

The Use of RTK GPS in Open Pit Survey – A Case Study at Gold Fields Ghana Limited, Tarkwa

Francis Mensah and Edward E. Duncan, Ghana

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SUMMARY

Planimetric control positioning and detail pick ups using the RTK GPS system is emerging as one of the fastest, reliable and more accurate method of surveying in surface mining. This paper seeks to highlight how the RTK GPS from Trimble is being employed at Gold Fields Ghana limited, Tarkwa Mine. The usage, problems, processing and efficiency of this system in a mining environment is also explored. It also looks at the level of accuracies provided by this system.

BIOGRAPHICAL NOTES

Biography of authors **F. Mensah** Holds a Diploma in Mine Surveying from the University of Science & Technology School of Mines, Tarkwa, Ghana. He is the Chief Surveyor at Gold Fields Ghana Limited. He has 14 years of field experience in Surveying. He worked with Tarkwa Goldfields as a Surveyor, Mutual Resources and Birim Goldfields as Chief Surveyor. He is a member of the Ghana Institution of Surveyors (GhIS) and is currently an MPhil student at the University of Mines and Technology, Tarkwa researching into GPS/GIS integration in Mine Waste disposal.

E. E. Duncan holds an MSc degree in Geomatics (Surveying) from the University of Glasgow, UK and a BSc degree in Geodetic Engineering from the University of Science and Technology, Kumasi, Ghana. He worked on a UNICEF mapping project of the Northern regions of Ghana in 1993 as a Surveyor. In 1996 he joined the UST School of Mines (Currently the University of Mines and Technology, UMaT) where he now lectures in GIS, GPS, Remote Sensing and Advanced Statistical Applications to Geomatics. He is currently affiliated to the Institution of Civil Engineering Surveyors, UK (ICES) and an academic member of the Federation of International Surveyors (FIG).

CONTACTS

Title: Mr. Francis Mensah
Chief Surveyor
Department of Mining/Geomatic Engineering
University of Mines and Technology
Post Office Box 237
Tarkwa
Ghana
Tel.: + 233 244 618125
Fax: + 233 362 20306
Email: francism@goldfieldsghana.com