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ELITHENI DOLERITE PIT Elitheni Coal (Pty) Ltd Office 1 ; First Floor ; Kings Court ; Buffelsfontein Rd, Walmer Heights Port Elizabeth, 6001 Tel: 041 368 9650 Fax: 041 368 9651 This report is for a proposed open pit mining operation in the Macubeni Area intended to supply Aggregates to the construction industry within the Eastern Cape. This report is undertaken in compliance with the Minerals and Petroleum Resources Development Act, Act 28 of 2002.



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1 INTRODUCTION

1.1 Regional Setting

Elitheni Dolerite Pit (belonging to Elitheni Coal (Pty) Ltd) is located within the Chris Hani District Municipal Area. The mine is situated approximately 10 km south west of the closest town : Indwe, in the Emalahleni Local Municipality, which is the Regional Services Council authority. Other communities in the area are Dordrecht about 30 km west ; Cala about 25 km South East ; and Lady Frere about 35 km South. The mine is accessible en-route the R56 Regional Road between Dordrecht and Indwe.



The mine's 1½ hectares of land is situated on State Land, the Macubeni 3 Allotment Area (18338 ha.). Elitheni Coal (Pty) Ltd has a nearby colliery as indicated below.





The surrounding area is on average between 1450m to 1500m above mean sea level. The Doringrivier Dam is located next to Indwe and has a capacity of 17.9 million cubic meters. No heavy industries are currently located in the area. Almost all of the commercial activities in the area comprise commercial and subsistence farming and related services, with Indwe serving the local community. Indwe has an unpaved landing strip (length 885m) that is able to serve small planes. No refuelling or hangar facilities are available at present.

	Description	Detail
1	Full name of Company	Elitheni Coal (Pty) Ltd
2	Registration number of Company	2001/002173/07
3	Copy of certification of incorporation.	See Section 9 : Annexure 1
4	Copy of certification to commence business	See Section 10 : Annexure 2
5	Copy of resolution of representative for the company	See Section 11 : Annexure 3
6	Contact Person	Mr David Nel
7	Applicant's Telephone number	041 – 368 9650
8	Applicant's Facsimile number	041 – 368 9651
9	Applicant's Cell phone number	083 – 441 4963
10	Applicant's Physical Address	Office 1 ; King's Court Buffelsfontein Road Walmer Heights Port Elizabeth 6001
11	Applicant's Postal Address	P.O. Box 211177 The Fig Tree Port Elizabeth 6033
12	Contact person's e-mail address	david.nel@elitheni.co.za

1.2 Particulars of the Applicant and its Representative

Elitheni Dolerite Pit is a small scale mining enterprise focusing on the mining of sandstone and dolerite as aggregates to be sold as raw materials. The focus of the business is on the optimal utilisation of the natural ore reserves within the Guba-Hoek area, to supply unprocessed aggregates to crushers that in turn supply these aggregates to the Construction & Building industry within the local Emalahleni municipal area.



2 PLANS SHOWING THE LAND AND MINING AREA

2.1 Location of the Mine

Elitheni Dolerite Pit is located more or less at latitude 31° 31' 51" S and longitude 27° 16' 30" E approximately 10 km south west of the closest town of Indwe in the North - Eastern Cape.

2.2 Plans Contemplated in Regulation 2(2)

See Annexure 4 : Plans Contemplated in Regulation 2(2) and Annexure 5 : Macubeni - 3 Allotment Area for the plans contemplated in Regulation 2(2) of the Mineral & Petroleum Resources Development Act, Act 28 of 2002. The mine is situated on a plateau elevated and on a higher elevation than the nearby communities. All land within the mining permit application has been zoned as "rural agricultural" ground. Only a portion of the title deed (1½ hectares) concerned comprise of this mining permit application. The mine's grounds are approximately 1443 m.a.m.s.l. with very little vegetation covering it as the surface mineralogy indicates outcrops of dolerite extending over the area. See also Section 4 of this report for details regarding the title deeds.

3 **REGISTERED DESCRIPTION OF THE LAND**

An area of State Land (the Macubeni nr 3 - Allotment Area) situated in the Guba Hoek, districts of Lady Frere and Indwe, Eastern Cape is indicated on the sketch plan marked in Annexure 5 : Macubeni - 3 Allotment Area in extent approximately 18 000 hectares. Other ERF's had been registered within this Macubeni 3 - Allotment area though. This state land in question falls between other privately owned property. This mining permit area extends over an area of 1½ hectares of land, which comprises of the Macubeni 3 - Allotment State Land and more specifically in the vicinity of the Guba Hoek area. See Annexure 6 : Title Deed Confirmation from Land Surveyor, for a confirmation from Mr Ivan Hansen, a registered Land Surveyor from the office of Ivan Hansen Land Surveyors, that the surface works of Elitheni Dolerite Pit do not extend over any privately owned ERF and/or title deed other than the state land mentioned. An SG diagram of this mining permit area has been compiled for this purpose, which will accompany the mining lease to the Mining Title Deeds Office once this application has been granted. All the land is zoned as "rural agricultural" ground.



No roads cross the mining area. No servitudes housing ESKOM high tension power lines ; SPOORNET railway lines or DWAF water pipe lines have been registered over the land.

4 <u>LIFE OF MINE</u>

4.1 Geology and Stratigraphy

The sedimentary rocks in the Guba Valley are all of the Triassic age and belong to the Molteno Formation, which forms part of the Karoo Sequence. Dolerite intrusions of the younger Jurassic age are common, while thin alluvial slope (sheet-wash) and valley (channel-transported) deposits of Quaternary age blanket these older rocks in some places. Coal seams occurs in four main seams known as the Indwe, Guba, Molteno and Gubenxa seams. The Indwe is the lowest seam in the coal-bearing succession followed by the Guba, Molteno and Gubenxa respectively. It is a composite seam that exhibits considerable variation in seam structure and thickness within relatively short lateral distances. The bottom two (Indwe and Guba) coal seams are of main economic use and occur in the Bamboes Member of the Molteno Formation, which rests directly on the Beaufort Group. The Guba seam is located at the top of the Bamboes Member and is overlain directly by the competent Indwe Sandstone Member.

The strata are generally horizontal or dip at low angles less than 5° with the horizontal. Steeper dips are rare and only present closer to the dolerite intrusions. Faulting is relatively uncommon and those faults that do occur show very small displacements. Gentle basining has resulted in low (between 1° and 3°) regional northward dips.

The aggregates that could be mined within the Elitheni Dolerite Pit consists mainly of dolerite, but also to a lesser extent the sandstone.

See Annexure 7 : Ore Reserve Summary and Mining Plan, for the mineral resources and ore reserves expected located within the mining area.

4.2 Market Product Specifications

Aggregates are required not only for readymix concrete demands of the local construction sector, but mainly for road construction purposes. The full range of G10-to G1 road layering is required to be delivered for the local municipal's upgrade of gravel roads. The higher specifications for G1, G2 & G3 base materials are as follows :



G1, G2 and G3 are defined according to "TRH 14 : Guidelines for road construction materials" as compiled by the Committee of State Road Authorities Technical Recommendations for Highways, Department of Transport, Pretoria, 1985. Aggregates for the use as base material shall comply with the requirements appropriate to the maximum size (37,5 mm or 26,5 mm) of aggregate and class specified. For G1 and G2 granular bases 37,5 mm maximum size shall apply. (The larger the maximum size the higher the shear resistance of the layer). For G3 bases the 37,5 mm maximum size will normally apply and the 26,5 mm aggregate size only where approved by the Materials Engineer for light pavement structures.

In case of G1 base, the parent rock shall consist entirely of hard, sound, durable, solid, unweathered rock obtained from a stone quarry, or clean un-weathered mine rock obtained from mine dumps, or from clean un-weathered boulders. Where fines are in short supply, the grading may be corrected only by the addition of fines obtained from the crushing of the same parent rock. The presence of deleterious minerals, such as mica and sulphide minerals, may affect the durability of the aggregate. This may be reflected by low 10% FACT values or by a low wet-dry ratio. Further petrological examination may then be advisable and/or required. While the presence of mica could result in compaction problems, sulphides produce sulphates (which could cause blistering of seals) and H_2SO_4 (which attacks rock, concrete and produces more sulphate salts). Any visible presence of mica or sulphides should be further investigated.

The material for G2 base shall be derived from the crushing of hard, sound, durable, un-weathered rock, boulders or coarse gravel. The presence of deleterious minerals, such as mica and sulphide minerals, may affect the durability of the aggregate. This may be reflected by low 10% FACT values, or by a low wet-dry ratio. Further petrological examination may then be advisable and/or required. G2 Base material may contain natural fines obtained from a source other than from crushed parent rock if :

- approved by the Materials Engineer, and
- the specified requirements are met.

Such added material may not exceed 10 percent by mass. In addition, the dry viscosity (indirect method to measure particles of the fine aggregate) of any natural sand shall be determined in accordance with an approved method and criteria currently being researched. Furthermore, the added fines shall have a



Liquid Limit not more than 25 percent and a PI not more than 6. The supplier shall submit full details regarding aggregate to be added and the nature of the proposed well-proven mixing process before approval may be obtained to use the fine aggregate.

The material for G3 shall be similar to G2 base in all respects, except that the Atterberg limits and grading may be assessed, using a non-statistical assessment methodology. The presence of deleterious minerals, such as mica and sulphide minerals, may affect the durability of the aggregate. This may be reflected by low 10% FACT values or by a low wet-dry ratio. Further petrological examination may then be advisable and/or required. G3 Base may contain natural fines obtained from a source other than from crushed parent rock if:

- Approved by the Materials Engineer, and
- Specified requirements are met.

Such added material may not exceed 15 percent by mass. In addition the added fines shall have a Liquid Limit not more than 25 percent, and PI not more than 6. The minimum 10 percent Fines Aggregate Crushing Value (10% FACT) shall not be less than the value given in the table below :

Table 2-5: Aggregate Strength and Resistance to Crushing								
ROCK TYPE	MATRIX	DRY 10% FACT kN	WET 10% FACT kN	WET/DRY %				
Arenaceous	Non-siliceous cementing matrix	140	-	75				
	Siliceous cementing matrix	110	-	75				
Diamictites (tillite)		200 ²	-	70				
Argillaceous rock ¹		-	125	-				
Other rock types		110	-	75				
Note: 1. Only permitted if indicated in the Project Specification (only for <0,8×10 ⁶ E80 traffic class and if the rock is well inducated ['baked"]. 2. See reference 5								

The Aggregate Value (ACV) shall not exceed the values given in the table below:

Table 2-6: Maximum aggregate crushing values				
ROCK TYPE	ACV %			
Arenaceous: Without a siliceous cementing matrix	27			
With a siliceous cementing matrix	29			
Diamictites (tillite)	21			
Argillaceous rock ¹	24			
Other rock types	29			
Note: 1. Rock types only permitted where indicated in the Project Specification.				

The sandstone and dolerite could be crushed to meet the specified grading specification, i.e. all material less than 37,5 mm. There is very little clay in the area and



therefore the plastcicity index (P.I.) is all less than 3 and the Liquid Limits are all less than 25%. The minimum 10 percent Fines Aggregate Crushing Value (10% FACT) of both sandstone and dolerite exceed 110 kN and 140kN respectively. The ACV values of 20% for the sandstone and 21% are also less than the specifications of 21% and 29% respectively. Hence, the sandstone and dolerite minerals are ideally suitable to meet these requirements to be produced as G1, G2 & G3 road base materials.

4.3 Mineral Resources - & Ore reserves Quantifications

According to Section 2.4 of the SAMREC Code 2007, the Code sets minimum standards for public reporting of mineral reserves / resources for listed public companies and therefore is not applicable to Elitheni Coal (Pty) Ltd, which is a private company. However, in the light of transparency the Code is accepted and followed to quantify this mineral resource and ore reserve. According to Section 4.3 of the Code, Mr Rudi Gerber from Algoa Consulting Mining Engineers cc. is the competent person responsible for the mineral resource & ore reserve determination.

The extent of the measured resource were used to determine the extent of the proven reserve, seeing that the :

- Quantifications of dolerite and sandstone have been done accurately
- The mineral properties are conforming to the market requirements
- Mining methods of mining the minerals under the conditions exist
- Various processes of mining, processing and marketing makes the project economically viable.

The square area measuring 122,5 m X 122,5 m with the centre thereof at more or less at latitude 31° 31' 51" S and longitude 27° 16' 30" E and at an elevation of circa 1443 m.a.m.s.l. The top bench is then measured at a bench height between the original ground level (O.G.L.) and 1435 m.a.m.s.l. ; the second bench (a 10 m bench height) between 1435 m.a.m.s.l. and 1425 m.a.m.s.l., but at a smaller area. In accordance with the Mandatory Code of Practice to combat rockfalls and highwall slope stability, the overall slopes of the quarry had been designed at a 50° angle with the horizontal. Therefore, each bench would leave a 8,4 m ledge after it had been mined out. Every level at a lower elevation would therefore have a smaller area until the lowest level at 1385 m.a.m.s.l. would become too congested for vehicular movement.

See Annexure 7 : Ore Reserve Summary and Mining Plan for details that describe the above.



4.3.1 Mining Permit Area

The Elitheni Dolerite Pit mining area extends over 1,5 hectares. The entire area is considered as mining area, because dolerite and sandstone is found within the entire area.

4.3.2 Measured Resource

The exploration boreholes that were drilled resulted in 135 m overlapping circles and is sufficient to describe the mineral resource. The dolerite deposit within this area amounts to 393 188 BCM's (Bank Cubic Metres). The dolerite is uniform throughout the cores retrieved from the core drill and extends even deeper than the 60 m drilled. The eastern boundary of the pit itself is founded upon a dolerite dyke that is expected to extend even further below the final floor planned.

4.3.3 Indicated - & Inferred Resources and Probable Reserves

As this the mining permit area falls entirely within the overlapping circles of the exploration boreholes, no Indicated - & Inferred Resources as well as Probable Reserves exist.

4.3.4 **Proven Reserve**

The factors applied due to geological losses and due to practical mining losses were 10% and 15% respectively for the first bench (O.G.L. to 1435 m.a.m.s.l.) and 10% for both geological and mining losses for the lower levels. The proven dolerite reserve extends to slightly less than the measured resources. This will result in saleable product of 890 185 R.O.M. tonnes.

4.3.5 Summary

See Annexure 7 : Ore Reserve Summary and Mining Plan for a summary of the Mineral Resources and Ore Reserves.

4.4 Mine Development & Site Layout

The opencast pit layout has a square configuration and could therefore be developed with access ramps along any of its four sides. The decline from north to south along the western mine boundary has been chosen for :

- a) Shortest haul distance to the gate of the mine
- b) Possible future mine expansions not hampered by the ramp's location



The access ramps have been designed to have an inclination not steeper than 8° with the horizontal as that is the limit on supplier specifications for optimum hauling & material handling. The second bench (1435 m.a.m.s.l. to 1425 m.a.m.s.l.) will not be developed until the first level (O.G.L. to 1435 m.a.m.s.l.) have been mined out completely. Once the mine had reached its limits, the four highwalls would indicate clearly the best way to expand the mine, should future expansions would be deemed feasible.

4.5 **Provisional Mine Closure Plan**

The rehabilitation of the mine would be able to be used as a water storage facility as the mine is located on a plateau at an altitude above other communities. This would then serve as a reservoir of water to be used by the communities of Guba Hoek. In the event that Elitheni Coal (Pty) Ltd prefers to keep the options available for future mine expansions, then the rehabilitation of the slopes would be deployed. There would be no visual impact as the mine cannot be seen from any lower lying community or road. Closely spaced large boulders would be placed along the crest of the slopes at O.G.L., but within the perimeter fence to prevent accidental entry that could lead to falling below to the next level.

4.6 Life of Mine Conclusion

The amount of circa 225 000 R.O.M tonnes of dolerite to be mined is realistic as the market demand still outweighs the supply of aggregates. As the market predictions require aggregates in excess of 2 years ; and as the ore reserves are sufficient to produce aggregates beyond the next 2 years ; the life of Elitheni Dolerite Pit is more than the maximum 2 years applied for from the day the Mining Permit is awarded, i.e. from 2011 until 2013. A possibility exist that the mining permit could even be renewed depending on the growth of the local economy.

5 MARKET

The aggregates that could be mined within the Elitheni Dolerite Pit consists mainly of dolerite, but also to a lesser extent the sandstone. As the properties of the dolerite and sandstone have met the market specifications, end-users have shown interests in purchasing raw materials from Elitheni Dolerite Pit. The minerals will be loaded at the mine; weighed on a weighbridge at the nearby colliery, before leaving to be transported to an SMME dealing with contract crushing. Elitheni Dolerite Pit will sell all of its minerals to Impact Mining Investments (IMI) (Pty) Ltd, which will in turn market it and/or



process it off-site according to the desired specifications of the end-users. No mineral processing will take place on-site. Elitheni Dolerite Pit has one customer : IMI (Pty) Ltd. A letter of intent for a prospective Sale Agreement between Elitheni Coal (Pty) Ltd and IMI (Pty) Ltd indicate that it could buy circa 10000 tonnes of blasted rock per month.

Aggregates are required not only for readymix concrete demands of the local construction sector, but mainly for road construction purposes. The full range of G5- to G1 road layering is required to be delivered for the local municipal's upgrade of gravel roads. The sandstone and dolerite minerals are ideally suitable to meet these requirements.

No exports of aggregates are economically feasible.

6 <u>TIMEFRAMES AND SCHEDULING</u>

Contractors have given their commitment that site establishment to commence mining operations could start within one month of notification. Elitheni Dolerite Pit will start their mining operations as soon as this Mining Permit has been granted. See Annexure 8 : Scheduling of Mine Development Phase, the construction and implementation phase of the mine until the production starts.

Due to the simplicity of the mining practice, the whole mining area will be regarded as one mining block, and thus no complicated scheduling is required. Time frames for mining are determined by the markets and the rate of mining of the ore reserves. The Mining operations will follow the sequence of :

- Topsoil removal and stacking
- Drilling & Blasting of minerals with explosives
- Loading & Hauling of minerals to customers
- Replacing of Topsoil
- Rehabilitating the affected areas

The planned production rate for the mine will be around 2500 R.O.M tonnes / week ; i.e. an equivalent of about 4400 BCM's (in-situ Bank Cubic Metres) per month. The final voids and open pits will have benches or slopes which are being constructed during the operational phase and maintained until the rehabilitation thereof. Once the



ore reserves had been depleted, then the rehabilitation of the slopes and benches would be completed.

See also Section 4 for the Life of Mine of this mining permit application. This section describes the scheduling of the mine development and production.

7 FINANCING PLAN

7.1 Costs Related to the Mining Technique

The description of the mining methods ; the technology to be used and the forecast of the annual production rates have been addressed in Section 4 Life Of Mine. The mining of the sandstone & dolerite will be done by means of contractors and their overall costs ranges between R100-00 to R120-00 excluding VAT per R.O.M. tonne mined. These contracting mining companies will be deployed according to a Supply & Off-take Agreement contract.

See Annexure 9: Forecast of Detailed Costs, where these costs have been detailed and incorporated into the Cashflow Forecast of the business found in Annexure 11: Cashflow Forecast.

7.2 Costs Related to the Mineral Processing

No mineral processing is being undertaken by Elitheni Dolerite Pit and therefore the costs are zero. The sandstone and dolerite ores are being drilled & blasted by means of explosives ; mined by the excavator ; loaded onto the dump truck ; hauled to the customer and dumped on the desired location of the customer's stockpiles.

7.3 Costs Related to Technical Skills

Technical Skills in the field of Mine Management will be performed by Mr Kobus Van Zyl. All other specialist skills required, such as accredited Surveyors, - Occupational Hygienists, - Occupational Medical Practitioners will be contracted as consultants.

As this application is for the registration of a new quarry, very few staff members have been appointed. It is envisaged that the mining operations will be outsourced to contract mining companies. Prior to the start of each works order, these contractors will undergo an annual induction program and relevant medical surveillance.



See Annexure 9 : Forecast of Detailed Costs, where these costs have been detailed and incorporated into the Cashflow Forecast of the business found in Annexure 11 : Cashflow Forecast.

7.4 Costs Related to Regulatory Requirements

Provision has been made for costs pertaining to regulatory requirements. The costs of the necessary consultants for specialist skills are not viewed as regulatory requirements, but part of the necessary mine management costs for technical skills. Although provision had been made for royalty payments, in terms of the SARS regulatory conditions, Elitheni Dolerite Pit would meet the requirements to be exempted from royalty tax upon application thereof. The provisions for rehabilitation is preliminary and will only be detailed once the Environmental Management Plan has been approved by the DMR. Provisions have already been made for a financial guarantee as required by the Environmental Management Plan. Upon the granting of this Mining Permit, Elitheni Dolerite Pit undertakes to issue this guarantee in favour of the DMR. This guarantee will be amended every financial year during the time of audits.

See Annexure 9: Forecast of Detailed Costs, where these costs have been detailed and incorporated into the Cashflow Forecast of the business found in Annexure 11: Cashflow Forecast.

7.5 Other Costs Related to the Mining Project

See Annexure 9 : Forecast of Detailed Costs, where all other costs have been detailed and incorporated into the Cashflow Forecast of the business found in Annexure 11 : Cashflow Forecast.

7.6 Capital Expenditure

See Annexure 12 : Capital Expenditure Forecast, for a detailed Capital Expenditure forecast. All capital goods have been financed with cash from the shareholders. Limited loans have been registered against Elitheni Coal (Pty) Ltd, existing only in the case of 3 vehicles. The requirements for the financial guarantee for the Environmental Management Plan has been included as capital to be deployed upon the favourable granting of this Mining Permit application.



7.7 Revenue

See Annexure 10 : Forecast of Detailed Revenue, for the forecast of revenue of the project. There is currently a drive in the upgrading of roads and transport systems in the Emalahleni municipal area and Elitheni Dolerite Pit would form an integral part thereof. With an ever increasing market demand currently experienced, the increase in revenue is estimated to be still a conservative 8,5%, which is lower than the current inflation rate (9%).

7.8 Cashflow Forecast

See Annexure 11 : Cashflow Forecast, for the forecast of the cash flow of the project. See Annexure 13 : Summary of Financial Indices, for a summary of the financial indices which indicate that this a viable project.

7.9 Financing Mechanism

The funding of the project is privately funded by the shareholders of Elitheni Coal (Pty) Ltd. Elitheni Dolerite Pit's bankers are ABSA Bank and Elitheni Coal (Pty) Ltd is a registered VAT vendor.

Strategic Natural Resources PLC ("SNR") is a registered company listed on the Alternative Investment Market of the London Stock Exchange. SNR owns 100% of Acharnian Mining Limited ("Acharnian Mining"), a company domiciled in the British Virgin Islands. Acharnian Mining in turn owns 74% of Elitheni Coal (Pty) Ltd. The remaining 26% of Elitheni Coal (Pty) Ltd is owned by South African black economic empowerment shareholders.

See Annexure 14 : Verification of Funds by Guarantor, for the verification of funds by the Elitheni Coal (Pty) Ltd in the form of a bank statement reflecting the cash in their account.

7.10 Financial Year-End of the Mine

The financial period for Elitheni Coal (Pty) Ltd is from 01 March to 28 February the following year.



8 **RESOLUTION / UNDERTAKING**

I, David Nel, the undersigned and duly authorised thereto by Elitheni Coal (Pty) Ltd (Reg. nr 2001/002173/07) undertake to adhere to the information, requirements, commitments and conditions as set out in the Mining Works Programme.

SIGNED AT Port Elizabeth ON THIS 18th DAY OF August 2011.

David Nel

Witness



9 ANNEXURE 1 : CERTIFICATE OF INCORPORATION



10 ANNEXURE 2: CERTIFICATE TO COMMENCE BUSINESS



11 ANNEXURE 3: RESOLUTION OF CO. REPRESENTATIVE



12 ANNEXURE 4 : PLANS CONTEMPLATED IN REGULATION 2(2)



13 ANNEXURE 5: MACUBENI - 3 ALLOTMENT AREA



14 ANNEXURE 6 : TITLE DEED CONFIRMATION FROM LAND SURVEYOR



15 ANNEXURE 7: ORE RESERVE SUMMARY AND MINING PLAN

Reserve determination of Elitheni Dolerite Pit Mining Permit Area

Level	Level	Level Area	Bench	Dolerite	Dolerite	In-Situ	Geological	Mining	R.O.M.
2010.	Elevation		Height	BCM's	Density	Tonnes	Losses	Losses	Tonnes
	m	m²	m	m³	t/m³	t	%	%	t
1	1 435	15 006	7.00	105 044	2.800	294 123	10%	15%	225 004
2	1 425	11 172	10.00	111 725	2.850	318 416	10%	10%	257 917
3	1 415	7 903	10.00	79 032	2.850	225 241	10%	10%	182 446
4	1 405	5 198	10.00	51 984	2.850	148 155	10%	10%	120 005
5	1 395	3 058	10.00	30 581	2.850	87 156	10%	10%	70 596
6	1 385	1 482	10.00	14 823	2.850	42 244	10%	10%	34 218
Σ		43 821	8.97	393 188	2.837	1 115 334	10%	11%	890 185



16 ANNEXURE 8: SCHEDULING OF MINE DEVELOPMENT PHASE

Celitheni Coal



17 ANNEXURE 9: FORECAST OF DETAILED COSTS



18 ANNEXURE 10 : FORECAST OF DETAILED REVENUE



19 ANNEXURE 11 : CASHFLOW FORECAST



20 ANNEXURE 12 : CAPITAL EXPENDITURE FORECAST

	Capital Exper
	Mar-11
Imported machinery (R)	R 0.00
Price in Foreign Currency	\$0.00
Rand/\$US Exchange rate	R 7.00
Plant Cost	R 0.00
Critical Spares	R 0.00
Shipping Costs	R 0.00
Shipping Insurance	R 0.00
LC Costs	R 0.00
Forex Cover	R 0.00
15% Contingency	R 0.00
Local machinery (R)	R 0.00
Plant & M achinery	R 0.00
Modular Semi-fixed Plant	R 0.00
Critical Spares	R 0.00
8%Contingency	R 0.00
Fixed Assets Capital to be outlayed	R 520 000.00
Cost of land / square metre	R 0.00
Number of hectares	14.5
Total land cost	R 0.00
DM E Rehabilitation Guarantee	R 55 000.00
Mine Site Development	R 320 000.00
Electricity Supply & backup	R 50 000.00
Potable & Process Water supply	R 25 000.00
perimeter Fence	R 50 000.00
Personnel Placement & Induction	R 20 000.00
Project to Date Capital outlayed	R 80 000.00
Cost of land / ha	R 0.00
Number of hectares	14.5
Total land cost	R 0.00
Mining Permit Application	R 80 000.00
	R 0.00
	R 0.00
Total Capital expenditure	R 600 000.00



21 ANNEXURE 13 : SUMMARY OF FINANCIAL INDICES

FINANCIAL EVALUATION SUMMARY							
DESCRIPTION	Mining Permit Application						
CAPITAL EXPENDITURE (PV)		R 2 000 000					
DISCOUNTED PAY-BACK Period (years)		0.609					
NPV (without continuing value over 2 years)		R 4 128 678					
IRR (without continuing value over 2 years)		158.63%					
Profitability Index		3.06					
Sensitivity Analysis	Payback	NPV	IRR				
Average Product Price @ -10% : i.e. , R 168.27	0.95	R 1 812 150	81.2%				
Average Product Price @ -10% : i.e. , R 205.67	0.45	R 6 445 207	232.2%				
Exchange Rate @ -10% : i.e. , R 6.3 / \$	0.95	R 1 812 150	81.2%				
Exchange Rate @ -10% : i.e., R 7.7 / \$	0.45	R 6 445 207	232.2%				
Capital Expenditure @ -10% : i.e. , R 1800000	0.55	R 4 328 678	181.0%				
Capital Expenditure @ +10% : i.e. , R 2200000	0.67	R 3 928 678	140.1%				
W.A.C.O.C. @ -10% : i.e. , 12.6 %	0.60	R 4 240 700	158.6%				
W.A.C.O.C. @ +10% : i.e. , 15.4 %	0.62	R 4 020 223	158.6%				
Inflation Rate @ -10% : i.e. , 10.8 %	0.61	R 4 128 678	158.6%				
Inflation Rate @ +10% : i.e. , 13.2 %	0.61	R 4 128 678	158.6%				
Tax Rate @ -10% : i.e. , 27 %	0.58	R 4 391 336	167.3%				
Tax Rate @ +10% : i.e. , 33 %	0.64	R 3 866 021	149.9%				
OTHER VARIAE	BLES						
Exchange Rate (R,c per \$)		R 7.00					
Weighted Average Product Price		R 186.97					
Inflation Rate		12.0%					
Weighted Average Cost of Capital		14.0%					
Tax Rate		30.0%					
Year Data Obtained		March-11					
NPV / IRR Term (Preferred Terms 5, 10 or 15 year	rs)	2					
Increase Working Capital (Y or N)		n					
Escalate Expenditure Flow (Y or N)		у					



22 ANNEXURE 14 : VERIFICATION OF FUNDS BY GUARANTOR