151.48	SDST	Sandstone
B28-002	151.48	161	SHLE	Shale
B28-002	161	163.28	SDST	Sandstone
B28-002	163.28	171.5	SHLE	Shale
B28-002	171.5	177.5	SHLE	Shale
B28-002	177.5	178.34	SDST	Sandstone
B28-003	0	9.5	COLY	Colluvium
B28-003	9.5	52.7	PL	Pyroclastic Lamproite

B28-003	52.7	66.1	PL	Pyroclastic Lamproite
B28-003	66.1	67.7	PL	Pyroclastic Lamproite
B28-003	67.7	79.95	PL	Pyroclastic Lamproite
B28-003	79.95	81.9	PL	Pyroclastic Lamproite
B28-003	81.9	90.2	PL	Pyroclastic Lamproite
B28-003	90.2	94.55	PL	Pyroclastic Lamproite
B28-003	94.55	99.95	PL	Pyroclastic Lamproite
B28-003	99.95	108.4	PL	Pyroclastic Lamproite
B28-003	108.4	111.5	PL	Pyroclastic Lamproite
B28-003	111.5	117.6	PL	Pyroclastic Lamproite
B28-003	117.6	120.3	PL	Pyroclastic Lamproite
B28-003	120.3	144.55	SHLE	Shale
B28-003	144.55	149.9	SDST	Sandstone
B28-003	149.9	151.75	SHLE	Shale
B28-004	0	23.5	COLV	Colluvium
B28-004	23.5	64.3	MgL	Magmatic Lamproite
B28-004	64.3	82.3	MgL	Magmatic Lamproite
B28-004	82.3	111.5	PL	Pyroclastic Lamproite
B28-004	111.5	164	PL	Pyroclastic Lamproite
B28-004	164	192	PL	Pyroclastic Lamproite
B28-004	192	204	PL	Pyroclastic Lamproite
B28-004	204	216.16	TL	Transitional Textured Lamproite
B28-005	0.00	4.50	COLV	Colluvium
B28-005	4.5	11.2	SPLT	Saprolite
B28-005	11.2	13.5	SPRK	Saprock
B28-005	13.5	19.2	SPL	Southern Pyroclastic Lamproite
B28-005	19.2	28.15	SPL	Southern Pyroclastic Lamproite
B28-005	28.15	36.3	SPL	Southern Pyroclastic Lamproite
B28-005	36.3	52.95	SPL	Southern Pyroclastic Lamproite
B28-005	52.95	70.4	SPL	Southern Pyroclastic Lamproite
B28-005	70.4	75.6	SPL	Southern Pyroclastic Lamproite
B28-005	75.6	84.1	SPL	Southern Pyroclastic Lamproite
B28-005	84.1	91.3	SPL	Southern Pyroclastic Lamproite
B28-005	91.3	103.65	SPL	Southern Pyroclastic Lamproite
B28-005	103.65	121.2	SPL	Southern Pyroclastic Lamproite
B28-005	121.2	127.6	SPL	Southern Pyroclastic Lamproite
B28-005	127.6	164.4	SPL	Southern Pyroclastic Lamproite
B28-005	164.4	171.3	SPL	Southern Pyroclastic Lamproite
B28-005	171.3	184.9	SPL	Southern Pyroclastic Lamproite
B28-005	184.9	193	SPL	Southern Pyroclastic Lamproite
B28-005	193	194	SPL	Southern Pyroclastic Lamproite
B28-005	194	206.7	SPL	Southern Pyroclastic Lamproite
B28-005	206.7	211	McL	Magmaclastic Lamproite

B28-005	211	214.5	DLST	Dolostone
B28-005	214.5	219.7	DLST	Dolostone
B28-005	219.7	240.3	CB	Contact Breccia
B28-005	240.3	144.75	DLST	Dolostone
B28-005	244.75	250.7	SDBX	Sedimentary Breccia
B28-005	250.7	268.73	DLST	Dolostone
B28-006	0	2.3	COLV	Colluvium
B28-006	2.3	20.7	COLV	Colluvium
B28-006	20.7	21.7	SPRK	Saprock
B28-006	21.7	22.7	McL	Magmaclastic Lamproite
B28-006	22.7	45.1	McL	Magmaclastic Lamproite
B28-006	45.1	49.05	PL	Pyroclastic Lamproite
B28-006	49.05	49.25	SDST	Sandstone
B28-006	49.25	53	McL	Magmaclastic Lamproite
B28-006	53	54.85	McL	Magmaclastic Lamproite
B28-006	54.85	58.3	PL	Pyroclastic Lamproite
B28-006	58.3	64.6	PL	Pyroclastic Lamproite
B28-006	64.6	107.98	McL	Magmaclastic Lamproite
B28-006	107.98	108.45	McL	Magmaclastic Lamproite
B28-006	108.45	110.45	MgL	Magmatic Lamproite
B28-006	110.45	110.9	MgL	Magmatic Lamproite
B28-006	110.9	122	PL	Pyroclastic Lamproite
B28-006	122	123.2	PL	Pyroclastic Lamproite
B28-006	123.2	158.9	PL	Pyroclastic Lamproite
B28-006	158.9	166.15	QTZIT	Quartzite
B28-006	166.15	168.8	SDST	Sandstone
B28-006	168.8	189.6	TL	Transitional Textured Lamproite
B28-006	189.6	200.4	SDST	Sandstone
B28-006	200.4	201	MgL	Magmatic Lamproite
B28-006	201	221.8	SDST	Sandstone
B28-006	221.8	237	SDST	Sandstone
B28-006	237	255.6	SDST	Sandstone
B28-006	255.6	272.9	SHLE	Shale
B28-007	0	15	COLV	Colluvium
B28-007	15	60.01	SDST	Sandstone
B28-007	60.01	69.6	SHLE	Shale
B28-007	69.6	72.1	CNGL	Conglomerate
B28-007	72.1	72.6	CB	Contact Breccia
B28-007	72.6	82	PL	Pyroclastic Lamproite
B28-007	82	88.5	SDST	Sandstone
B28-007	88.5	101.85	PL	Pyroclastic Lamproite
B28-007	101.85	103.1	PL	Pyroclastic Lamproite
B28-007	103.1	111	PL	Pyroclastic Lamproite

B28-007	111	121	PL	Pyroclastic Lamproite
B28-007	121	122.8	PL	Pyroclastic Lamproite
B28-007	122.8	129.6	PL	Pyroclastic Lamproite
B28-007	129.6	130	SDST	Sandstone
B28-007	130	135.9	TL	Transitional Textured Lamproite
B28-007	135.9	143.5	QTZIT	Quartzite
B28-007	143.5	146.95	SDST	Sandstone
B28-007	146.95	170.5	SHLE	Shale
B28-008	0	20.15	COLV	Colluvium
B28-008	20.15	21.4	MgL	Magmatic Lamproite
B28-008	21.4	29.2	PL	Pyroclastic Lamproite
B28-008	29.2	54	PL	Pyroclastic Lamproite
B28-008	54	59.15	PL	Pyroclastic Lamproite
B28-008	59.15	66.2	PL	Pyroclastic Lamproite
B28-008	66.2	71.4	PL	Pyroclastic Lamproite
B28-008	71.4	77.05	PL	Pyroclastic Lamproite
B28-008	77.05	80.04	QTZIT	Quartzite
B28-008	80.04	89.4	CNGL	Conglomerate
B28-008	89.4	93.8	QTZIT	Quartzite
B28-008	93.8	101.4	QTZIT	Quartzite
B28-008	101.4	130	SHLE	Shale
B28-009	0	4.6	COLV	Colluvium
B28-009	4.6	7.15	PL	Pyroclastic Lamproite
B28-009	7.15	33.15	PL	Pyroclastic Lamproite
B28-009	33.15	69.3	PL	Pyroclastic Lamproite
B28-009	69.3	84.3	PL	Pyroclastic Lamproite
B28-009	84.3	119.3	PL	Pyroclastic Lamproite
B28-009	119.3	146.7	PL	Pyroclastic Lamproite
B28-009	146.7	167.5	PL	Pyroclastic Lamproite
B28-009	167.5	195.7	SDST	Sandstone
B28-009	195.7	212.45	SDST	Sandstone
B28-009	212.45	221.5	SHLE	Shale
B28-009	221.5	224.2	MgL	Magmatic Lamproite
B28-009	224.2	243.5	SHLE	Shale
B28-010	0	2.7	COLV	Colluvium
B28-010	2.7	11.7	SPRK	Sparock
B28-010	11.7	14.7	SPL	Southern Pyroclastic Lamproite
B28-010	14.7	95	SPL	Southern Pyroclastic Lamproite
B28-010	95	127	SPL	Southern Pyroclastic Lamproite
B28-010	127	152	SPL	Southern Pyroclastic Lamproite
B28-010	152	173.2	SPL	Southern Pyroclastic Lamproite
B28-010	173.2	178.95	SPL	Southern Pyroclastic Lamproite
B28-010	178.95	180.25	SPL	Southern Pyroclastic Lamproite

B28-010	181.9	219.6	SDST	Sandstone
B28-010	219.6	230.7	SHLE	Shale
B28-011	0	7	COLV	Colluvium
B28-011	7	16.6	CNGL	Conglomerate
B28-011	16.6	18.2	SDST	Sandstone
B28-011	18.2	22.3	SDST	Sandstone
B28-011	22.3	29.64	SDST	Sandstone
B28-011	29.64	31.8	SDST	Sandstone
B28-011	31.8	67.8	SDST	Sandstone
B28-011	67.8	79	CNGL	Conglomerate
B28-011	79	84.2	DLST	Dolostone
B28-011	84.2	152	SHLE	shale
B28-011	152	169.85	SHLE	shale
B28-011	169.85	175.4	DLST	Dolostone
B28-011	175.4	181.3	SHLE	shale
B28-011	181.3	187.8	QTZIT	Quartzite
B28-012	0	19.1	COLV	Colluvium
B28-012	19.1	21.9	SPRK	Saprock
B28-012	21.9	53.2	PL	Pyroclastic Lamproite
B28-012	53.2	76.95	PL	Pyroclastic Lamproite
B28-012	76.95	87.4	PL	Pyroclastic Lamproite
B28-012	87.4	93.73	DLST	Dolostone
B28-012	93.73	116	DLST	Dolostone
B28-012	116	140.8	SHLE	shale
B28-013	0	16.4	COLV	Colluvium
B28-013	16.4	31.95	SDST	Sandstone
B28-013	31.95	47.2	SDST	Sandstone
B28-013	47.2	54	SDST	Sandstone
B28-013	54	55.5	SDST	Sandstone
B28-013	55.5	60.9	SDBX	Sedimentary Breccia
B28-013	60.9	61.3	SDST	Sandstone
B28-013	61.3	102.15	VL	Volcaniclastic Lamproite
B28-013	102.15	156.3	VL	Volcaniclastic Lamproite
B28-013	156.3	157.8	VL	Volcaniclastic Lamproite
B28-013	157.8	204.5	VLB	Volcaniclastic Lamproite Breccia
B28-013	204.5	242.3	MgLB	Magmatic Lamproite Breccia
B28-013	242.3	259.78	CB	Contact Breccia
B28-013	259.78	300.3	SHLE	Shale
B28-014	0	16.62	COLV	Colluvium
B28-014	16.62	19.85	SPRK	Saprock
B28-014	19.85	35.1	PL	Pyroclastic Lamproite
B28-014	35.1	57.3	PL	Pyroclastic Lamproite
B28-014	57.3	134	PL	Pyroclastic Lamproite

B28-014	134	187	PL	Pyroclastic Lamproite
B28-014	187	212.6	SHLE	shale
B28-014	212.6	230	SHLE	shale
B28-015	0	12.8	COLV	Colluvium
B28-015	12.8	25.84	SDST	Sandstone
B28-015	25.84	56.26	SDST	Sandstone
B28-015	56.26	61.8	PL	Pyroclastic Lamproite
B28-015	61.8	83.75	PL	Pyroclastic Lamproite
B28-015	83.75	107.4	PL	Pyroclastic Lamproite
B28-015A	0	12.8	COLV	Colluvium
B28-015A	12.8	25.8	SDST	Sandstone
B28-015A	25.8	39.2	SDST	Sandstone
B28-015A	39.2	46.9	SDST	Sandstone
B28-015A	46.9	50.9	CNGL	Conglomerate
B28-015A	50.9	55.7	SHLE	Shale
B28-015A	55.7	58.37	PL	Pyroclastic Lamroite
B28-015A	58.37	101.77	PL	Pyroclastic Lamroite
B28-015A	101.77	110	PL	Pyroclastic Lamroite
B28-015A	110	113	SHLE	Shale
B28-015A	113	174.7	CB	Contact Breccia
B28-015A	174.7	190.4	SHLE	Shale
B28-015A	190.4	248.4	SHLE	Shale
B28-015A	248.4	270.43	COLV	Colluvium
B28-015A	270.43	309.9	SDST	Sandstone
B28-016	0	1.8	SDST	Sandstone
B28-016	1.8	4.9	SDST	Sandstone
B28-016	4.9	7.8	SDST	Sandstone
B28-016	7.8	17.6	SDST	Sandstone
B28-016	17.6	24.7	SDST	Sandstone
B28-016	24.7	30	SDST	Sandstone
B28-016	30	61.5	SDST	Sandstone
B28-016	61.5	84	CNGL	Conglomerate
B28-016	84	89.4	DLST	Dolostone
B28-016	89.4	112.44	SHLE	Shale
B28-016	112.44	119.1	Mcl	Magmaclastic Lamproite
B28-016	119.1	131.6	PL	Pyroclastic Lamroite
B28-016	131.6	184.93	PL	Pyroclastic Lamroite
B28-016	184.93	199	MgL	Magmatic Lamproite
B28-016	199	356	PL	Pyroclastic Lamroite
B28-016	356	377.5	PL	Pyroclastic Lamroite
B28-016	377.5	407.35	PL	Pyroclastic Lamroite
B28-016	407.35	524.7	PL	Pyroclastic Lamroite
B28-016	524.7	528.4	CB	Contact Breccia

B28-016	528.4	570.2	SHLE	Shale
B28-017	0	5.3	COLV	Colluvium
B28-017	5.3	94.65	PL	Pyroclastic Lamroite
B28-017	94.65	111.9	PL	Pyroclastic Lamroite
B28-017	111.9	149.4	PL	Pyroclastic Lamroite
B28-017	149.4	242.6	PL	Pyroclastic Lamroite
B28-017	242.6	301.2	PL	Pyroclastic Lamroite
B28-017	301.2	306.2	PL	Pyroclastic Lamroite
B28-017	306.2	317.46	PL	Pyroclastic Lamroite
B28-017	317.46	330.3	CB	Contact Breccia
B28-017	330.3	343.25	SHLE	Shale
B28-017	343.25	433.4	SHLE	Shale
B28-017	433.4	437.6	DLRT	Dolerite
B28-018	0	5.4	COLV	Colluvium
B28-018	5.4	20.78	CNGL	Conglomerate
B28-018	20.78	32.57	SDST	Sandstone
B28-018	32.57	35.4	SDST	Sandstone
B28-018	35.4	48.75	SDST	Sandstone
B28-018	48.75	71.3	SDST	Sandstone
B28-018	71.3	83.4	SDST	Sandstone
B28-018	83.4	91.95	CNGL	Conglomerate
B28-018	91.95	93.5	MgL	Magmatic Lamproite
B28-018	93.5	101.2	CNGL	Conglomerate
B28-018	101.2	105.9	QTZIT	Quartzite
B28-018	105.9	109.16	CNGL	Conglomerate
B28-018	109.16	120.26	SHLE	Shale
B28-018	120.26	121.6	CNGL	Conglomerate
B28-018	121.6	126.23	SLST	Siltstone
B28-018	126.23	127.5	SHLE	Shale
B28-018	127.5	147.19	CNGL	Conglomerate
B28-018	147.19	151.78	SHLE	Shale
B28-018	151.78	206.89	SHLE	Shale
B28-018	206.89	211.8	SDST	Sandstone
B28-018	211.8	212.24	SHLE	Shale
B28-018	212.24	213.9	SDST	Sandstone
B28-018	213.9	214.05	SPL	Southern Pyroclastic Lamproite
B28-018	214.05	219.18	SHLE	Shale
B28-018	219.18	257.06	SPL	Southern Pyroclastic Lamproite
B28-018	257.06	263	SHLE	Shale
B28-018	263	266.4	CB	Contact Breccia
B28-018	266.4	271.67	SHLE	Shale
B28-018	271.67	282.45	SPL	Southern Pyroclastic Lamproite
B28-018	282.45	284.56	SHLE	Shale

B28-018	284.56	288.55	CB	Contact Breccia
B28-018	288.55	290.13	SPL	Southern Pyroclastic Lamproite
B28-018	290.13	291	SDST	Sandstone
B28-018	291	315.95	SHLE	Shale
B28-018	315.95	366.27	SHLE	Shale
B28-018	366.27	374.54	SPL	Southern Pyroclastic Lamproite
B28-018	374.54	382.8	SPL	Southern Pyroclastic Lamproite
B28-018	382.8	387.6	SPL	Southern Pyroclastic Lamproite
B28-018	387.6	417	SPL	Southern Pyroclastic Lamproite
B28-018	417	436.7	SPL	Southern Pyroclastic Lamproite
B28-018	436.7	464.4	SPL	Southern Pyroclastic Lamproite
B28-018	464.4	483.84	SPL	Southern Pyroclastic Lamproite
B28-018	483.84	494.4	SPL	Southern Pyroclastic Lamproite
B28-018	494.4	517.5	SPL	Southern Pyroclastic Lamproite
B28-018	517.5	540.45	SPL	Southern Pyroclastic Lamproite
B28-018	540.45	550	SPL	Southern Pyroclastic Lamproite
B28-018	550	578.9	SPL	Southern Pyroclastic Lamproite
B28-018	578.9	581.4	SHLE	Shale
B28-018	581.4	589.95	SPL	Southern Pyroclastic Lamproite
B28-018	589.95	631.42	SPL	Southern Pyroclastic Lamproite
B28-018	631.42	635.4	SPL	Southern Pyroclastic Lamproite
B28-018	635.4	635.8	SHLE	Shale
B28-019	0	21.6	COLV	Colluvium
B28-019	21.6	29.1	SDST	Sandstone
B28-019	29.1	43.55	SDST	Sandstone
B28-019	43.55	62.8	SDST	Sandstone
B28-019	62.8	64.37	SDST	Sandstone
B28-019	64.37	70.2	CNGL	Conglomerate
B28-019	70.2	72.8	SDST	Sandstone
B28-019	72.8	74.7	PL	Pyroclastic Lamproite
B28-019	74.7	83.5	PL	Pyroclastic Lamproite
B28-019	83.5	93.18	PL	Pyroclastic Lamproite
B28-019	93.18	95.15	PL	Pyroclastic Lamproite
B28-019	95.15	123.5	MgL	Magmatic Lamproite
B28-019	123.5	131.48	PL	Pyroclastic Lamproite
B28-019	131.48	143.85	PL	Pyroclastic Lamproite
B28-019	143.85	146.65	PL	Pyroclastic Lamproite
B28-019	146.65	167.4	MgL	Magmatic Lamproite
B28-019	167.4	174.6	PL	Pyroclastic Lamproite
B28-019	174.6	187.01	PL	Pyroclastic Lamproite
B28-019	187.01	190.8	PL	Pyroclastic Lamproite
B28-019	190.8	194.5	QTZIT	Quartzite
B28-019	194.5	196.13	PL	Pyroclastic Lamproite

B28-019	196.13	201	PL	Pyroclastic Lamproite
B28-019	201	204.4	PL	Pyroclastic Lamproite
B28-019	204.4	227.8	QTZIT	Quartzite
B28-019	227.8	231.2	SHLE	Shale
B28-019	231.2	237.5	QTZIT	Quartzite
B28-019	237.5	246.13	SHLE	Shale
B28-019	246.13	248.32	MgL	Magmatic Lamproite
B28-019	248.32	251.4	PL	Pyroclastic Lamproite
B28-019	251.4	271.8	PL	Pyroclastic Lamproite
B28-019	271.8	279.7	PL	Pyroclastic Lamproite
B28-019	279.7	299.84	PL	Pyroclastic Lamproite
B28-019	299.84	302.2	PL	Pyroclastic Lamproite
B28-019	302.2	322.5	SHLE	Shale
B28-019	322.5	347.4	SHLE	Shale
B28-019	347.4	473.4	SHLE	Shale
B28-020	0	15	COLV	Colluvium
B28-020	15	48.5	SDST	Sandstone
B28-020	48.5	71.3	CNGL	Conglomerate
B28-020	71.3	245	PL	Pyroclastic Lamproite
B28-020	245	306	PL	Pyroclastic Lamproite
B28-020	306	308	MgL	Magmatic Lamproite
B28-020	308	315.8	CB	Contact Breccia
B28-020	315.8	322.8	SHLE	Shale
B28-020	322.8	330.4	SHLE	Shale
B28-020	330.4	335.3	SHLE	Shale
B28-020	335.3	356.4	SHLE	Shale
B28-021	0	15.3	COLV	Colluvium
B28-021	15.3	30.6	SDST	Sandstone
B28-021	30.6	40.35	SDST	Sandstone
B28-021	40.35	57	CNGL	Conglomerate
B28-021	57	62.5	SHLE	Shale
B28-021	62.5	74.8	SHLE	Shale
B28-021	74.8	85.73	SDST	Sandstone
B28-021	85.73	98.87	CNGL	Conglomerate
B28-021	98.87	106.8	QTZIT	Quartzite
B28-021	106.8	115.82	CNGL	Conglomerate
B28-021	115.82	147.4	DLST	Dolostone
B28-021	147.4	173.4	SHLE	Shale
B28-021	173.4	178.5	SPL	Southern Pyroclastic Lamproite
B28-021	178.5	180.9	MgL	Magmatic Lamproite
B28-021	180.9	186.4	CB	Contact Breccia
B28-021	186.4	219.8	SPL	Southern Pyroclastic Lamproite
B28-021	219.8	224	SPL	Southern Pyroclastic Lamproite

B28-021	224	238.76	SPL	Southern Pyroclastic Lamproite
B28-021	238.76	243.74	SPL	Southern Pyroclastic Lamproite
B28-021	243.74	256.07	SPL	Southern Pyroclastic Lamproite
B28-021	256.07	261.56	SPL	Southern Pyroclastic Lamproite
B28-021	261.56	271.53	SPL	Southern Pyroclastic Lamproite
B28-021	271.53	276.02	SPL	Southern Pyroclastic Lamproite
B28-021	276.02	288.49	SPL	Southern Pyroclastic Lamproite
B28-021	288.49	308.6	SPL	Southern Pyroclastic Lamproite
B28-021	308.6	317.6	SPL	Southern Pyroclastic Lamproite
B28-021	317.6	325	SPL	Southern Pyroclastic Lamproite
B28-021	325	340.37	SPL	Southern Pyroclastic Lamproite
B28-021	340.37	352.35	SPL	Southern Pyroclastic Lamproite
B28-021	352.35	402.9	SPL	Southern Pyroclastic Lamproite
B28-021	402.9	411.4	SPL	Southern Pyroclastic Lamproite
B28-021	411.4	457.46	PL	Pyroclastic Lamproite
B28-021	457.46	512.6	SHLE	Shale
B28LD001	0	4.1	COLV	Colluvium
B28LD001	4.1	7.4	SPLT	Saprolite
B28LD001	7.4	10.88	SPL	Southern Pyroclastic Lamproite
B28LD001	10.88	15	SPL	Southern Pyroclastic Lamproite
B28LD001	15	19.11	SPL	Southern Pyroclastic Lamproite
B28LD001	19.11	36.73	SPL	Southern Pyroclastic Lamproite
B28LD001	36.73	56.03	SPL	Southern Pyroclastic Lamproite
B28LD001	56.03	131	SPL	Southern Pyroclastic Lamproite
B28LD001	131	182.5	SPL	Magmatic Lamproite
B28LD001	182.5	200	CB	Contact Breccia
B28LD001	200	219	SDLT	Sandstone
B28LD001	219	227.43	SHLE	Shale
B28LD002	0	4	COLV	Colluvium
B28LD002	4	12.3	SPLT	Saprolite
B28LD002	12.3	21.1	SPL	Southern Pyroclastic Lamproite
B28LD002	21.1	32	SPL	Southern Pyroclastic Lamproite
B28LD002	32	45.1	SPL	Southern Pyroclastic Lamproite
B28LD002	45.1	141	SPL	Southern Pyroclastic Lamproite
B28LD002	141	155.3	SPL	Southern Pyroclastic Lamproite
B28LD002	155.3	204.24	SPL	Southern Pyroclastic Lamproite
B28LD002	204.24	205.75	CB	Contact Breccia
B28LD002	205.75	209.15	SHLE	Shale
B28LD002	209.15	-999	SHLE	Shale
B28LD002	213	236	SDBX	Sedimentary Breccia
B28LD002	236	243	SHLE	Shale
B28LD002	243	245	SPL	Southern Pyroclastic Lamproite
B28LD002	245	250.5	SHLE	Shale

B28LD003	0	3.4	COLV	Colluvium
B28LD003	3.4	15.5	SPRK	Saprock
B28LD003	15.5	16.5	SPRK	Saprock
B28LD003	16.5	33	SPL	Southern Pyroclastic Lamproite
B28LD003	33	86	SPL	Southern Pyroclastic Lamproite
B28LD003	86	164	SPL	Southern Pyroclastic Lamproite
B28LD003	164	188	SPL	Southern Pyroclastic Lamproite
B28LD003	188	202	SPL	Southern Pyroclastic Lamproite
B28LD003	202	219	SPL	Southern Pyroclastic Lamproite
B28LD003	218	239	SPL	Pyroclastic Lamproite
B28LD003	219	221	MgL	Magmatic Lamproite
B28LD003	239	255	SPL	Pyroclastic Lamproite
B28LD004	0	5.9	COLV	Colluvium
B28LD004	5.9	140.2	PL	Pyroclastic Lamproite
B28LD004	140.2	144	CB	Contact Breccia
B28LD004	144	147.4	SHLE	Shale
B28LD004	147.4	174.5	CB	Contact Breccia
B28LD004	174.5	185.4	MgL	Magmatic Lamproite
B28LD004	185.4	191.6	CB	Contact Breccia
B28LD004	191.6	201.5	SHLE	Shale
B28LD005	0	6	COLV	Colluvium
B28LD005	6	22.95	SPL	Southern Pyroclastic
B28LD005	22.95	39.44	SPL	Southern Pyroclastic
B28LD005	39.44	42.5	SPL	Southern Pyroclastic
B28LD005	42.5	47.1	SPL	Southern Pyroclastic
B28LD005	47.1	49.7	SPL	Southern Pyroclastic
B28LD005	49.7	59	SPL	Southern Pyroclastic
B28LD005	59	116	SPL	Southern Pyroclastic
B28LD005	116	121.74	SPL	Southern Pyroclastic
B28LD005	121.74	125.73	SPL	Southern Pyroclastic
B28LD005	125.73	131.18	MgL	Magmatic Lamproite
B28LD005	131.18	159.7	SPL	Pyroclastic Lamproite
B28LD005	157.7	169.09	SHLE	Shale
B28LD005	169.09	173.65	QTZIT	Quartzite
B28LD005	173.65	173.8	SHLE	Shale
B28LD006	0	10.35	COLV	Colluvium
B28LD006	10.35	16.8	CNGL	Conglomerate
B28LD006	16.8	18.2	PL	Pyroclastic Lamproite
B28LD006	18.2	70.53	PL	Pyroclastic Lamproite
B28LD006	70.53	71.33	MgL	Magmatic Lamproite
B28LD006	71.33	92	PL	Pyroclastic Lamproite
B28LD006	92	95.03	MgL	Magmatic Lamproite
B28LD006	95.03	248.6	PL	Pyroclastic Lamproite

Annexure-2
Details Of slim drill holes

Sr. No.	-1	-2	-3	-4	-5	-6	-7	8	9	10
	HOLE ID	Co-Ordinate	Co- Ordinate	Reduced Level m	DEPTH m	Inclination In degree	Thickness Colluvium m	Direction from North (Degrees)	Top Intersection Of Lamproite m	Bottom Intersection Of Lamproite m
		East-West	North- South							
NORTH ATRI										
1	B28-004	320322.1	261492	449.909	216.16	55	23.5	86	23.5	216.16
2	B28-006	326359.2	2691496.7	450.015	272.9	60	20.7	0	20.7	201
3	B28- 007	326459.3	2691527.8	449.143	170.5	60	15	90	72.6	135.9
4	B28-008	326315.3	2691390.7	449.716	130	60	20.15	270	20.15	77.05
5	B28-012	326324	2691522.8	449.761	140.8	60	19.1	300	19.1	87.4
6	B28-013	326529.8	2691605.9	449.251	300.3	55	16.4	204	61.3	242.3
7	B28-014	326376.9	2691460.7	449.706	230	80	16.62	148	16.62	187
8	B28-015	326501.9	2691381.1	449.423	107.4	54	12.8	270	56.26	107.4
9	B28-015A	326501.9	2691381.1	449.423	309.9	54	12.8	270	55.7	110
10	B28-019	326474.8	2691670.1	448.833	473.4	45	21.6	200	72.8	302.2
11	B28-020	326505.5	2691378.3	449.511	356.4	45	15	310	71.3	308
12	B28D3GT10	326573	2691237	452	300	50	6	360	-	-
13	B28FGT11	326167	2691517	440	300	50	16.6	140	196.5	250.6
SOUTH ATRI										
1	B28-001	326349.6	2691096.8	428.787	260.22	90	4.5	0	4.5	260.22
2	B28-002	326350.6	2691097.1	428.801	178.34	58	6.2	190	6.2	149.85
3	B28-003	326337.2	2691297.1	425.105	151.75	60	9.5	270	9.5	120.3
4	B28-005	326349.2	2691099.9	428.936	268.73	65	4.5	272	4.5	211
5	B28-009	326323.5	2691299.7	425.105	243.5	60	4.6	90	4.6	167.5
6	B28-010	326400.3	2691152.3	427.979	230.7	60	2.7	90	2.7	180.25
7	B28-011	326099.1	2691148.7	449.776	187.8	60	7	90	0	0

8	B28-016	326548.1	2691000.2	436.531	570.2	58	1.8	300	112.44	524.7
9	B28-017	326329.1	2691286.3	425.173	437.6	45	5.3	10	5.3	317.46
10	B28-018	326102.3	2691303.3	449.095	635.8	45	5.4	120	366.27	635.4
11	B28-021	326506.8	2691374.8	449.594	512.6	45	15.3	209	173.4	457.46
12	B28-022	326352.7	2690949.6	431.398	659.3	55	0	5	96.41	628.3
13	B28-023	326285	2691224	425	392.5	48	4.83	120	6.5	377.45
14	B28-024	326405	2691115	433	410.4	60	2.8	326.5	2.8	273.74
15	B28-025	326337	2691297	425	375.3	65	4	200	4.5	158.85
16	B28-026	326478	2691114	435	114	65	5.3	55	5.3	39
17	B28-027	326390	2691176	443	250	55	2	345	2	-
18	B28-028	326395	2691032	426	95.9	65	4.8	145	4.8	59.5
19	B28-029	326244	2691111	426	147	75	4.8	260	4.8	127.78
20	B28-030	326223	2691217	420	300	65	5.5	115	5.5	-
21	B28-031	326467	2691100	423	100	70	8.1	80	8.1	29.8
22	B28-032	326402	2691182	443	312	70	2.5	65	2.5	235.65
23	B28-033	326259	2691015	426	300.3	75	2.03	45	2.03	174.6
24	B28-034	326393	2691263	431	284.8	65	4.9	100	4.9	231.23
25	B28-035	326417	2691251	426	130	65	4.6	105	4.6	111.9
26	B28-036	326477	2691100	434	57.6	50	7.2	125	7.2	19.4
27	B28-037	326255	2691022	426	90	80	0.8	85	0.8	33.5
28	B28-038	326423	2691247	434	80.7	50	5.3	90	5.3	49.9
29	B28-039	326508	2691065	439	254.4	90	1.1	0	44.25	221.4
30	B28-040	326267	2691210	437	110.2	70	5	265	5	100.19
31	B28-041	326260	2691019	427	55.8	60	1	180	1	30.5
32	B28-042	326248	2691153	432	72	60	5.5	275	5.5	63.36
33	B28-043	326258	2691023	427	196	60	1.5	315	1.5	184.4
34	B28-044	326259	2691225	427	116	60	3.5	348.5	3.5	111
35	B28-045	326416	2691104	438	189	0	2.5	88.5	2.5	134.5
36	B28-046	326396	2691038	443	120	75	3	170	3	78.5
37	B28-047	326506	2691064	436	61.2	60	0.5	285	49.07	-
38	B28-048	326477	2691040	439	89.5	85	0.5	255	34.9	-
39	B28A2GT02	326334	2690936	426	215.7	60	1.1	145	-	-

40	B28C1GT03	326099	2691304	444	171.1	50	17.54	239	-	-
41	B28B2GT04	326100	2690999	448	145.05	50	21.17	280.5	-	-
42	B28A1GT05	326334	2690936	423	230.27	66	53.9	1	-	-
43	B28D1GT06	326557	2691238	449	288.3	50	4.97	132	-	-
44	B28E1GT07	326550	2690999	430	317.6	70	1	322	194.8	317.6
45	B28B1GT12	326100	2690999	448	302	55	21.35	88	230.4	239
46	B28D2GT08	326557	2691237	450	300	59	6.3	227	176.3	300
47	B28E2GT09	326553	2691002	430	255	50	6	69	-	-

Annexure-3
Details Of Large Dia (203mm) Drilled Holes

Sr. No.	-1	-2	-3	-4	-5	-6	-7	-8	-9
	HOLE ID	Co-Ordinate	Co-Ordinate	Reduced Level m	DEPTH m	Inclination In degree	Thickness Colluvium m	Top Intersection Of Lamproite m	Bottom Intersection Of Lamproite m
		East-West	North-South						
NORTH ATRI									
1	B28LD004	326332	2691293.1	425.105	201.5	90	5.9	5.9	104.2
2	B28LD006	326357.8	2691496.5	450.044	249.34	90	10.35	16.8	249.34
3	B28LD007	326402	2691314.9	425.565	143.8	90	2.5	2.5	111.7
4	B28LD009	326371.6	2691460.4	449.741	228.54	90	12	19.4	215
SOUTH ATRI									
1	B28LD001	326261.3	2691073	423.669	227.43	90	4.1	4.1	182.5
2	B28LD002	326296.7	2691157	425.205	250.5	90	4	4	204.24
3	B28LD003	326413	2691097.8	430.477	255.6	90	3.4	3.4	255.6
4	B28LD005	326265.1	2691209.5	425.356	173.8	90	6	6	159.7
5	B28LD008	326353.1	2691099.7	429.081	350	90	2.6	2.6	259.5
6	B28LD010	326382.6	2691066.2	430.07	260.2	90	2.7	2.7	260.2
7	B28LD012	326369	2691188.6	426.746	251.6	90	4.5	4.5	251.6
8	B28LD015	326333	2691101	429	350	90	-	0	350
9	B28LD016	326368	2691268	424	196.2	90	-	0	196.2
10	B28LD017	326240	2691151	424	196.44	90	-	0	196.44
11	B28LD018	326340	2691177	427	349.95	90	-	0	349.95
12	B28LD019	326411	2691115	430.477	352.6	90	-	0	352.6
13	B28LD020	326239	2691068	431	135.3	90	4.5	4.5	-
14	B28LD021	326416	2691237	432	211.8	90	1.85	1.85	197
15	B28LD022	326237	2691113	430	53.3	90	4.8	4.8	-

16	B28LD023	326467	2691100	435	213.9	90	6	6	-
17	B28LD024	326400	2691204	425	156.1	90	3	3	-
18	B28LD027	326404	2691033	434	246.1	90	4.5	4.5	-
19	B28LD028	236335	2691038	424	150.8	90	3.1	3.1	131.5

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Annexure-4
Details of PQ > (small dia) Borlholes

Sr. No.	-1	-2	-3	-4	-5	-6	-7	-8	-9
	HOLE ID	Co-Ordinate	Co-Ordinate	Reduced Level m	DEPTH m	Inclimation In degree	Thickness Colluvium m	Top Intersection Of Lamproite m	Bottom Intersection Of Lamproite m
		East-West	North-South						
NORTH ATRI									
1	B28PQ001	326324	2691109	429	334.9	90	4.17	4.17	-
SOUTH ATRI									
1	B28PQ002	326319	2691280	425	165.5	90	2.5	2.5	133
2	B28PQ003	326394	2691257	425	249.3	90	2.8	2.8	8
3	B28PQ004	326350	2691206	426.7	350.1	90	4.54	4.54	350.1
4	B28PQ005	326285	2691224	425.3	206.4	90	4.9	4.9	206.4
5	B28PQ006	326255	2691174	424	206.1	90	5.9	5.9	164.2
6	B28PQ007	326360	2691076	430	359.7	90	5.7	5.7	359.7
7	B28PQ008	326249	2691224	425.356	185	90	6	6	143.6
8	B28PQ009	326373	2691197	426.75	338.9	67	-	-	-
9	B28PQ010	326345	2691213	430.5	374.6	60	-	-	-
10	B28PQ011	326413	2691097	430.7	426	75	-	-	-
11	B28PQ012	326412	2691103	430	414	70	1.9	1.9	262.85

Annexure-5
Details of Shallow Pits for Bulk Sampling

Sr. No.	Pit No.	Easting	Northing	RL	Maximum Depth of Trench (m)	Length (m)	Excavation Width (m)	Depth From (m)	Depth to (m)	Interval (m)	Rock type	Vol. as per the pit (m³) dimension	Vol. mentioned (m³) (per bucket calculation)	Weight (Kg)
1.	Pit 1A	326235	2691281	421	6.0	10.0	3.8	1.2	6.0	4.8	Lampoite	182.40	203.00	406000
2.	Pit	326	2691191	425	5.7	7.0	2.0	3.0	4.4	1.4	Overburden	19.60	-	20060
3.	Pit	326	2691191	425	5.7	7.0	2.0	4.4	5.7	1.3	Weathered Lampoite	18.20	-	24000
4.	Pit	326	2692485	421	5.7	7.6	3.3	0	5.7	5.7	Lampoite	142.96	196.50	393000
5.	Pit	326	2691279	421	7.3	9.0	4.4	1.9	7.3	5.4	Lampoite	213.84	301.00	602000
6.	Pit	326	2691280	421	6.75	8.0	4.99	1.2	6.75	5.55	Lampoite	221.56	208.00	416000
7.	Pit	326	2691279	421	6.6	7.0	5.6	1.1	6.6	5.5	Lampoite	215.60	194.00	388000
8.	Pit	326	2691117	431	5.9	14.9	2.3	0.3	1.97	1.67	Overburden	57.23	-	96629
9.	Pit	326	2691117	431	5.9	14.9	2.3	1.97	5.12	3.15	Weathered Lampoite	107.95	-	162636
10.	Pit	326	2690990	424	5.0	17.3	2.1	0.3	0.6	0.3	Overburden	10.90	-	27752
11.	Pit	326	2690990	424	5.0	17.3	2.1	0.6	2.51	1.91	Weathered Lampoite	69.39	-	79074
12.	Pit	326	2690990	424	5.0	17.3	2.1	2.51	4.94	2.43	Lampoite	88.28	-	269699
13.	Pit	326	2691023	424	6.0	8.5	4.0	0.3	1.4	1.1	Overburden	37.40	385	114000
14.	Pit	326	2691023	424	6.0	8.5	4.0	1.4	1.7	0.3	Weathered Lampoite	10.20	385	164000
15.	Pit	326	2691023	424	6.0	8.5	4.0	1.7	6.0	4.3	Lampoite	146.20	385	438000

Annexure-6 (Table 1: Bulk sample Recoveries)

Sample No.	Percentage Recovery (counts)			Percentage Recovery (carats)		
	Primary	Recrush	-2mm_CF	Primary	Recrush	-2mm_CF
6641942	90%	10%	0%	92%	8%	0%
6641931	83%	17%	0%	93%	7%	0%
6641932	91%	9%	0%	98%	200%	0%
6641946	90%	10%	0%	94%	6%	0%
6641943	91%	9%	0%	94%	6%	0%
6641944	73%	28%	0%	78%	22%	0%
6641945	96%	4%	0%	97%	3%	0%
6641925	94%	6%	0%	92%	8%	0%
6641927	58%	42%	0%	84%	16%	0%
6641929	93%	7%	0%	96%	4%	0%
6672009	97%	3%	0%	96%	4%	0%
6672005	100%	0%	0%	100%	0%	0%
6641910	100%	0%	0%	100%	0%	0%
6672006	100%	0%	0%	100%	0%	0%
6641911	87%	13%	0%	98%	2%	0%
6672007	100%	0%	0%	100%	0%	0%
6641912	35%	7%	57%	75%	6%	19%
6641947	99%	1%	0%	100%	0%	0%
6641984	88%	12%	0%	93%	7%	0%
6641949	100%	0%	0%	100%	0%	0%
6641959	97%	3%	0%	99%	1%	0%
6641956	98%	2%	0%	100%	0%	0%
6641950	80%	20%	0%	87%	13%	0%
6641953	98%	2%	0%	100%	0%	0%
6672008	87%	13%	0%	89%	11%	0%
6641961	69%	31%	0%	76%	24%	0%
6641958	74%	26%	0%	83%	17%	0%
6641952	76%	24%	0%	81%	19%	0%
6641955	65%	35%	0%	76%	24%	0%

Table2: LDC Sample Recoveries

Hole No	Sample ID	Percentage Recovery (counts)		-2mm_CF	Percentage Recovery (counts)		
		Primary	Recrush		Primary	Recrush	-2mm_CF
B28LD001	6666302	75%	0%	25%	95%	0%	5%
B28LD001	6666303	3%	9%	88%	39%	46%	15%
B28LD001	6666304	13%	0%	88%	19%	0%	81%
B28LD001	6666305	0%	38%	63%	0%	54%	46%
B28LD001	6666306	8%	15%	77%	62%	12%	26%
B28LD001	6666307	25%	75%	0%	85%	15%	0%
B28LD001	6666308	13%	50%	38%	13%	70%	18%
B28LD001	6666309	10%	30%	60%	11%	53%	36%
B28LD001	6666310	0%	60%	40%	0%	72%	28%
B28LD001	6666311	43%	57%	0%	67%	33%	0%
B28LD001	6666312	20%	60%	20%	14%	86%	0%
B28LD001	6666313	0%	0%	100%	0%	0%	100%
B28LD001	6666314	4%	2%	93%	59%	32%	9%
B28LD001	6666315	33%	33%	33%	39%	55%	6%
B28LD001	6666316	67%	33%	0%	33%	67%	0%
B28LD001	6666317	0%	0%	100%	0%	0%	100%
B28LD001	6666318	11%	11%	78%	90%	4%	6%
B28LD001	6666319	67%	0%	33%	87%	0%	13%
B28LD002	6666320	50%	0%	50%	82%	0%	18%
B28LD002	6666321	20%	40%	40%	53%	43%	4%
B28LD002	6666322	100%	0%	0%	100%	0%	0%
B28LD002	6666323	0%	86%	14%	0%	94%	6%
B28LD002	6666324	25%	75%	0%	18%	82%	0%
B28LD002	6666325	67%	33%	0%	70%	30%	0%
B28LD002	6666326	22%	78%	0%	31%	69%	0%
B28LD002	6666327	60%	20%	20%	91%	6%	3%
B28LD002	6666328	0%	100%	0%	0%	100%	0%
B28LD002	6666329	23%	46%	31%	37%	60%	3%
B28LD002	6666330	38%	38%	25%	52%	39%	9%
B28LD002	6666331	43%	29%	29%	63%	32%	5%
B28LD002	6666332	31%	46%	23%	40%	60%	0%
B28LD002	6666333	35%	30%	35%	82%	16%	2%
B28LD002	6666334	0%	20%	80%	0%	26%	74%
B28LD002	6666335	22%	44%	33%	41%	38%	21%
B28LD002	6666336	14%	43%	43%	20%	76%	4%
B28LD002	6666337	67%	22%	11%	94%	2%	4%
B28LD002	6666338	20%	20%	60%	84%	5%	11%
B28LD002	6666339	50%	50%	0%	91%	9%	0%
B28LD003	6666340	0%	0%	100%	0%	0%	100%

B28LD003	6666341	13%	13%	75%	36%	18%	46%
B28LD003	6666342	29%	0%	71%	51%	0%	49%
B28LD003	6666354	0%	38%	63%	0%	66%	34%
B28LD003	6666355	0%	11%	89%	0%	32%	68%
B28LD003	6666356	0%	0%	100%	0%	0%	100%
B28LD003	6666357	33%	0%	67%	94%	0%	6%
B28LD003	6666358	17%	0%	83%	84%	0%	16%
B28LD003	6666359	0%	0%	100%	0%	0%	100%
B28LD003	6666360	20%	0%	80%	67%	0%	33%
B28LD003	6666361	9%	0%	91%	39%	0%	61%
B28LD003	6666362	18%	0%	82%	59%	0%	41%
B28LD003	6666363	0%	10%	90%	0%	68%	32%
B28LD003	6666364	0%	11%	89%	0%	54%	46%
B28LD003	6666365	10%	10%	80%	26%	52%	22%
B28LD003	6666366	10%	20%	70%	22%	56%	22%
B28LD003	6666367	0%	0%	100%	0%	0%	100%
B28LD003	6666368	27%	0%	73%	71%	0%	29%
B28LD003	6666369	33%	11%	56%	73%	16%	11%
B28LD003	6666370	17%	8%	75%	76%	9%	15%
B28LD003	6666371	10%	0%	90%	22%	0%	74%
B28LD003	6666372	0%	0%	100%	0%	0%	100%
B28LD003	6666373	0%	20%	80%	0%	64%	36%
B28LD003	6666374	13%	6%	81%	65%	13%	23%
B28LD003	6666375	0%	6%	94%	0%	35%	65%
B28LD003	6666376	10%	0%	90%	36%	0%	64%
B28LD004	6671602	-	-	-	-	-	-
B28LD004	6671603	0%	0%	100%	0%	0%	100%
B28LD004	6671604	0%	0%	100%	0%	0%	100%
B28LD004	6671605	0%	0%	100%	0%	0%	100%
B28LD004	6671606	0%	0%	100%	0%	0%	100%
B28LD004	6671607	0%	0%	100%	0%	0%	100%
B28LD004	6671608	0%	0%	100%	0%	0%	100%
B28LD004	6671609	0%	0%	100%	0%	0%	100%
B28LD004	6671610	100%	0%	0%	100%	0%	0%
B28LD004	6671611	0%	0%	100%	0%	0%	100%
B28LD004	6671612	17%	33%	50%	56%	33%	12%
B28LD004	6671613	0%	0%	100%	0%	0%	100%
B28LD004	6671614	0%	0%	100%	0%	0%	100%
B28LD004	6671615	33%	0%	67%	74%	0%	26%
B28LD005	6666378	8%	23%	69%	11%	62%	27%
B28LD005	6666379	5%	0%	95%	68%	0%	32%
B28LD005	6666380	0%	0%	100%	0%	0%	100%

B28LD005	6666381	8%	8%	85%	11%	72%	16%
B28LD005	6666382	0%	0%	100%	0%	0%	100%
B28LD005	6666383	0%	2%	98%	0%	27%	73%
B28LD005	6666384	0%	0%	100%	0%	0%	100%
B28LD005	6666385	8%	8%	83%	28%	25%	46%
B28LD005	6666386	17%	0%	83%	50%	0%	50%
B28LD005	6666387	6%	3%	91%	31%	2%	67%
B28LD005	6666388	4%	2%	94%	22%	12%	66%
B28LD005	6666389	0%	8%	92%	0%	27%	73%
B28LD005	6666390	8%	17%	75%	27%	48%	24%
B28LD005	6666391	17%	17%	67%	64%	25%	11%
B28LD005	6666392	14%	0%	86%	52%	0%	48%
B28LD005	6666393	0%	13%	88%	0%	30%	70%
B28LD006	6666397	0%	0%	100%	0%	0%	100%
B28LD006	6666398	-	-	-	-	-	-
B28LD006	6666399	0%	0%	100%	0%	0%	100%
B28LD006	6666400	33%	33%	33%	60%	40%	0%
B28LD006	6671801	67%	0%	33%	97%	0%	3%
B28LD006	6671802	-	-	-	-	-	-
B28LD006	6671803	0%	20%	80%	0%	74%	26%
B28LD006	6671804	0%	0%	100%	0%	0%	100%
B28LD006	6671805	20%	0%	80%	63%	0%	37%
B28LD006	6671806	0%	0%	100%	0%	0%	100%
B28LD006	6672807	0%	0%	100%	0%	0%	100%
B28LD006	6672808	-	-	-	-	-	-
B28LD006	6672809	-	-	-	-	-	-
B28LD006	6672810	0%	0%	100%	0%	0%	100%
B28LD006	6672811	0%	0%	100%	0%	0%	100%
B28LD006	6672812	0%	0%	100%	0%	0%	100%
B28LD006	6672813	0%	0%	100%	0%	0%	100%
B28LD006	6672814	0%	0%	100%	0%	0%	100%
B28LD006	6672815	0%	0%	100%	0%	0%	100%
B28LD006	6672816	-	-	-	-	-	-
B28LD006	6672817	0%	0%	100%	0%	0%	100%
B28LD006	6672818	0%	0%	100%	0%	0%	100%
B28LD006	6671819	50%	0%	50%	55%	0%	45%
B28LD007	6671622	10%	20%	70%	28%	30%	42%
B28LD007	6671623						
B28LD007	6671624	0%	100%	0%	0%	100%	0%
B28LD007	6671625	0%	0%	100%	0%	0%	100%
B28LD007	6671626	0%	0%	100%	0%	0%	100%
B28LD007	6671627	0%	0%	100%	0%	0%	100%
B28LD007	6671628	0%	0%	100%	0%	0%	100%

B28LD007	6671629	0%	0%	100%	0%	0%	100%
B28LD007	6671630	0%	0%	100%	0%	0%	100%
B28LD007	6671631	0%	0%	100%	0%	0%	100%
B28LD007	6671632	0%	0%	100%	0%	0%	100%
B28LD007	6671633	0%	0%	100%	0%	0%	100%
B28LD008	6671638	20%	0%	80%	65%	0%	35%
B28LD008	6671639	18%	9%	73%	82%	9%	9%
B28LD008	6671640	0%	0%	100%	0%	0%	100%
B28LD008	6671641	0%	0%	100%	0%	0%	100%
B28LD008	6671642	8%	0%	92%	32%	0%	68%
B28LD008	6671643	0%	18%	82%	0%	85%	15%
B28LD008	6671644	0%	8%	92%	0%	36%	64%
B28LD008	6671645	0%	0%	100%	0%	0%	100%
B28LD008	6671646	50%	0%	50%	78%	0%	22%
B28LD008	6671647	29%	0%	71%	75%	0%	25%
B28LD008	6671648	0%	0%	100%	0%	0%	100%
B28LD008	6671649	6%	18%	76%	15%	52%	33%
B28LD008	6671650	2%	2%	97%	15%	23%	62%
B28LD008	6671651	20%	10%	70%	49%	15%	37%
B28LD008	6671652	12%	6%	82%	24%	59%	16%
B28LD008	6671653	23%	0%	77%	68%	0%	32%
B28LD008	6671654	14%	0%	86%	44%	0%	56%
B28LD008	6671655	14%	0%	86%	71%	0%	29%
B28LD008	6671656	0%	23%	77%	0%	72%	28%
B28LD008	6671657	0%	0%	100%	0%	0%	100%
B28LD008	6671658	5%	5%	89%	26%	34%	40%
B28LD008	6671659	20%	0%	80%	92%	0%	8%
B28LD008	6671660	0%	0%	100%	0%	0%	100%
B28LD008	6671661	11%	8%	81%	42%	30%	28%
B28LD008	6671662	20%	0%	80%	77%	0%	23%
B28LD009	6671823	0%	0%	100%	0%	0%	100%
B28LD009	6671824	0%	50%	50%	0%	88%	12%
B28LD009	6671825	0%	0%	100%	-	-	-
B28LD009	6671826	-	-	-	-	-	-
B28LD009	6671827	0%	0%	100%	0%	0%	100%
B28LD009	6671828	0%	0%	100%	0%	0%	100%
B28LD009	6671829	50%	0%	50%	88%	0%	12%
B28LD009	6671830	0%	0%	100%	0%	0%	100%
B28LD009	6671831	0%	0%	100%	-	-	-
B28LD009	6671832	0%	0%	100%	0%	0%	100%
B28LD009	6671833	0%	0%	100%	0%	0%	100%
B28LD009	6671834	0%	0%	100%	0%	0%	100%
B28LD009	6671835	0%	0%	100%	0%	0%	100%

B28LD009	6671836	0%	0%	100%	0%	0%	100%
B28LD009	6671837	0%	0%	100%	0%	0%	100%
B28LD009	6671838	-	-	-	-	-	-
B28LD009	6671839	-	-	-	-	-	-
B28LD009	6671840	-	-	-	-	-	-
B28LD009	6671841	0%	0%	100%	0%	0%	100%
B28LD009	6671842	0%	0%	100%	0%	0%	100%
B28LD010	6671664	50%	0%	50%	95%	0%	5%
B28LD010	6671665	0%	7%	93%	0%	69%	31%
B28LD010	6671666	29%	0%	71%	48%	0%	52%
B28LD010	6671667	10%	10%	80%	18%	56%	26%
B28LD010	6671668	0%	4%	96%	0%	50%	50%
B28LD010	6671669	3%	0%	97%	96%	0%	4%
B28LD010	6671670	11%	0%	89%	83%	0%	17%
B28LD010	6671671	10%	15%	75%	63%	21%	17%
B28LD010	6671672	0%	15%	85%	0%	87%	13%
B28LD010	6671673	9%	0%	91%	48%	0%	52%
B28LD010	6671674	0%	20%	80%	0%	60%	40%
B28LD010	6671675	0%	0%	100%	0%	0%	100%
B28LD010	6671676	2%	2%	95%	31%	18%	51%
B28LD010	6671677	25%	0%	75%	62%	0%	38%
B28LD010	6671678	0%	0%	100%	0%	0%	100%
B28LD010	6671679	0%	0%	100%	0%	0%	100%
B28LD010	6671680	0%	0%	100%	0%	0%	100%
B28LD010	6671681	27%	0%	73%	71%	0%	29%
B28LD010	6671682	0%	0%	100%	0%	0%	100%
B28LD010	6671683	14%	0%	86%	66%	0%	34%
B28LD010	6671684	22%	0%	78%	81%	0%	19%
B28LD010	6671685	2%	0%	98%	75%	0%	25%
B28LD010	6671686	20%	0%	80%	71%	0%	29%
B28LD010	6671687	3%	0%	97%	38%	0%	62%
B28LD010	6671688	0%	0%	100%	0%	0%	100%
B28LD010	6671689	40%	0%	60%	93%	0%	7%

		%age Recovery (counts)			%age Recovery (Carats)		
Hole No	Sample ID	Primary	Recrush	-2mm_CF	Primary	Recrush	-2mm_CF
B28LD012	6671844	0%	0%	100%	0%	0%	100%
B28LD012	6671845	0%	14%	86%	0%	63%	37%
B28LD012	6671846	0%	0%	100%	0%	0%	100%
B28LD012	6671847	10%	0%	90%	43%	0%	57%
B28LD012	6671848	0%	0%	100%	0%	0%	100%
B28LD012	6671849	10%	10%	80%	78%	17%	5%
B28LD012	6671851	0%	0%	100%	0%	0%	100%
B28LD012	6671852	0%	0%	100%	0%	0%	100%
B28LD012	6671853	0%	13%	88%	0%	62%	38%
B28LD012	6671854	0%	0%	100%	0%	0%	100%
B28LD012	6671855	0%	6%	94%	0%	36%	54%
B28LD012	6671856	22%	11%	67%	50%	44%	6%
B28LD012	6671857	20%	20%	60%	48%	37%	15%
B28LD012	6671858	0%	0%	100%	0%	0%	100%
B28LD012	6671859	6%	6%	88%	20%	45%	34%
B28LD012	6671860	0%	20%	80%	0%	50%	50%
B28LD012	6671861	17%	4%	79%	60%	18%	22%
B28LD012	6671862	16%	6%	77%	60%	26%	13%
B28LD012	6671863	11%	5%	84%	63%	21%	17%
B28LD012	6671864	14%	0%	86%	47%	0%	53%
B28LD012	6671865	0%	15%	85%	0%	63%	37%
B28LD012	6671866	3%	9%	88%	21%	52%	27%
B28LD012	6671867	0%	4%	96%	0%	48%	52%
B28LD012	6671868	13%	0%	88%	80%	0%	20%
B28LD012	6671869	0%	0%	100%	0%	0%	100%
B28LD015	6672701	59%	6%	35%	76%	3%	21%
B28LD015	6672702	29%	14%	57%	30%	35%	35%
B28LD015	6672703	0%	0%	100%	0%	0%	100%
B28LD015	6672704	18%	27%	55%	26%	41%	33%
B28LD015	6672705	33%	0%	67%	74%	0%	26%
B28LD015	6672706	0%	50%	50%	0%	84%	16%
B28LD015	6672707	17%	33%	50%	35%	25%	42%
B28LD015	6672708	14%	14%	71%	27%	20%	53%
B28LD015	6672709	50%	25%	25%	67%	30%	3%
B28LD015	6672710	18%	45%	36%	46%	48%	5%
B28LD015	6672711	20%	60%	20%	31%	61%	8%
B28LD015	6672712	75%	25%	0%	95%	5%	0%
B28LD015	6672713	33%	35%	35%	23%	57%	20%

B28LD015	6672714	29%	0%	71%	91%	0%	9%
B28LD015	6672715	40%	40%	20%	58%	34%	9%
B28LD015	6672716	67%	17%	17%	55%	10%	5%
B28LD015	6672717	45%	27%	27%	56%	11%	3%
B28LD015	6672718	27%	36%	36%	91%	6%	4%
B28LD015	6672719	11%	44%	44%	1%	93%	5%
B28LD015	6672720	12%	35%	53%	39%	36%	25%
B28LD015	6672721	11%	44%	44%	6%	80%	14%
B28LD015	6672722	33%	0%	67%	42%	0%	58%
B28LD015	6672723	20%	80%	0%	10%	90%	0%
B28LD015	6672724	40%	0%	60%	70%	0%	30%
B28LD015	6672725	29%	14%	57%	89%	6%	6%
B28LD015	6672726	0%	0%	100%	0%	0%	100%
B28LD016	6672727	-	-	-	-	-	-
B28LD016	6672728	50%	0%	50%	42%	0%	58%
B28LD016	6672729	0%	0%	100%	0%	0%	100%
B28LD016	6672730	100%	0%	0%	100%	0%	0%
B28LD016	6672731	0%	33%	67%	0%	32%	68%
B28LD016	6672732	0%	100%	0%	0%	100%	0%
B28LD016	6672733	0%	0%	100%	0%	0%	100%
B28LD016	6672734	0%	0%	100%	0%	0%	100%
B28LD016	6672735	0%	100%	0%	0%	100%	0%
B28LD016	6672736	0%	67%	33%	0%	84%	16%
B28LD016	6672737	0%	33%	67%	0%	57%	43%
B28LD016	6672738	0%	33%	67%	0%	52%	48%
B28LD016	6672739	0%	0%	100%	0%	0%	100%
B28LD016	6672740	50%	0%	50%	98%	0%	2%
B28LD016	6672741	0%	0%	100%	0%	0%	100%
B28LD016	6672742	0%	0%	100%	0%	0%	100%
B28LD016	6672743	50%	0%	50%	73%	0%	27%
B28LD016	6672744	0%	0%	100%	0%	0%	100%
B28LD016	6672745	100%	0%	0%	100%	0%	0%
B28LD017	6672747	25%	50%	25%	17%	70%	13%
B28LD017	6672748	30%	0%	70%	61%	0%	39%
B28LD017	6672749	17%	0%	83%	75%	0%	25%
B28LD017	6672750	25%	50%	25%	26%	53%	21%
B28LD017	6672751	17%	17%	67%	9%	18%	73%
B28LD017	6672752	33%	33%	33%	51%	13%	36%
B28LD017	6672753	0%	40%	60%	0%	55%	45%
B28LD017	6672754	75%	0%	25%	97%	0%	13%
B28LD017	6672755	13%	50%	38%	26%	66%	8%
B28LD017	6672756	80%	0%	20%	97%	0%	3%
B28LD017	6672757	33%	11%	56%	34%	12%	54%

B28LD017	6672758	36%	0%	64%	40%	0%	60%
B28LD017	6672759	0%	40%	60%	0%	68%	32%
B28LD017	6672760	50%	25%	25%	38%	59%	3%
B28LD017	6672761	0%	0%	100%	0%	0%	100%
B28LD017	6672762	0%	0%	100%	0%	0%	100%
B28LD017	6672763	100%	0%	0%	100%	0%	0%
B28LD017	6672764	25%	0%	75%	69%	0%	31%
B28LD018	6672766	-	-	-	-	-	-
B28LD018	6672767	36%	0%	64%	62%	0%	38%
B28LD018	6672768	0%	0%	100%	0%	0%	100%
B28LD018	6672769	-	-	-	-	-	-
B28LD018	6672770	100%	0%	0%	100%	0%	0%
B28LD018	6672771	25%	0%	75%	84%	0%	16%
B28LD018	6672772	13%	38%	50%	28%	47%	26%
B28LD018	6672773	6%	13%	81%	6%	44%	49%
B28LD018	6672774	33%	0%	67%	33%	0%	57%
B28LD018	6672775	33%	0%	67%	56%	0%	44%
B28LD018	6672776	0%	0%	100%	0%	0%	100%
B28LD018	6672777	20%	20%	60%	38%	19%	43%
B28LD018	6672778	25%	25%	50%	30%	56%	14%
B28LD018	6672779	0%	0%	100%	0%	0%	100%
B28LD018	6672780	0%	20%	80%	0%	49%	51%
B28LD018	6672781	33%	0%	67%	85%	0%	15%
B28LD018	6672782	50%	17%	33%	42%	50%	9%
B28LD018	6672783	50%	17%	33%	73%	17%	9%
B28LD018	6672784	40%	0%	60%	95%	0%	5%
B28LD018	6672785	0%	67%	33%	0%	94%	6%
B28LD018	6672786	18%	12%	71%	27%	46%	27%
B28LD018	6672787	14%	29%	57%	40%	34%	26%
B28LD018	6672788	64%	0%	36%	93%	0%	7%
B28LD018	6672789	11%	22%	67%	18%	46%	36%
B28LD018	6672790	22%	11%	67%	72%	16%	12%
B28LD019	10112402	60%	20%	20%	92%	6%	2%
B28LD019	10112403	0%	43%	57%	0%	57%	43%
B28LD019	10112404	33%	33%	33%	89%	5%	6%
B28LD019	10112405	17%	25%	58%	37%	43%	21%
B28LD019	10112406	25%	50%	25%	43%	47%	10%
B28LD019	10112407	25%	0%	75%	96%	0%	4%
B28LD019	10112408	0%	20%	60%	44%	25%	31%
B28LD019	10112409	33%	33%	33%	57%	24%	19%
B28LD019	10112410	10%	10%	80%	59%	8%	33%
B28LD019	10112411	25%	0%	75%	26%	0%	74%
B28LD019	10112412	57%	0%	43%	94%	0%	6%

B28LD019	10112413	14%	14%	71%	49%	39%	12%
B28LD019	10112414	20%	20%	60%	28%	29%	43%
B28LD019	10112415	17%	17%	67%	52%	15%	33%
B28LD019	10112416	33%	33%	33%	35%	57%	8%
B28LD019	10112417	0%	44%	56%	0%	36%	64%
B28LD019	10112418	33%	33%	33%	79%	14%	7%
B28LD019	10112419	20%	0%	80%	67%	0%	33%
B28LD019	10112420	0%	10%	90%	0%	53%	47%
B28LD019	10112421	0%	0%	100%	0%	0%	100%
B28LD019	10112422	31%	19%	50%	62%	19%	19%
B28LD019	10112423	17%	25%	58%	18%	43%	39%
B28LD019	10112424	14%	43%	43%	13%	84%	3%
B28LD019	10112425	0%	47%	53%	0%	86%	14%
B28LD019	10112426	43%	14%	43%	69%	16%	15%
B28LD019	10112427	33%	0%	67%	72%	0%	28%
B28LD019	10112428	0%	57%	43%	0%	77%	23%
B28LD019	10112429	29%	29%	43%	94%	3%	3%
B28LD019	10112430	13%	13%	75%	66%	2%	32%
B28LD019	10112431	0%	0%	100%	0%	0%	100%
B28LD019	10112432	22%	35%	44%	31%	23%	46%
B28LD019	10112433	6%	11%	83%	8%	14%	78%
B28LD019	10112434	50%	50%	0%	62%	38%	0%
B28LD019	10112435	9%	9%	82%	18%	13%	69%
B28LD019	10112436	0%	20%	80%	0%	36%	64%

Summary Results of the samples

Table 3 Sample results from LDC

Hole No	sample ID	sample from	sample to	sample weight (tonnes)	carats
B28LD001	6666302	5	15	0.72	0.806
B28LD001	6666303	15	25	0.75	0.575
B28LD001	6666304	25	35	0.73	0.045
B28LD001	6666305	35	45	0.73	0.515
B28LD001	6666306	45	55	0.71	0.48
B28LD001	6666307	55	65	0.71	0.35
B28LD001	6666308	65	75	0.67	0.239
B28LD001	6666309	75	85	0.83	0.456
B28LD001	6666310	85	95	0.74	0.104
B28LD001	6666311	95	105	0.73	0.658
B28LD001	6666312	105	115	0.78	0.127
B28LD001	6666313	115	125	0.67	0.142
B28LD001	6666314	125	135	0.76	0.833
B28LD001	6666315	135	145	0.78	0.35
B28LD001	6666316	145	155	0.79	0.172
B28LD001	6666317	155	165	0.82	0.017
B28LD001	6666318	165	175	0.82	0.371
B28LD001	6666319	175	185	0.78	0.117
B28LD002	6666326	6	16	0.52	0.213
B28LD002	6666327	16	26	0.7	0.415
B28LD002	6666328	26	36	0.7	0.471
B28LD002	6666329	36	46	0.79	0.456
B28LD002	6666330	46	56	0.74	0.128
B28LD002	6666331	56	66	0.71	1.393
B28LD002	6666332	66	76	0.76	0.376
B28LD002	6666333	76	86	0.78	0.184
B28LD002	6666334	86	96	0.76	1.014
B28LD002	6666335	96	106	0.78	1.063
B28LD002	6666336	106	116	0.76	0.124
B28LD002	6666337	116	126	0.81	1.053
B28LD002	6666338	126	136	0.72	1.196
B28LD002	6666339	136	146	0.76	1.598
B28LD002	6666340	146	156	0.72	0.075
B28LD002	6666341	156	166	0.77	0.738
B28LD002	6666342	166	176	0.75	0.09

B28LD002	6666343	176	186	0.77	1.497
B28LD002	6666344	186	196	0.73	0.237
B28LD002	6666345	196	206	0.73	0.707
B28LD003	6666351	0	10	0.5	0.031
B28LD003	6666352	10	20	0.61	0.329
B28LD003	6666353	20	30	0.81	0.372
B28LD003	6666354	30	40	0.68	0.357
B28LD003	6666355	40	50	0.71	0.217
B28LD003	6666356	50	60	0.73	0.156
B28LD003	6666357	60	70	0.47	1.482
B28LD003	6666358	70	80	0.69	0.714
B28LD003	6666359	80	90	0.74	0.064
B28LD003	6666360	90	100	0.72	0.28
B28LD003	6666361	100	110	0.75	0.24
B28LD003	6666362	110	120	0.76	0.412
B28LD003	6666363	120	130	0.75	0.414
B28LD003	6666364	130	140	0.81	0.657
B28LD003	6666365	140	150	0.79	0.629
B28LD003	6666366	150	160	0.8	0.667
B28LD003	6666367	160	170	0.78	0.095
B28LD003	6666368	170	180	0.78	0.357
B28LD003	6666369	180	190	0.78	0.871
B28LD003	6666370	190	200	0.78	1.147
B28LD003	6666371	200	210	0.78	0.277
B28LD003	6666372	210	220	0.78	0.294
B28LD003	6666373	220	230	0.79	0.147
B28LD003	6666374	230	240	0.8	0.938
B28LD003	6666375	240	250	0.77	0.514
B28LD003	6666376	250	255.6	0.47	0.526
B28LD004	6671602	6	16	0.7	0
B28LD004	6671603	16	26	0.74	0.03
B28LD004	6671604	26	36	0.67	0.026
B28LD004	6671605	36	46	0.7	0.052
B28LD004	6671606	46	56	0.77	0.077
B28LD004	6671607	56	66	0.68	0.066
B28LD004	6671608	66	76	0.68	0.05
B28LD004	6671609	76	86	0.7	0.024
B28LD004	6671610	86	96	0.73	0.155
B28LD004	6671611	96	106	0.71	0.044
B28LD004	6671612	106	116	0.59	0.582

B28LD004	6671613	116	126	0.67	0.072
B28LD004	6671614	126	136	0.46	0.039
B28LD004	6671615	136	146	0.72	0.201
B28LD005	6666378	6	16	0.66	0.96
B28LD005	6666379	16	26	0.78	0.372
B28LD005	6666380	26	36	0.69	0.054
B28LD005	6666381	36	46	0.78	1.863
B28LD005	6666382	46	56	0.72	0.089
B28LD005	6666383	56	66	0.77	0.591
B28LD005	6666384	66	76	0.76	0.123
B28LD005	6666385	76	86	0.73	0.26
B28LD005	6666386	86	96	0.76	0.284
B28LD005	6666387	96	106	0.76	0.755
B28LD005	6666388	106	116	0.77	0.813
B28LD005	6666389	116	126	0.77	0.193
B28LD005	6666390	126	136	0.78	0.474
B28LD005	6666391	136	146	0.77	0.683
B28LD 005	6666392	146	156	0.78	0.345
B28LD 005	6666393	156	166	0.73	0.134
B28LD 006	6666397	20	30	0.74	0
B28LD 006	6666398	30	40	0.75	0
B28LD 006	6666399	40	50	0.74	0.132
B28LD 006	6666400	50	60	0.74	0.198
B28LD 006	6666401	60	70	0.51	0.85
B28LD 006	6666402	70	80	0.74	0
B28LD 006	6666403	80	90	0.77	0.113
B28LD 006	6666404	90	100	0.76	0.226
B28LD 006	6666405	100	110	0.71	0.243
B28LD 006	6666406	110	120	0.68	0.013
B28LD 006	6666407	120	130	0.7	0.01
B28LD 006	6666408	130	140	0.66	0
B28LD 006	6666409	140	150	0.69	0
B28LD 006	6666410	150	160	0.55	0.018
B28LD 006	6666411	160	170	0.42	0.082
B28LD 006	6666412	170	180	0.61	0.029
B28LD 006	6666413	180	190	0.65	0.011
B28LD 006	6666414	190	200	0.65	0.021
B28LD 006	6666415	200	210	0.76	0.079
B28LD 006	6666416	210	220	0.74	0
B28LD 006	6666417	220	230	0.71	0

B28LD 006	6666418	230	240	0.76	0.05
B28LD 006	6666419	240	249.34	0.73	0.121
B28LD 007	6671622	0	7	0.41	0.493
B28LD 007	6671623	7	17	0.7	0
B28LD 007	6671624	17	27	0.64	0.1
B28LD 007	6671625	27	37	0.7	0.01
B28LD 007	6671626	37	47	0.64	0.075
B28LD 007	6671627	47	57	0.68	0.087
B28LD 007	6671628	57	67	0.7	0.02
B28LD 007	6671629	67	77	0.64	0.018
B28LD 007	6671630	77	87	0.61	0.03
B28LD 007	6671631	87	97	0.34	0.072
B28LD 007	6671632	97	107	0.5	0.021
B28LD 007	6671633	107	117	0.59	0.047
B28LD 008	6671638	10	20	0.6	0.58
B28LD 008	6671639	20	30	0.72	1.286
B28LD 008	6671640	30	40	0.72	0.137
B28LD 008	6671641	40	50	0.78	0.156
B28LD 008	6671642	50	60	0.7	0.35
B28LD 008	6671643	60	70	0.74	0.915
B28LD 008	6671644	70	80	0.76	0.291
B28LD008	6671645	80	90	0.77	0.216
B28LD008	6671646	90	100	0.79	0.347
B28LD008	6671647	100	110	0.75	0.374
B28LD008	6671648	110	120	0.77	0.324
B28LD008	6671649	120	130	0.76	0.845
B28LD008	6671650	130	140	0.81	0.514
B28LD008	6671651	140	150	0.8	0.568
B28LD008	6671652	150	160	0.76	1.553
B28LD008	6671653	160	170	0.8	0.624
B28LD008	6671654	170	180	0.75	0.225
B28LD008	6671655	180	190	0.77	0.793
B28LD008	6671656	190	200	0.79	0.935
B28LD008	6671657	200	210	0.73	0.408
B28LD008	6671658	210	220	0.76	0.324
B28LD008	6671659	220	230	0.79	1.128
B28LD008	6671660	230	240	0.83	0.124
B28LD008	6671661	240	250	0.76	1.616
B28LD008	6671662	250	259.5	0.75	0.323
B28LD009	6671823	20	30	0.71	0.013

B28LD009	6671824	30	40	0.78	0.085
B28LD009	6671825	40	50	0.76	0
B28LD009	6671826	50	60	0.71	0
B28LD009	6671827	60	70	0.73	0.03
B28LD009	6671828	70	80	0.73	0.007
B28LD009	6671829	80	90	0.67	0.073
B28LD009	6671830	90	100	0.76	0.032
B28LD009	6671831	100	110	0.73	0
B28LD009	6671832	110	120	0.78	0.034
B28LD009	6671833	120	130	0.77	0.041
B28LD009	6671834	130	140	0.76	0
B28LD009	6671835	140	150	0.77	0.032
B28LD009	6671836	150	160	0.76	0.01
B28LD009	6671837	160	170	0.78	0.086
B28LD009	6671838	170	180	0.77	0
B28LD009	6671839	180	190	0.76	0
B28LD009	6671840	190	200	0.73	0
B28LD009	6671841	200	210	0.79	0.014
B28LD009	6671842	210	220	0.77	0.017
B28LD010	6671664	2	12	0.5	0.931
B28LD010	6671665	12	22	0.76	0.498
B28LD010	6671666	22	32	0.75	0.385
B28LD010	6671667	32	42	0.78	0.287
B28LD010	6671668	42	52	0.81	0.386
B28LD010	6671669	52	62	0.79	1.422
B28LD010	6671670	62	72	0.82	1.255
B28LD010	6671671	72	82	0.76	1.695
B28LD010	6671672	82	92	0.79	1.46
B28LD010	6671673	92	102	0.83	0.362
B28LD010	6671674	102	112	0.76	0.127
B28LD010	6671675	112	122	0.8	0.125
B28LD010	6671676	122	132	0.78	0.509
B28LD010	6671677	132	142	0.8	0.378
B28LD010	6671678	142	152	0.75	0.07
B28LD010	6671679	152	162	0.79	0.121
B28LD010	6671680	162	172	0.78	0.222
B28LD010	6671681	172	182	0.8	0.721
B28LD010	6671682	182	192	0.81	0.389
B28LD010	6671683	192	202	0.77	0.581
B28LD010	6671684	202	212	0.8	1

B28LD010	6671685	212	222	0.79	0.47
B28LD010	6671686	222	232	0.79	0.119
B28LD010	6671687	232	242	0.8	0.285
B28LD010	6671688	242	252	0.82	0.302
B28LD010	6671689	252	260.2	0.62	0.86
B28LD012	6671844	0	10	0.84	0.065
B28LD012	6671845	10	20	0.85	0.155
B28LD012	6671846	20	30	0.77	0.069
B28LD012	6671847	30	40	0.76	0.21
B28LD012	6671848	40	50	0.78	0.043
B28LD012	6671849	50	60	0.76	1.922
B28LD012	6671850	60	70	0.78	0.255
B28LD012	6671851	70	80	0.78	0.073
B28LD012	6671852	80	90	0.77	0.113
B28LD012	6671853	90	100	0.81	0.701
B28LD012	6671854	100	110	0.72	0.137
B28LD012	6671855	110	120	0.79	0.33
B28LD012	6671856	120	130	0.77	1.045
B28LD012	6671857	130	140	0.78	0.384
B28LD012	6671858	140	150	0.77	0.092
B28LD012	6671859	150	160	0.76	0.538
B28LD012	6671860	160	170	0.77	0.395
B28LD012	6671861	170	180	0.78	1.301
B28LD012	6671862	180	190	0.81	2.521
B28LD012	6671863	190	200	0.77	0.987
B28LD012	6671864	200	210	0.79	0.142
B28LD012	6671865	210	220	0.81	0.703
B28LD012	6671866	220	230	0.81	0.879
B28LD012	6671867	230	240	0.82	0.267
B28LD012	6671868	240	250	0.82	1.232
B28LD012	6671869	250	251.6	0.12	0.014
B28LD015	6672701	1	11	0.91	0.663
B28LD015	6672702	11	21	1.04	0.207
B28LD015	6672703	21	31	0.8	0.157
B28LD015	6672704	31	41	0.86	0.351
B28LD015	6672705	41	51	0.81	0.161
B28LD015	6672706	51	61	0.8	0.186
B28LD015	6672707	61	71	0.85	0.176
B28LD015	6672708	71	81	0.82	0.147
B28LD015	6672709	81	91	0.89	0.495

B28LD015	6672710	91	101	0.86	1.862
B28LD015	6672711	101	111	0.86	0.775
B28LD015	6672712	111	121	0.85	0.43
B28LD015	6672713	121	131	0.82	0.305
B28LD015	6672714	131	141	0.86	1.572
B28LD015	6672715	141	151	0.87	0.363
B28LD015	6672716	151	161	0.85	1.466
B28LD015	6672717	161	171	0.85	1.321
B28LD015	6672718	171	181	0.86	1.893
B28LD015	6672719	181	191	0.88	0.869
B28LD015	6672720	191	201	0.86	0.85
B28LD015	6672721	201	211	0.82	0.489
B28LD015	6672722	211	221	0.82	0.071
B28LD015	6672723	221	231	0.82	0.353
B28LD015	6672724	231	241	0.85	0.24
B28LD015	6672725	241	250.1	0.73	1.346
B28LD016	6672726	0	7	0.41	0.015
B28LD016	6672727	7	17	0.79	0
B28LD016	6672728	17	27	0.79	0.168
B28LD016	6672729	27	37	0.81	0.018
B28LD016	6672730	37	47	0.78	0.032
B28LD016	6672731	47	57	0.77	0.075
B28LD016	6672732	57	67	0.81	0.06
B28LD016	6672733	67	77	0.82	0.011
B28LD016	6672734	77	87	0.8	0.097
B28LD016	6672735	87	97	0.85	0.024
B28LD016	6672736	97	107	0.83	0.106
B28LD016	6672737	107	117	0.82	0.174
B28LD016	6672738	117	127	0.82	0.073
B28LD016	6672739	127	137	0.82	0.041
B28LD016	6672740	137	147	0.82	0.359
B28LD016	6672741	147	157	0.84	0.006
B28LD016	6672742	157	167	0.89	0.011
B28LD016	6672743	167	177	0.87	0.064
B28LD016	6672744	177	187	0.81	0.056
B28LD016	6672745	187	188.8	0.22	0.274
B28LD017	6672747	7	17	0.82	0.412
B28LD017	6672748	17	27	0.79	0.614
B28LD017	6672749	27	37	0.78	0.446
B28LD017	6672750	37	47	0.79	0.182

B28LD017	6672751	47	57	0.8	0.202
B28LD017	6672752	57	67	0.78	0.266
B28LD017	6672753	67	77	0.82	0.569
B28LD017	6672754	77	87	0.74	0.563
B28LD017	6672755	87	97	0.86	0.483
B28LD017	6672756	97	107	0.8	0.441
B28LD017	6672757	107	117	0.83	0.263
B28LD017	6672758	117	127	0.78	0.379
B28LD017	6672759	127	137	0.77	0.255
B28LD017	6672760	137	147	0.85	1.65
B28LD017	6672761	147	157	0.87	0.083
B28LD017	6672762	157	167	0.84	0.068
B28LD017	6672763	167	177	0.82	0.071
B28LD017	6672764	177	181	0.43	0.165
B28LD018	6672766	0	9	0.48	0
B28LD018	6672767	9	19	0.74	0.715
B28LD018	6672768	19	29	0.8	0.073
B28LD018	6672769	29	39	0.78	0
B28LD018	6672770	39	49	0.77	0.07
B28LD018	6672771	49	59	0.78	0.422
B28LD018	6672772	59	69	0.76	0.352
B28LD018	6672773	69	79	0.78	0.824
B28LD018	6672774	79	89	0.78	0.227
B28LD018	6672775	89	99	0.8	0.324
B28LD018	6672776	99	109	0.76	0.077
B28LD018	6672777	109	119	0.8	0.12
B28LD018	6672778	119	129	0.77	0.271
B28LD018	6672779	129	139	0.79	0.07
B28LD018	6672780	139	149	0.71	0.202
B28LD018	6672781	149	159	0.78	0.467
B28LD018	6672782	159	169	0.78	0.407
B28LD018	6672783	169	179	0.8	0.313
B28LD018	6672784	179	189	0.81	1.564
B28LD018	6672785	189	199	0.8	0.441
B28LD018	6672786	199	209	0.76	0.817
B28LD018	6672787	209	219	0.82	0.277
B28LD018	6672788	219	229	0.78	0.661
B28LD018	6672789	229	239	0.79	0.285
B28LD018	6672790	239	249	0.84	0.906
B28LD019	10112402	2.5	12.5	0.48	0.444

B28LD019	10112403	12.5	22.5	0.79	0.445
B28LD019	10112404	22.5	32.5	0.75	0.449
B28LD019	10112405	32.5	42.5	0.77	0.936
B28LD019	10112406	42.5	52.5	0.78	0.204
B28LD019	10112407	52.5	62.5	0.76	0.855
B28LD019	10112408	62.5	72.5	0.77	0.209
B28LD019	10112409	72.5	82.5	0.75	0.11
B28LD019	10112410	82.5	92.5	0.78	0.344
B28LD019	10112411	92.5	102.5	0.78	0.317
B28LD019	10112412	102.5	112.5	0.65	2.325
B28LD019	10112413	112.5	122.5	0.77	0.657
B28LD019	10112414	122.5	132.5	0.79	0.083
B28LD019	10112415	132.5	142.5	0.8	0.165
B28LD019	10112416	142.5	152.5	0.78	0.298
B28LD019	10112417	152.5	162.5	0.83	0.222
B28LD019	10112418	162.5	172.5	0.81	0.662
B28LD019	10112419	172.5	182.5	0.74	0.189
B28LD019	10112420	182.5	192.5	0.81	0.35
B28LD019	10112421	192.5	202.5	0.87	0.06
B28LD019	10112422	202.5	212.5	0.78	1.064
B28LD019	10112423	212.5	222.5	0.82	0.359
B28LD019	10112424	222.5	232.5	0.82	1.645
B28LD019	10112425	232.5	242.5	0.8	1.55
B28LD019	10112426	242.5	252.5	0.79	0.232
B28LD019	10112427	252.5	262.5	0.8	0.337
B28LD019	10112428	262.5	272.5	0.86	0.368
B28LD019	10112429	272.5	282.5	0.78	2.069
B28LD019	10112430	282.5	292.5	0.8	0.84
B28LD019	10112431	292.5	302.5	0.8	0.148
B28LD019	10112432	302.5	312.5	0.8	0.317
B28LD019	10112433	312.5	322.5	0.8	1.066
B28LD019	10112434	322.5	332.5	0.8	0.123
B28LD019	10112435	332.5	342.5	0.79	0.22
B28LD019	10112436	342.5	352.5	0.82	0.142

Table 4 Sample results from Bulk Samples

Sample No	Pit	Geology		Carats	Weight(t)
6641942	Pit1A	Weathered Lamproite		96.13	406
6641931	Pit7	Colluvium		0.59	20.06
6641932	Pit7	Weathered Lamproite		5.17	24
6641946	Pit7A	Colluvium+Lamproite		42.47	393
6641943	Pit8A	Weathered Lamproite		79.19	602
6641944	Pit8B	Weathered Lamproite		21.142	416
6641945	Pit8C	Weathered Lamproite		78.18	388
6641925	Pit10	Colluvium		6.68	26.74
6641927	Pit10	Colluvium		1.8	34.47
6641929	Pit10	Colluvium		5.7	35.42
6672009	Pit10	Weathered Lamproite		116.53	162.64
6672005	Pit11	Colluvium		24.22	22.29
6641910	Pit11	Colluvium		4.82	5.46
6672006	Pit11	Weathered Lamproite		77.57	73.21
6641911	Pit11	Weathered Lamproite		8.4	5.86
6672007	Pit11	Sightly Weathered Lamproite		207.49	231.22
6641912	Pit11	Slightly Weathered Lamproite		43.45	38.48
6641947	Pit11A	Colluvium		18.6	54.48
6641948	Pit11A	Weathered Lamproite		68.87	45.66
6641949	Pit11A	Slightly Weathered Lamproite		375.56	316.32
6641959	Pit11A	Colluvium		7.07	14.41
6641956	Pit11A	Colluvium		9.88	9.95
6641950	Pit11A	Colluvium		10.741	11.23
6641953	Pit11A	Colluvium		8.802	23.93
6672008	Pit11A	Weathered Lamproite		362.64	118.34
6641961	Pit11A	Slightly Weathered Lamproite		29.79	19.43
6641958	Pit11A	Slightly Weathered Lamproite		76.03	49.81
6641952	Pit11A	Slightly Weathered Lamproite		16.84	17.57
6641955	Pit11A	Slightly Weathered Lamproite		72.07	34.86

Annexure-7
Domainwise and levelwise estimated ore Reserves

Figures of tonnage in “000 t

Bench			Ore			Average grade
mRL	UNFC	South	Grade	UNFC	North	
	Code	Domain		Code	Domain	Grade
440	111			122		0.13
430	111			122	269.357	0.13
420	111	561.215	0.837	122	747.694	0.13
410	111	2108.176	0.729	122	1,134.931	0.13
400	111	2078.502	0.723	122	1,150.648	0.13
390	111	2041.71	0.704	122	1,142.080	0.13
380	111	1997.789	0.688	122	1,121.097	0.13
370	111	1953.639	0.678	122	1,035.508	0.13
360	111	1908.253	0.677	122	934.669	0.13
350	111	1892.161	0.679	122	818.770	0.13
340	111	1848.974	0.702	122	719.496	0.13
330	111	1781.789	0.719	122	647.312	0.13
320	111	1736.576	0.736	122	580.795	0.13
310	111	1701.762	0.744	122	463.098	0.13
300	111	1650.933	0.743	122	379.000	0.13
290	111	1596.146	0.751	122	318.026	0.13
280	111	1535.923	0.741	122	250.287	0.13
270	111	1448.249	0.777	122	180.114	0.13
260	111	1413.667	0.76	122	122.391	0.13
250	111	1355.448	0.778	122	64.653	0.13
240	111	1303.005	0.784	122	38.890	0.13
230	111	1227.659	0.814	122	15.037	0.13
220	111	1166.269	0.817	122	3.782	0.13
210	111	1096.215	0.804	-	-	-
200	111	1052.728	0.818	-	-	-
190	122	997.969	0.834	-	-	-
180	122	937.181	0.879	-	-	-
170	122	865.332	0.885	-	-	-
160	122	727.412	0.854	-	-	-
150	122	572.212	0.847	-	-	-
140	122	417.229	0.855	-	-	-
130	122	285.16	0.812	-	-	-
120	122	186.655	0.813	-	-	-
110	122	98.976	0.842	-	-	-
100	122	16.861	0.842	-	-	-
Total Tonnage		41561.775			12137.536	

UNFC Classification of Reserves and Resources Estimation

	Classification	Code	Quantity (Mill. Tonne)	Grade Ct/t
	For Potential 954 ha. Area in Atri south & Atri North Deposit			
	Total Mineral Resources		53.70	0.78
	Mineral Reserves			
	a. Proved Mineral Reserves (Atri South)	111	36.46	0.78
	b. Probable Mineral Reserves	122	5.10	0.78
	(i) Atri South	122	12.14	0.13
	(ii) Atri North			
	Remaining Resources			
	a. Feasibility Mineral Resources	Nil		
	b. Pre-feasibility Mineral Resources (Angiras Deposit)	333	Not assessed	Not assessed
	c. Measured Mineral Resources	Nil		
	d. Indicated Mineral Resources	Nil		
	e. Inferred Mineral Resources	Nil		
	f. Reconnaissance Mineral Resources.	Nil		
		Nil		

