



**REPORT ON RESERVE ESTIMATION
OF GRANITE QUARRY DEPOSIT OF
CHRISMAY ENTERPRISE LIMITED**

at

**ASUABA IN THE WEST AKYEM MUNICIPALITY
- EASTERN REGION -**

by

GEOCONSULT AND ALLIED SURVEYS LTD.

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Photos & Maps

RESERVE ESTIMATION OF CHRISMAY ENTERPRISE LIMITED AT ASUABA IN THE WEST AKYEM MUNICIPALITY – EASTERN REGION

1.0 INTRODUCTION

- Chrismay Enterprise Limited is a registered Ghanaian Company desirous of establishing a Granite Quarry through mining and processing and reprocessing of the raw material for Civil Construction works in Ghana.
- It is therefore at the last stage of securing a Mining License to enable it commence an open cast mining at its 69.26 acre granite concession at Asuaba in the West Akyem Municipality of the Eastern Region.
- It is hoped that the establishment of this quarry will produce the much needed mined materials to improve the ever increasing demand for granite products for the immediate surroundings and the Accra Metropolis in particular.

2.1. LOCATION

- The deposit is located at Asuaba in the West Akyem Municipality. (See pic.4)
- It is about 10km west of Nsawam and on the Nsawam-Asamankese road. (See map 1&2 and pic.1)
- The deposit can be reached from Asuaba on 1.5Km feeder road. (See pic.2)
- Electricity has been extended to the site. (See pic.3)

3.0 Conditions for Reserve Estimation

Parameters of and Conditions of reserves are just ultimate requirements to quality and quantity of the raw material, mining, geological and hydrogeological conditions of its development and technological properties.

4.0 Methods of Reserve Estimation

The occurrence of the deposit is the Belt type granite of the Kibi-Winneba Birimian Belt of the Eastern Region. Topographically, the hill rises to an elevation -170m, the necessary graphical layouts for the reserve calculation are made on the topographic basis to the scale of 1:2,750 and on the initial base topographic map of 1,50,000 of Field Sheet 0501B prepared by Survey of Ghana.

The delineation of the deposit and the relative mineable depth is derived from data acquired through Geological Surveys of similar types in Southern Ghana.

The relative density of the granite was taken as $2.7\text{m}^3/\text{Ton}$ since the relative densities of granite ranges between $2.6\text{-}2.79\text{m}^3/\text{Ton}$.

5.0 Acquired Data/Reserve

- Total surface area of deposit - (69.26 acres) -
- Area of Concession in (3D Model) and above 100m Contour
- Volume of Concession above 100m Contour-
- Volume of Concession below 100m contour –

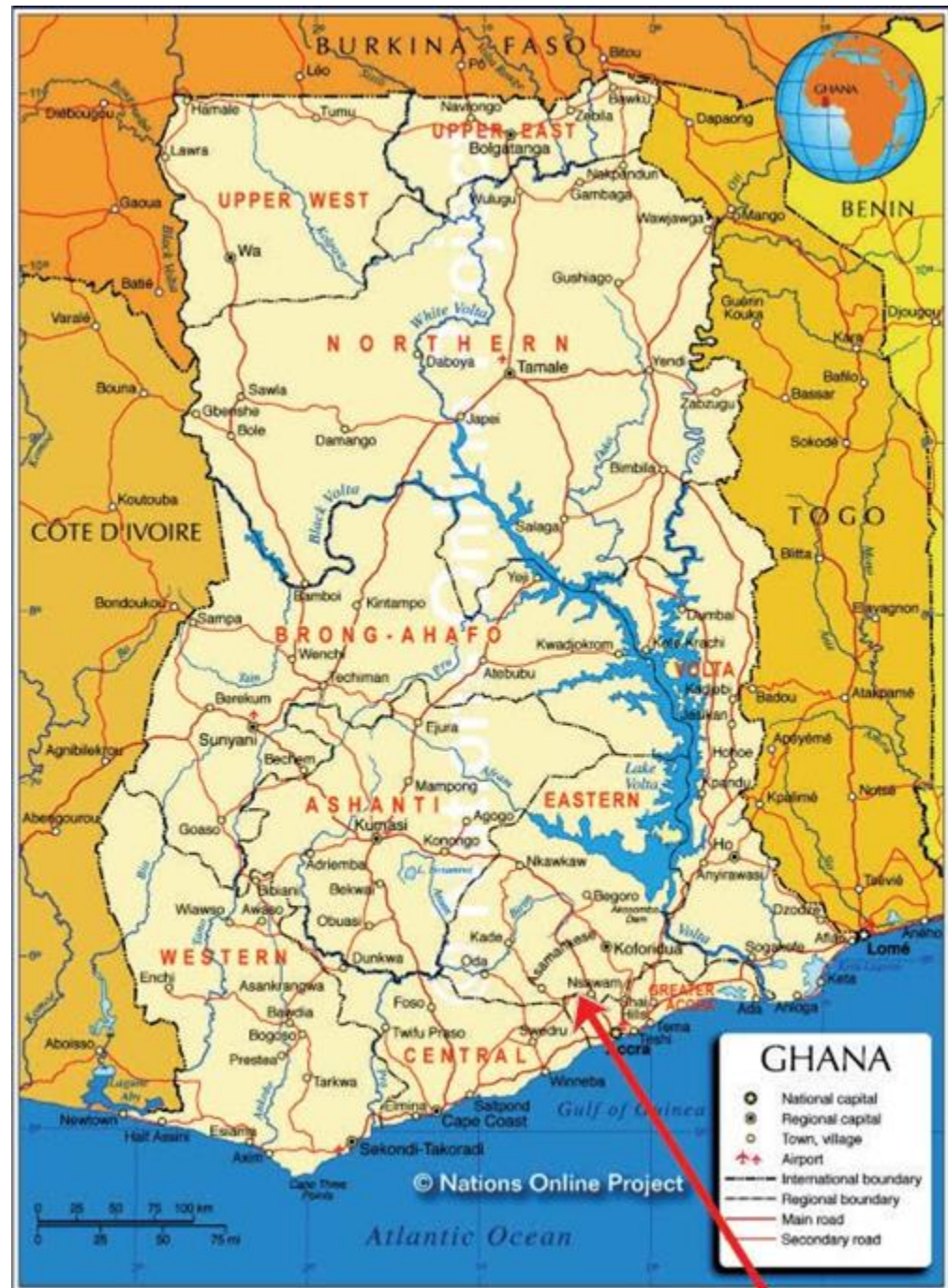
- R_1 – Reserve above 100m contour
- R_2 – Reserve below 100m Contour
- $R_{\square}$ – Total Reserve = $R_1 + R_2$
- Mineable depth below 100m contour - 40m.
- R_1 = 16,909,523.901
- R_2 = 29,520,004,608
- $R_{\square}$ = $R_1 + R_2$
- $R_{\square}$ = 16,909,523,901 + 29,520,004,608
- R_1 = 46,429,528,509 Tons

6.0 CONCLUSION

The total Granite Reserve of the Asuaba Granite Concession of Chrismay Enterprise Limited is 46,429,528.509 Tons. The deposit has a mine life of about 92 years with an average mining capacity of 500,000 Tons/year. It is hoped that this data will boost investor confidence of this enterprise which can greatly contribute to the enhancement of the supply of Granite aggregates and other related materials for the socio economic development of Ghana.

J.A. DUODU
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**ARROW
SHOWING
THE LOCATION
OF THE GRANITE
CONCESSION**



[illegible]

Signature: _____
 Name: _____

48 IN.
 LAPE LOAST
 Layer No. #21
 1/20/83...
 1100000 E
 APPROVED BY:
 [Signature]
 for Director of Resources
 Regional Highway, RM
 Date 12-06-2012



Panoramic view of the Granite deposit (Pic.1)

**Accessibility to
the proposed
quarry site — (Pic.2)**



Extension of Electricity- (From National Grid)

(Pic. 3)



**Asuaba village and
the re-asphalting
of the road - (Pic. 4)**

