



THE UNITED REPUBLIC OF TANZANIA
 PRIME MINISTER'S OFFICE
 TANZANIA INVESTMENT CENTRE

FILE BEGINS	ENDS	PART
FILE TITLE		FILE NUMBER TICC
CONFIDENTIAL		PP. 10 042428

INDEX HEADINGS

Officer or Section	For Action F/M	Initials	Date	Action taken vide F/M	Officer or Section	For Action F/M	Initials	Date	Action taken vide F/M	Officer or Section	For Action F/M	Initials	Date	Action taken vide F/M
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PART
 FILE NUMBER
 TICC
 PP. 10/042428

XUDICK MINERALS
CO. LTD

MINUTE SHEET

Ukezo
No.

1.0

Ag: EXD

The approved project has fulfilled the investment requirements, which are: -

(a) Minimum finance investment threshold has been exceeded, the project expects to invest US\$ 3.03 m

(b) Legal entity has been incorporated under certificate

No. 98177 of 28/02/2013

Based on the above, the letter of approval is hereby submitted for signature in order for the project to comply with the requirements of Section 17 of Tanzania Investment Act, 1997.

Submitted for signature.



N. Senzia

DIF

22nd April, 2013

MINUTE SHEET

Dokezo
No.

Unclaimed refund beyond three years will be forfeited



TANZANIA INVESTMENT CENTRE

Shaaban Robert Street, P.O. Box 938, Dar Es Salaam, Tel. +255 22 2116328-31, Fax: +255 22 2118253

RECEIPT REC013477

No. 007427

Received from : XUDICK MINERALS CO. LTD

Address P.O. Box 8086, Dar Es Salaam

Received the sum of (In words): ONE THOUSAND AND ZERO CENTS ONLY

Being payment in respect of : CERIFICATE OF INCENTIVES

Amount : USD 1,000.00

Cash / Cheque No: d/deposit 13/11

Date : 13-Nov-2013

BUISSO

Receiving Officer



Tanzania Investment Centre
Shaban Robert Street
P o Box 938
Dar es Salaam



Stanbic Centre
Plot No. 99A
Kinondoni Road / Ali Hassan Mwinyi
Road
Dar es Salaam
Fax: 2666301
Telephone: (255-22) 2666430

Date	Direct telephone Number	In reply please quote our reference	your reference
12 th November 2013	2666430	AB/CCC322/2013	

Dear Sir,

RE: XUDICK MINERALS COMPANY LIMITED

We, Stanbic Bank Tanzania Limited wish to confirm having an account in the name of:

1. **XUDICK MINERALS COMPANY LIMITED**– TZS account no. 9120001633153 and USD account no. 9120001639232 which was opened at our Centre Branch.

Nature of their business is **Exploration and exploitation of Minerals.**

Please note that this information is given in strict confidence without any liability or responsibility of either the bank or any of its officers.

Yours faithfully,



Susan K Magai,
Manager, Customer Care



Stanbic Bank Tanzania Limited

Directors:

H. Senkoro (Chairman / Non-Executive); N. Margwe (Non-Executive); G. Alliy (Non-Executive); Dr. H. Kibola (Non-Executive); K. Mbathi (Non-Executive); P. Omara (Acting Managing Director)

Company No. 98177

XUDICK MINERALS COMPANY LIMITED

P.O.BOX 8086

1308 – MWAYA (BAOBAB) STREET MASAKI

DAR ES SALAAM - TANZANIA

THE SPECIAL BOARD RESOLUTION OF XUDICK MINERALS COMPANY LIMITED PASSED ON 11.11.2013 IN THE REGISTERED OFFICE OF THE COMPANY SITUATED ON PLOT 1308 BAOBAB STREET MASAKI

Following the adequate preparations as required by TIC ACT 1997, and in line with our Investments in the Copper and Gold processing projects, we the undersigned Directors of XUDICK MINERALS COMPANY LTD entitled to receive notice of the Board meetings, DO HEREBY CERTIFY that we consented to the following resolution.

1. To authorise the company to apply for the Tanzania Investment Centre (TIC) Certificate of Investment in order for the company to access various incentives available in the Copper and Gold minerals processing sector.
2. To authorise the company equity funds in the tune of USD 3.03 million, to be used for the Investment purposes in the Copper and Gold processing projects.

RESOLVED:

To authorise the company to apply for TIC Certificate of Incentives for Investment in the Copper and Gold processing projects.

We further resolve to the authorisation of the company funds in the tune of USD 3.03 million to be the Capital expenditure on the Projects.

Certified by


.....
XU YIN
CHAIRMAN




.....
PAUL EMMANUEL
DIRECTOR



TANZANIA INVESTMENT CENTRE

REGISTRATION FORM

FOR

CERTIFICATE OF INCENTIVES

**(Tanzania Investment Act 1997, Section 17 and 18,
and the Investment Regulations:
Regulation 42, Government Notice No. 318A of 2002)**

Tanzania Investment Centre
9A & B Shaaban Robert Street
P. O. Box 938
DAR ES SALAAM
Tel. 022 2116328
Fax. 022 2118253
e-mail: information@tic.co.tz
Website: www.tic.co.tz

(Please fill the form in duplicate)

UNITED REPUBLIC OF TANZANIA

THE TANZANIA INVESTMENT ACT
(No. 26 of 1997)

APPLICATION FOR REGISTRATION
(Made under Regulation 42)

To: The Executive Director
Tanzania Investment Centre
P. O. Box 938
DAR ES SALAAM
Tanzania

1. I/We DICKSON MKONO
(director/directors/agent of XUDICK MINERALS COMPANY LTD
(name of business enterprise) apply for registration of CERTIFICATE OF INCENTIVES
under Section 17 of the Act and Part IV of the Investment Regulations, 2002.
2. The registered office of the company will be situated at UPANGA - DAR ES SALAAM

Copies of the following documents are attached to this application:

- (i) The Memorandum and Articles of Association/or partnership agreement
 - (ii) Certificate of Incorporation/Registration
 - (iii) A copy of the Project Profile or Feasibility Study showing the implementation period, programme of implementation and operative date
 - (iv) Evidence of financing and evidence of land ownership for the project
3. The Head Office of the Company will be situated at UPANGA DAR ES SALAAM
4. The Principal Officers of the Company are 1. YIN XU
2. DICKSON MKONO
5. Auditors of the Company are TO BE APPOINTED
6. The authorized share capital of the Company is Tshs./US\$ 10,000,000/-

7. The intended capital investment of the Company in terms of Section 2(2) of the Act is Tshs./US\$ 3,030,000/-

8. The month and day of the financial year end is 31 DECEMBER

Note: *failure to provide all the required information will result in the return of the application by the Centre.*

I/We enclose a cheque/cash made payable to the **Tanzania Investment Centre** for Tshs./US\$ 100 Being the Registration Fees. *In the event this application is unsuccessful we understand that this fee will not be refunded.*

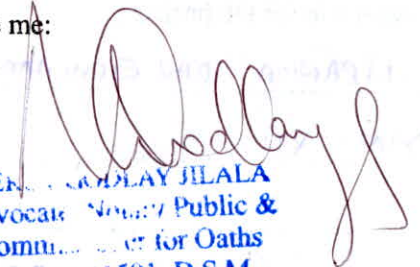
I, DICKSON MKONO of Post Office Number 8086 DSM

do solemnly and sincerely declare that I am a director/duly authorized agent of XUDICK MINERAL COMPANY LTD

AND that all the requirements of the Tanzania Investment Act, 1997 in respect of matters precedent to the registration of the business enterprise under the Act and incidental thereto have been complied with, **AND I** make this solemn declaration conscientiously believing the same to be true.

Declared at Dar es Salaam }
The 9 day of APRIL 2013 }


Applicant

Before me:

MENA... JILALA
Advocate, Notary Public &
Commissioner for Oaths
P.O.Box 11591, D.S.M.

Commissioner for Oaths

APPLICATION SUMMARY

Company Name: XUDICK MINERALS COMPANY LIMITED

Certificate of Incorporation Number: 98177 Status: NEW

Certificate of Incorporation Date: 28/03/2013

Post Box: 8086

Town: DAR ES SALAAM

Sector: MANUFACTURING

Sub-Sector: GOLD AND COPPER PROCESSING

Investment Financing Plan in Million US\$/Tshs.

Foreign Equity: 3.03 Local Equity: Foreign Loan: Local Loan:

Project Objectives: TO ESTABLISH A PROJECT FOR GOLD AND COPPER PROCESSING

Capacity: 1000 TONS/ANNUUM

Employment: Foreign: 5 Local: 43 Total: 48

Implementation Period: 3 YRS

Project Location

Site/Plot/Block No.:

Street: MPANDA District: MPANDA Region: MPANDA (Attach sketch map showing project location)

Table with 3 columns: Shareholders, Nationality, %

Investment Breakdown **US\$/Tshs.M**

Land/Building 900,000
Plant 1,200,000
Vehicles 800,000
Furniture & Fittings 90,000
Pre-expenses 40,000
Others
Working Capital 900,000
TOTAL 3,030,000/-

Contact Details:

Name: DICKSON MENDO Title: DIRECTOR

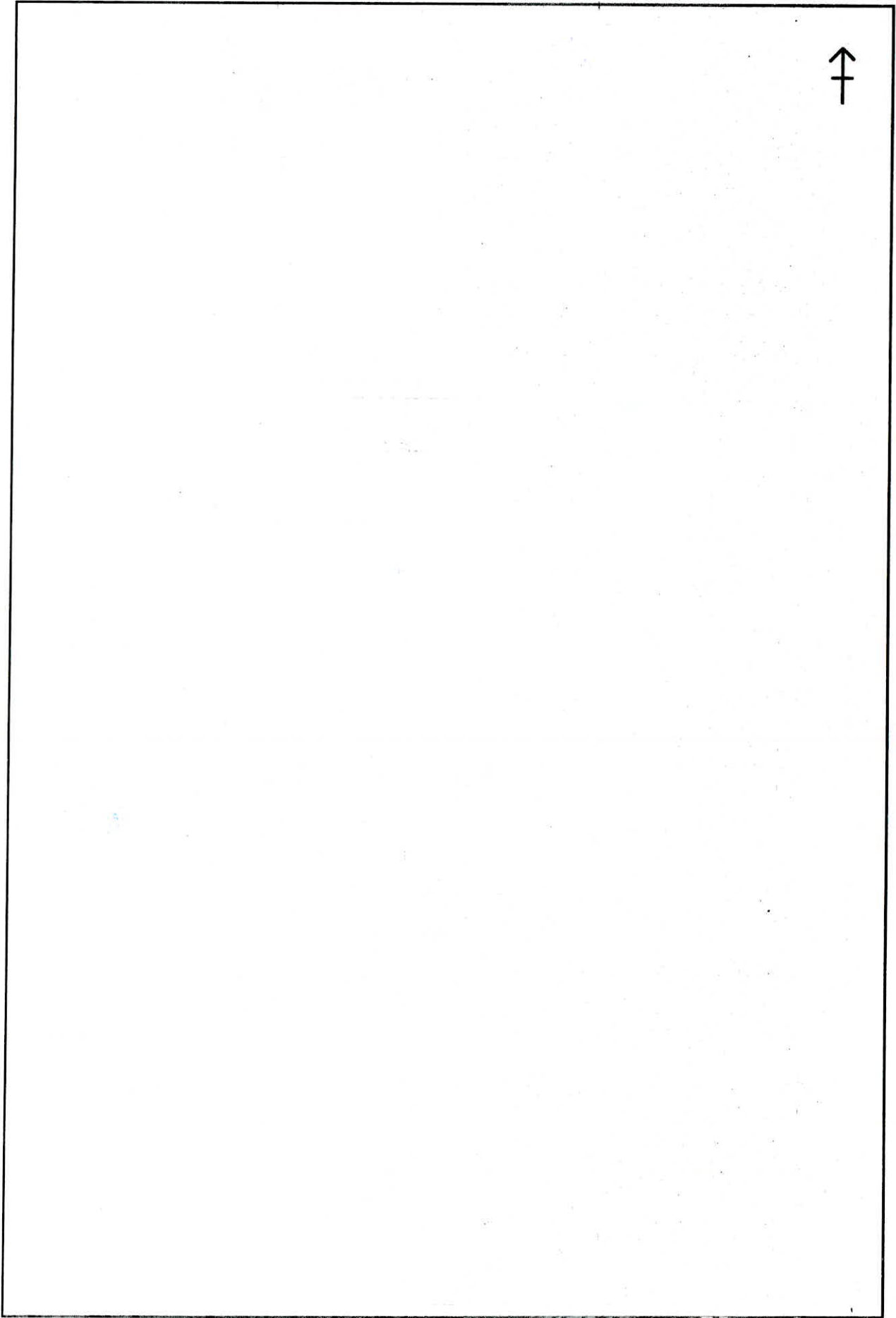
Telephone: 0716 537015 Fax:

Email:

Payments to be made payable to:

TANZANIA INVESTMENT CENTRE
STANDARD CHARTERED BANK TANZANIA LTD.
SWIFT ADDRESS: **SCBLTZTX**
ACCOUNT NO.: **8702006002000**

SKETCH MAP SHOWING PROJECT LOCATION



TANZANIA



Certificate of Incorporation

Section 15

No 98177

I HEREBY CERTIFY THAT


XUDICK MINERALS COMPANY LIMITED

.....

.....

is this day incorporated under the Companies Act, 2002 and that the Company is Limited.

Given under my hand at Dar es salaam

this 28TH day of MARCH**TWO THOUSAND AND THIRTEEN**

.....

Asst. Registrar of Companies

LEASE AGREEMENT

BETWEEN

GOLDEN STAR INTERNATIONAL MINERALS HOLDING (T) LTD

AND

XUDICK MINERALS COMPANY LTD

FOR LEASE OF PLOT NO. 74 BLOCK "C" MABWEPANDE AREA IN KINONDONI

MUNICIPALITY

DAR-ES-SALAAM, TANZANIA

1/11/ 2013



ORGANIZATIONS NAME

1

Warehouse Rental Contract

BETWEEN

GOLDEN STAR INTERNATIONAL MINERALS HOLDING (T)

LTD, the legal owner of the property located at plot no. 74

block "C" Mabwepande area in Kinondoni municipality

Hereafter referred to as the "Owner"

AND the LESSEE XUDICK MINERALS COMPANY LTD,

hereafter referred to as the "ORGANIZATION"

The following is agreed:

Article 1

By the present contract, the Owner agrees to rent to the

ORGANIZATION exclusive use of the warehouse facility,

comprising 1894sqm, located at plot no. 74 block "c"

Mabwepande area in Kinondoni municipality. The warehouse

and adjoining compound shall be rented empty and clean.

The ORGANIZATION has the right, should a need occur, to

erect temporary warehouse facilities (tents or containers) on

the warehouse premises next to the rented warehouse without

incurring any additional charges.

Xu Xin

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The Owner guarantees access to the warehouse 24 hours per day, 7 days per week.

(Note: When renting part of a warehouse, rent should reflect just the required space: the cost per square meter of the space being rented.)

Article 2

Total monthly rent is USD 220, payable at the end of the previous month. Rent includes the use of electricity and forklift(s) (add forklifts where). All other utilities, except electricity, shall be paid by the ORGANIZATION.

Article 3

The present contract is valid for three years (36 months), beginning 1/11/2013 and ending 1/11/2016. At the end of this period, the contract shall be extended automatically every six months, unless one of the parties terminates the contract, in which case the terminating party must provide a minimum of 30-90 days notice in writing to the other party. With the exception of Article 4 below, each party to the contract can terminate this agreement at the end of the first 36 months by giving a minimum of 30-90 days

Xu Xu

SAIX
1/11/16

written notice.

Article 4

In respect of unforeseen events, such as the closing of the Organizations' country representation, the forced reduction of its programs and/or personnel or similar events, the ORGANIZATION has the right to terminate the contract with 30 day's notice, even during the initial one-year-period of the contract.

Article 5

A. Throughout the duration of the contract, the Owner shall maintain the warehouse and adjoining compound in a state suitable for the purpose for which the facility is rented; i.e., to provide secure, dry storage of goods. This includes the provision of undamaged roofs, doors and walls.

B. Where the Owner does not fulfill the above-mentioned duties and damages are left unrepaired, the ORGANIZATION has the right to undertake the repairs and to charge the Owner the full cost of such repairs.

C. Security of the warehouse is the responsibility of

XUNICK MINERAL COMPANY LTD.

Xu Yin

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Article 6

A. The ORGANIZATION shall have no obligations whatsoever towards the Owner or local authorities for the payment of any taxes, fees and other fiscal duties originating from the ownership of the warehouse.

B. The Owner agrees to fulfill all duties towards the state, ensuring that the ORGANIZATION does not face any administrative problems in this regard. Disrespect of this clause will be considered as grounds for the immediate termination of the contract, and this without prejudice to the ORGANIZATION.

C. The ORGANIZATION has the right to sublease the warehouse to a third party, who is approved by the owner, until the end of the contract.

Article 7

The ORGANIZATION shall not be held responsible for the partial or total destruction of the warehouse, adjoining compound or enclosure as a result of natural or manmade disasters or an act of war. The Owner shall be responsible for insuring the warehouse property against all such risks.

Xu Yin

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Article 8

The Owner will insure the warehouse and surrounding compound against third-party damages (e.g., fire due to arson or an accident, damages due to water, etc.) for the duration of the contract and any subsequent renewals. The Owner shall carry, and provide proof of, liability insurance for injury or damages to the Organizations' personnel and /or goods due to negligence on the part of the Owner.

Article 9

Upon termination of the rental Agreement, the ORGANIZATION shall hand back the warehouse, forklift (where provided) and adjoining compound to the Owner in the same condition as initially rented, with the exception of minor deterioration commensurate with normal wear and tear.

Except for those cases covered by Article 5 B., no structural alterations will be made in and around the warehouse without prior written consent of the Owner and the ORGANIZATION. All such alterations shall belong to the Owner and shall not be undone or removed at the end of the contract.

Article 10

The present state of the warehouse, forklift (where one is provided) and adjoining compound has been jointly agreed to

Xu Yin

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in writing and countersigned by both parties; and is attached as an integral part of this contract.

Article 11

In the first instance, any dispute, controversy, or claim relating to this contract or the breach, termination or invalidity thereof, shall be settled amicable.

Where an amicable resolution is not possible, it shall be settled by arbitration according to the national jurisdiction governing commercial affairs in the country of TANZANIA Or (Choose one of the paragraphs.)

Where an amicable resolution is not possible, it shall be settled by arbitration, to the exclusion of national jurisdiction, in accordance with the TANZANIAN Arbitration Rules as at present in force. The parties agree to be bound by any arbitration award rendered in accordance with this paragraph as final adjudication of any such 3 disputes, claim or controversy. The place of arbitration shall be Geneva, Switzerland and the language of arbitration shall be English.

Article 12

A. Before this contract shall come into in force, the Owner shall present documentation demonstrating proof of ownership for the warehouse and an official letter signed by the relevant

Xu Yu

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local authorities proving the Owner's right to rent the facilities.

B. Should ownership of the warehouse change during the time that this contract is in force, the ORGANIZATION has the right to renegotiate the terms of the contract.

Article 13

Neither party shall be liable for any failure or delay in performing any of the obligations herein where such delay or failure is caused by strikes, lockouts, labor disputes, riots, civil commotion, acts or restraints of governments or any similar cause beyond the control of the party in question provided that such party shall: give immediate notice in writing to the other party of the existence of such causes or events and indicate the likelihood that a delay or postponement may take place, and has used its best effort to perform its obligations herein notwithstanding the existence of such causes or events.

The Owner shall not divulge, through advertising or any other means that it is or has been contracted by the ORGANIZATION. The Owner shall not use for any purpose whatsoever the ORGANIZATION name or logo without the express written consent of the ORGANIZATION it's designate. The contract is personal to the parties hereto and may not be assigned to a third party by either party without the

Xu Yin

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written consent of the other.No variation or amendment of the contract shall be binding on the parties unless confirmed by both in writing. Any notice to be given under the contract shall be in writing to the receiving party at its business address: as written on page one of this Agreement or as last notified in writing to the other party. Nothing in this contract shall be deemed a waiver, expressed or implied, of any privilege or immunity of the ORGANIZATION.This contract supersedes all prior agreements written and oral between the parties with respect to the subject matter of this contract.

For the ORGANIZATION

For the Owner

GOLDEN STAR INTERNATIONAL MINERALS HOLDING (T) LTD.



XUDICK MINERALS COMPANY LTD


MR. XU YIN (GOLDEN STAR INT'L)


MR. HUAREN XU (XUDICK MINERALS)



PLOT NO. 74 BLOCK "C" MABWEPANDE AREA IN
KINONDONI MUNICIPALITY

LEGAL SEAL



A handwritten signature in blue ink, appearing to be "Nelima Susan Tarvin", written over the right side of the circular seal.

01/11/2013

A partial circular blue ink stamp on the right edge of the page, showing the words "RALS H" and "INGS" in a curved arrangement.

(4)

GENERAL MEETING OF SHAREHOLDERS

HELD ON 5th April 2013

Agenda

- i) Registration with Tanzania Investment Centre
- ii) AOB

At 10.00 a.m. on April 5th 2013 the shareholders of **M/S MS. XUDICK MINERALS COMPANY LIMITED** held a meeting to discuss the agenda above. It was unanimously agreed that **M/S MS. XUDICK MINERALS COMPANY LIMITED** would register with Tanzania Investment Centre for Project of gold and copper processing.

There being no other business to discuss. The meeting was closed at 10.30 a.m.

Yin Xu

.....
Yin Xu
Chairman

Dickson Mkono

.....
Dickson Mkono
Secretary

3

TICC/PP.10/042428/3

22nd April, 2013

Managing Director,
Xudick Minerals Co. Ltd.,
P.O. Box 8086,
KATAVI

**RE: CERTIFICATE OF INCENTIVES FOR INVESTMENT IN THE
ESTABLISHMENT OF PROJECT FOR GOLD AND COPPER PROCESSING**

We wish to acknowledge receipt of your project proposal to establish project for gold and copper processing as presented in the TIC P.A. 1 Form No. 10970 and Feasibility Study with a projected investment of USD 3.03m.

We have studied your project proposal and are pleased to inform you that your investment proposal is now officially registered and therefore your project will be granted a CERTIFICATE OF INCENTIVES, given under authority conferred upon TIC under Part III, Section 17 (1-8) of the Tanzania Investment Act, 1997. In order to enable TIC prepare your Certificate of Incentives, You will be required to submit the following:-

- Company Board Resolution accompanied by Bank Reference for equity funding or a letter from Bank/Financial Institution that a loan is granted or is under consideration as required by Section 17(3) (f) of Tanzania Investment Act,1997.
- Certified document showing evidence of Land ownership for the location of the project.

You will also be required to submit to the Centre a Progress Report on the implementation of the project after every six months for our information and review. Guidelines for the preparation of the report are contained in annexure 2 also attached to this letter. Please do not hesitate to contact the Centre for any clarification if the need arises. Please also note that a facilitation fee equivalent to US\$ 1000.00 is payable at the ruling exchange rate before your Certificate of Incentives is prepared. Please make deposit direct to the bank as per bank details below:-

.../2

TICC/PP.10/042428/3

22nd April, 2013

*Tanzania Investment Centre
Standard Chartered Bank(T) Ltd
US Dollar A/C 8702006002000
T.Shs A/C 0102006002000*

We wish you every success in the implementation of the project.

Yours sincerely,
TANZANIA INVESTMENT CENTRE


B.D. Chonjo

For: EXECUTIVE DIRECTOR

Copy to: Permanent Secretary,
Ministry of Finance,
P. O. Box 9111,
DAR ES SALAAM

Permanent Secretary,
Ministry of Industry, Trade and Marketing,
P.O. Box 9503,
DAR ES SALAAM

Commissioner General,
Tanzania Revenue Authority,
P. O. Box 11491,
DAR ES SALAAM

2



TIC Evaluation Report

Name of the Company
Xudick Minerals Co. Ltd.

Post Box	Mpanda	COI Number	98177	Contact	Mr. Dickson Mkono
Post Office	8086	COI Date	28/03/2013	Designation	Director
Region	Katavi	Application F. No	10970	Phone	0
Country	Tanzania	Status	New	Direct Phone	0
		Sector	Manufacturing	Cell Phone	0716 537015
		Sub Sector	Gold And Copper Processing	Fax	0
		File No	042428	E-Mail Address	0

Project Location		Investment Finance Plan in Millions USD										
Plot/Block	0	<table border="1"> <tr> <th>Foreign Equity</th> <th>Local Equity</th> <th>Foreign Loan</th> <th>Local Loan</th> </tr> <tr> <td>3.03</td> <td>0</td> <td>0</td> <td>0</td> </tr> </table>	Foreign Equity	Local Equity	Foreign Loan	Local Loan	3.03	0	0	0		
Foreign Equity	Local Equity		Foreign Loan	Local Loan								
3.03	0		0	0								
Street	0											
District	Mpanda											
Region	Katavi											

Shareholders Detail			Investment Breakdown (USD Million)	
Name	Nationality	(%)	Land/Building	0.9
Dickson Mkono	Tanzanian	25	Plant	1.2
Yin Xu	Chinese	75	Vehicles	0.8
			Furniture & Fittings	0.09
			Pre-expenses	0.04
			Others	0
			Working Capital	0
			Total	3.03

Employment	48	Evaluated By	wf officer4
Capacity	1000 tons pa.	Drawn By	wf regist3
Project Turn Over		Project Type	Foreign

Description
To establish project for gold and copper processing

Recommendations
Be approved subject to providing evidence as required by section 17 of Tanzania Investment Act, 1997

Decision
Approved as recommended
by ExD
17/4/2013

XUDICK MINERALS COMPANY LIMITED

①

Ref.No: XML/TIC/Apr/2013

8TH April 2013

The Executive Director,
Tanzania Investment Centre,
P.O. Box 938,
Dar es Salaam.



Dear Sir,

RE: APPLICATION FOR TIC CERTIFICATE OF INCENTIVES

We are incorporated company created for purposes operating Gold and Copper processing Project. The Proposed project will be in Mpanda region . It is due to this reasons that we hereby submit our application for TIC Certificate of Incentives to facilitate implementation of the project.

Attached herewith please find the following basic documents for you kind approval:

1. A completed and signed application form
2. A copy of our certificate of Incorporation
3. A copy of the Company's Memorandum and Articles of Association
4. A certified copy of Title deed.
5. Company Board Resolution to register with TIC
6. A copy of our Feasibility study showing the implementation Period,

Thank you for your kind consideration

Yours Sincerely,

A handwritten signature in dark ink, appearing to read 'Dickson Mkono', written over a dotted line.

DICKSON MKONO



TANZANIA



Certificate of Incorporation

Section 15

No 98177

I HEREBY CERTIFY THAT

XUDICK MINERALS COMPANY LIMITED

.....

.....

is this day incorporated under the Companies Act, 2002 and that the Company is Limited.

Given under my hand at Dar es salaam

this 28TH day of MARCH**TWO THOUSAND AND THIRTEEN**

.....

Asst. Registrar of Companies

THE COMPANIES ACT 2002
COMPANY LIMITED BY SHARES
MEMORANDUM AND ARTICLE
OF
ASSOCIATION
OF
XUDICK MINERALS COMPANY LIMITED

Incorporated at this..... day of.....2013

Drawn by:
Mr Dickson Mkono (Subscriber)
P.O Box 8086
Dar Es Salaam
Tanzania

TANZANIA
Stamp Duty Shs. PAID ON ORIGINAL
Receipt No. 33021
28/3/13
Stamp Duty Officer

THE COMPANIES ACT 2002
COMPANY LIMITED BY SHARES
MEMORANDUM OF ASSOCIATION

TANZANIA
Stamp Duty Shs. PAID
Receipt No. 33021
28/3/13
Asst. Registrar of Companies

OF
XUDICK MINERALS COMPANY LIMITED

1. The name of the company is **XUDICK MINERALS COMPANY LIMITED**
2. The Registered office of the Company will be situated in The United Republic of Tanzania
3. The objects for which the company is established are:
 - a. To carry on the business of mining all kind of minerals, gemstones, diamonds and gold dealer in mines and prospectus make research prospecting sale and exporters of all dealership, including marketing and promotion of gold mines and other mines, mineral contractors and/or exchanges, taken on lease or otherwise acquire any mines, mining licence or right protected areas, ores, emeralds, diamonds, copper, gemstone, tantalite, titanium, industrial minerals, rubies and smelt, amalgamate, manipulated and otherwise treat gold, ores, metals, emeralds, rubies and other precious and semi stones or other valuable substances there from or prepare, render and make them fit for markets locally and international level.
 - b. To carry on all or any of the wholesale and/or retail as gemstones merchants, jewellers and or dealers in and/or buy, sell market import, export, and/ or general deal in all or any kinds of gemstones precious and semi-precious metals of whatsoever kind of description.
 - c. To carry on the business of real estate development, real estate management and related businesses.

- d. To carry on the business of agribusinesses
- e. To carry on the business of importers and sellers of motor vehicles, property and liabilities of any person, firm or company carrying on any business which the Company is authorised to carry on, or possess property suitable for the purpose of this company.
- f. To construct or otherwise set up, manage, maintain and operate cargo handling equipment, set up Warehousing services, train Cargo handling experts and set up Cargo handling educational institutions.
- g. To carry on the business of motor vehicles garage and repairing and servicing of all types of motor vehicles and machinery and the business as dealers, wholesalers, retailers, distributors, agents, importers and exporters of hardware, motor vehicles, cycles and its spares, agriculture and industrial machineries and spares, electrical machinery, accessories and spares of all kinds.
- h. To transact any and every description of agency, commission, commercial, industrial, manufacturing, mercantile and financial business, and to carry on the business of clearing and forwarding agents, stockists, importers, retailers and wholesalers, transporters of passengers and goods, motor cars, buses, coach proprietors and carriers, boat owners, ship owners, and amusement carriers.
- i. To carry on the business of Computer Networking, computer Hardware and software sales and service, Computer Consultancy, Computer bureau, System analysis and Design, Software program development, Sales of Computer stationers, consumable and accessories and to carry on any other business related to computers and Information Technology.
- j. To carry on business as an extremely strong Information Technology support organization that can provide twenty-four hours, seven days per week Information Technology support coverage

- k. To carry on business as providers of computer services bureaus to support the various applications sold and supported by the Company.
- l. To carry on business as providers of all services relating to cabling installation and support, Network LAN and WAN designs, fast Internet down line loads and full range of HP computer solutions
- m. To carry on business as consultants and experts in all matters relating to information Technology solutions in all their ranches.
- n. To carry on business of supplying installing and servicing all kinds of hardware and software of whatever description.
- o. To carry on and deal in the business of pharmaceuticals, medical preparations, chemicals, animal feeds manufacturing, making and assembling of machines equipment, plants, vessels, devices, of all description using modern technology appropriate and applicable to veterinary and agricultural industries.
- p. To engage in, conduct in and between any and all the regions and districts in Tanzania, neighbouring countries and other foreign countries, as agents or otherwise, the business of general trucking, forwarding, cartage, storage, warehousing, consolidating, distributing, wharface, contracting, loading, unloading and stevedore business and to conduct as general brokerage commission and customs house, brokerage service business and to handle and foreward for transportation by air highway, water and rail, road between cities, towns, villages and other places in various parts of the world, person bills, notes, packages merchandise, luggage, goods, wares, parcels and other movable and personal property over and on such liens and routes as may from time to time exist and generally to act as agents for land and estate, brokers, chatterers, auctioneers, clearing and forwarding agents, insurance agents and agency in all its respective branches

- q. To purchase, own or otherwise acquire lands, real property, easements, rights and other property, real or personal for the purpose and conducive to the objects of the Company including farming, horticulture, all kinds of agricultural produce for processing and export
- r. To carry on business of petrol stations and deal in petrol, diesel, oil, kerosene, mineral oil, crude oil, lubricating oil, grease and/or fuel oil of all kinds and all other kind of mineral and petroleum products as importers, dealers or distributors and servicing and repairing of vehicles of all types generally.
- s. To carry on the business as agents consultants or representative of overseas or local manufacturers, industrialists importers local retailers on brokerage and commission basis or other like organisation any type of goods, products or commodities.
- t. To transact any and every description of agency, commission, commercial, industrial, manufacturing, mercantile and financial business, and to carry on the business of clearing and forwarding agents, shopping agents, commission agents, customs agents, provisional merchants, stockists, importers, retailers and wholesales, transporters of passengers and goods, motorcars, omnibuses and coach proprietors and carriers, boat owners, ship owners, amusement carriers and job masters
- u. To enter into arrangements with any Government or authorities (supreme, municipal local or otherwise) or any corporations, companies or persons having objects that may seem conducive to the Company's objects or any other them, and to obtain from any such government, Authority, Corporation, Company or person, any charters, contracts, decrees, rights, privileges and concessions which the company may think desirable, and to carry out, exercise and comply with any such charters, contracts, decrees, rights privileges and concessions
- v. To enter into partnership or any arrangements for sharing profits, union or interests, Co-operation, joint venture

reciprocal, concession, or otherwise with any persons firm or company carrying on or engaged in or about to carry on, or engage in or any business or transaction which this Company is authorised to carry on, or engage in or any business or transaction capable of being conducted so as directly or indirectly to benefit this Company. And to lend money to, guarantee the contracts of, or otherwise acquire shares and securities of any such company and to sell, hold, reissue with or without guarantee, or otherwise deal with the same

- w. To act as agents, or brokers and as trustees for any person or Company and to undertake and perform sub-contracts and to do all or any other above business in any part of the world, and either as principals, agents, trustees, contractors or otherwise, and either alone or jointly with others and either by or through agents, sub-contractors trustees or otherwise
- x. To carry on the business of importers of motor vehicles, spare parts, electrical goods of various kinds, machinery, computers, calculators, metals, refrigerators, air conditioners, cookers, textiles, building materials, industrial
- y. To carry on any other business in Tanzania or elsewhere whether planting, growing, producing, mining, industrial manufacturing, merchanting, or otherwise which can in the opinion of the board be advantageously or conveniently carried on by the Company in the main or by way of extension or in connection with any such business as aforesaid or as calculated directly or indirectly to develop any branch of the Company's business or increase the value or turn to account any of the Company's assets, property or rights
- z. To engage in conduct and between any and all the regions and districts in Tanzania, neighbouring countries and other foreign countries, as agents or otherwise, the business of general trucking, forwarding, cartage, storage, warehousing, consolidating, distributing, wharfage. Contracting. Loading, unloading and stevedore business and to conduct as general

brokerage commission and customs house, brokerage service business and to handle and forward to transportation by air, highway, water and rail, road between cities, towns, villages and other places in various parts of the world person, bills notes, packages merchandise, lug gages, goods, wares, parcels and other movable and personal property over and on such lines and routes as may from time to time exist and generally to act as agents for land and estate, brokers, charters, auctioneers, clearing and forwarding agents, insurance agents and agency in all its respective branches

- aa. To carry out the business of property developers and real estate agents and to act as promoters, designers, planners, developers, builders. Constructors, renovators decorators, landscapers owners buyers sellers, lesser and lessees of residential houses, public office bocks, apartments houses, leisure parks, leisure centres, factories, industrial buildings, warehousing, depots, go-downs, park lots, shelters of all kinds and buildings of all types and to carry on the business of land use developers, town planners, designers land and estate agencies and project promoters
- bb. To carry on the business as wholesalers, retailers, importers, exporters, agents of dealers and distributors of all types of merchandise
- cc. To purchase and sell, import and export electronic equipment e.g. computers and accessories, modems, printers, fax machines, Internet services in whatever forms as is provided within the laws of the land.
- dd. To carry out the business of computer networking, network maintenance and systems integration including system upgrades, hardware and software installations, network bridging and segmenting, creation of virtual private networks.
- ee. To carry out the business of providing consultancy services to both locally and internationally, including

setting up of other businesses and providing business plans and models to them.

- ff. To carry on the business of farmers and agriculturalists generally land in particular as importers, exporters and breeders of cattle, sheep, horses and other livestock and as ranch owners, dairymen, market gardeners, horticulturalists, beekeepers seed growers, poultry farmers, butchers and meat, vegetable and fruit preservers
- gg. To manufacture, buy, sell, maintain, repair and deal in vehicles, plant, machinery tools, articles or any of them likely to be required by customers of or persons having dealings with the Company.
- hh. To transact business as capitalists, promoters and hire purchase and to negotiate loans of every description with financial and monetary agents both in Tanzania and elsewhere.
- ii. To borrow or raise or secure the payment or money by bank overdrafts by mortgage or by the issue of debentures or debenture stock, perpetual or otherwise or in such other manner as the company's property or assets present and future including its uncalled capital and collaterally or the company by a trust deed or other assurance.
- jj. To indemnify members, officers, directors, agents and servants of the company against proceedings costs, damages, claims and demands in respect of anything done or ordered to be done by them for and in the interest of their company or for any loss, damage or misfortune whatsoever, which shall happen in the execution of the duties of their office or in relation thereto unless the same happens through his own negligence or dishonesty or wilful default.
- kk. To acquire and undertake the whole or any part of the business, goodwill, and assets of any person, firm, or company carrying on or proposing to carry on any of the business which the company is authorised to carry on

and as part of the consideration of such acquisition to undertake all or any of the liabilities of such person, firm or company, or for co-operation

- ll. To lend and advance money or give credit on such items as may seem expedient and with or without security to customers and others, to enter into guarantees, contracts of indemnity and surety ships of all kinds, to receive money on deposit or loan such terms as the Company may approve and to secure or guarantee the payment of any sums of money or the performance of any obligation by any company, firm or person including any patent, subsidiary or fellow subsidiary company in such manner as the Company may think fit
- mm. To buy, sell, deal in import, export, manufacture, treat, cure, bottle, can or otherwise prepare for market any animal, vegetable or agricultural produce, mines or other commodities; and to undertake the management of any estates farms, factories mines, mills, or other undertakings and the purchase or sale of all or any of farm produce thereof.
- nn. To apply for, promote, and obtain any Act of Parliament, Provisional Order, Licence of the Business Registration and Licensing Agencies Ministry of Trade and Industries or other authority for enabling the Company to carry any of its objects into effect, or for effecting any modification of the Company's constitution, or for any other purpose which may seem calculated directly or indirectly to prejudice the Company's interests
- oo. To subscribe for, take, purchase, or otherwise acquire and hold shares or other interests in or securities of any other company having objects altogether or in part similar to those of the Company or carrying on any business capable of being carried on so as directly or indirectly to benefit the Company or enhance the value of any of its property and to co-ordinate, finance and manage the businesses and operations of any company in which the company holds any such interest.


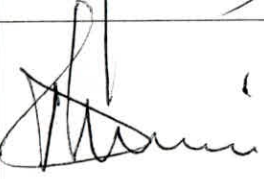
- pp. To sell or otherwise dispose of the whole or any part of the business or property of the Company, either together or in portions, for such consideration as the Company may think fit, and in particular for shares, debentures, or securities of any company purchasing the same
- qq. To procure the company to be registered or recognised in any part of the world.

And it is hereby declared that:

- a) The objects set forth in each sub-clause of this shall not be restrictively construed but the widest interpretation shall be given thereto, and they shall not, except where the context expressly so requires, be in any way limited or restricted by reference to or inference from, any other or objects set fourth in such sub-clauses or the objects therein specified or the powers thereby conferred shall be deemed subsidiary or ancillary to the objects conferred by and provided in each of said sub-clauses, except where used in reference to the Company.
 - b) The "Company" in this Clause, expect where used in reference to the Company, shall be deemed to include any partnership or other body of persons whether incorporated or unincorporated and whether domiciled in Tanzania or elsewhere
- 4. The liability of the members is limited.
 - 5. The share capital of the Company is Tanzania shillings 10,000,000 divided into 10,000 ordinary shares of Tanzania Shillings 1,000 each and the Company shall have power from time to time to increase or reduce its capital and to divide the shares in the original capital or increased capital into several classes of shares and to attach thereto respectively any preferential or deferred, qualified or special rights, privileges and conditions, And it is hereby declared that in the interpretation of this clause the powers conferred on the Company by any paragraphs shall not be restricted by reference to any other paragraph or to the name of the Company or by the juxtaposition of two or

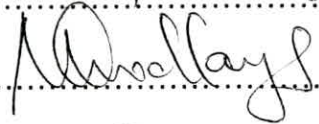
more objects and that, in the event of any ambiguity this clause and every paragraph hereof shall be construed in such a way as to widen and not to restrict the powers of the Company.

We, the several persons whose names, addresses and descriptions are desirous of being formed into a Company, in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names

NAMES, ADDRESS AND DESCRIPTIONS OF SUBSCRIBERS	NUMBER OF SHARES TAKEN BY EACH SUBSCRIBER	SIGNATURES OF SUBSCRIBERS
YIN XU P.O. Box 8086 DAR ES SALAAM	7500	
DICKSON MKONO P.O. Box 8086 DAR ES SALAAM	2500	

Dated at D.S.M. this 27th day of March 2013

WITNESS to the above Signatures:

Name : MERCY G. JILALA
 Signature : 
 Address : Box 11591
 Postal Address : D.S.M.
 Qualification : ADVOCATE

MERCY GODLAY JILALA
 Advocate, Notary Public &
 Commissioner for Oaths
 P.O.Box 11591, D.S.M.

TANZANIA
Stamp Duty Shs
PAID ON ORIGINAL
Receipt No. 3302/2813
Stamp Duty Officer

THE COMPANIES ACT 2002
COMPANY LIMITED BY SHARES
ARTICLES OF ASSOCIATION
OF
KUDICK MINERALS COMPANY LIMITED

TANZANIA
Stamp Duty Shs
PAID ON ORIGINAL
Receipt No. 3302/2813
Asst. Registrar of Companies

PRELIMINARY

1. In these regulations:-
"The Act" means the Companies Act 2002 of the Laws of Tanzania.

When any provision of the Act is referred to, the reference is that provision is as modified by any law for the time being in force.

Unless the context otherwise requires, the expressions defined in the Act or any statutory modification thereof in the force at the date at which these regulations become binding on the company, shall have the meaning so defined.

Any words importing the singular shall include the plural and vice versa, and words importing the masculine gender shall include females, and the words importing persons shall include bodies corporate, partnership, firms, cooperatives, societies, etc.

The regulations of Companies Act shall not apply to the company, save in so far as they are varied or excluded hereby, but in case of any conflict between the provisions herein, and the provisions under this regulation the former shall prevail, and in addition to substitution shall be the regulations of the company.

PRIVATE COMPANY

2. The Company is a Private Company and accordingly:-
 - (a) The right to transfer shares is restricted in manner hereinafter prescribed.
 - (b) The number of members of the company (exclusive of persons who are in the employment of the Company and of persons who have been formerly in the employment of the company were while in such employment to be the

member of the company) is limited fifty, provided that where two or more persons hold one or more shares in the company jointly they shall for the purpose of this regulation be treated as a single member.

- (c) Any invitation to the public to subscribe for any shares or debentures of the Company is prohibited.
- (d) The Company shall not have power to issue share warrants to bearer.

TRANSFER OF SHARES

3. **The Directors may in their direction and without assigning any reason thereof refuse to register the transfer of any share to any person who it shall in their opinion be undesirable for any reason whatsoever to admit to membership.**

4. Subject to clauses 2 and 3 hereof the right to members to transfer their shares shall be restricted as follows;

(a) No share shall be transferred to a person who is not a member so long as any member of any person selected by the Directors as one who it is desirable in the interest of the Company to admit to membership.

(b) Every shareholder or trustee in bankruptcy, or any person who may desire to sell or transfer any such shares and every personal representative of a deceased shareholder shall give notice in writing to the Directors that he desires to make such sale or transfer. Such notice shall constitute the Board of Directors of the Company as his agent for the sale of the said shares to any member or members of the company at the price to be agreed upon between the party giving such notice the party and the board, or in case of difference to be determined by the Auditor of the Company.

(c) Upon price of such shares being agreed on as determined as per clause (b) above, the board shall forthwith give notice to such of the shareholders other than the shareholders desiring to sell or transfer the said shares, stating the number and price of such share inviting the person to whom notice is sent to state within 21 days from the date of such notice whether he is willing to purchase

any, if so what maximum number of such shares. At the expiration of such days 21 notice the board shall apportion such shares amongst the shareholders (if more than one) who shall have expressed their desire to purchase number of shares already held by them respectively, or if there be only one such shareholder, that the whole of such shares shall be sold to him, provided no shareholder shall be obliged to take more than the maximum number of such shares stated in his answer to the said notice.

Upon such apportionment being made or such one shareholder notifying his intention to purchase, as the case may be, the party desiring to sell or transfer such shares shall be bound upon payment of the said price to transfer the shares to the respective shareholders or to single shareholder who shall have agreed to purchase the same.

5. **GENERAL MEETINGS: NOTICE OF GENERAL MEETING AND PROCEEDINGS OF THE GENERAL MEETINGS.**

The regulation of Companies Act shall apply to the following variations:-

- (a) A General Meeting, Ordinary or Extraordinary may with the consent in writing of all members, be convened on a shorter notice than seven days or without notice.
- (b) Two members, present either personally or by proxy shall form a quorum.
- (c) Any ordinary resolution of the company determined without any general meeting and evidenced by writing under the hands of majority of the Directors and of the members of the company holding three - fourths of the issued shares of the company shall be valid and effectual as an ordinary resolution duly passed at a general meeting of the company.

6. **DIRECTORS**

- (a) Until otherwise determined by the company in General Meeting the Directors shall not be less than two and not more than seven in number.
- (b) The following persons shall be the first Directors of the company:-
 - 1. **YIN XU**
 - 2. **DICKSON MKONO**

7. The shareholding qualification for Directors may be fixed by the company in General Meeting, and unless and until so fixed no qualification shall be required.
8. The quorum of Directors for transacting business shall, unless otherwise fixed by the Directors, be two.
9. A resolution in writing signed by all the Directors then in Tanzania shall be as valid and effectual as if it had been passed at a meeting of Directors duly called and constituted.
10. The Directors may from time to time borrow or raise any money for the purposes of the Company which may exceed the issued share capital of the company.

BORROWING POWERS

The Directors may from time to time in their discretion raise or borrow for the purpose of any Company's business such sum or sums of money as they think fit.

11. The Directors may secure the repayment of or raise any such sum or sums as aforesaid by mortgage or charge upon the whole or any part of the property and assets of the Company present or future including its uncalled capital for the time being, or by the issue at such price as they may think fit, of bonds or debentures either charged upon the whole or any part of the property and assets of the company or not so charged or in such other way as the Directors may think expedient.

VOTE OF MEMBERS

12. On a show of hands every member present in person shall have one vote. On a roll every member shall have one vote only for the shares of which he is holder.
13. No member shall be entitled to vote at any general meeting unless all calls or other sums presently by him in respect of shares in the Company have been paid.

DISQUALIFICATION OF DIRECTORS

14. The office of a Director shall be vacated if the Director;
- (a) becomes bankrupt; or
 - (b) is found to be a lunatic or becomes of unsound mind;
or
 - (c) resigns his office by notice in writing to the Company;
 - (d) abstains himself from meetings of the directors for a period of six months without special leave of absence from the other Directors.

SEAL

15. The Directors shall provide for the safe custody of the Seal. The Seal of the Company shall not be affixed to any instrument except by the authority of a resolution of the Board of Directors and in the presence of at least two Directors or a Director and Secretary or other person as aforesaid shall sign every instrument to which the seal of the Company is so affixed in their presence.

ALTERNATE DIRECTORS

16. Any director shall have power to nominate any person to act or attend as alternate Director during his absence or during his inability so to act. Such Director shall be subject in all respects to the terms and conditions existing with reference to the other Directors and such Alternate Director shall exercise and discharge all the duties of Director whom he represents.
17. Unless otherwise decided by the Directors the quorum necessary to transact business of the Directors shall be two Directors personally present.

SECRETARY

18. The Secretary shall be appointed by the Board for such terms at such remuneration and upon such condition as it may think fit, and any Secretary so appointed may be removed by the Board.

WINDING UP

19. With the sanction of a special resolution of the shareholders any part of the assets of the Company including any shares in other Companies may be divided between the members of the Company in special or may be vested in Trustees for the benefit of such members and the liquidation of the company may be closed and the company dissolved but so that no member shall be compelled to accept any shares whereupon there is any liability.

ALTERATION OR ADDITION

20. Subject to the provisions of the Act and to those contained in the Memorandum of Association the Company may by Special Resolution make alteration or addition so made shall be as valid and effectual as if originally contained in those articles and be subject in like manner to alteration by Special Resolution.


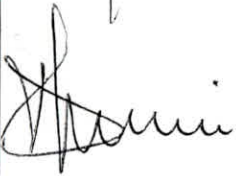
INDEMNITY

21. Every Director, Managing Director, Agent, Auditor, Secretary and other Officer for the time being of the Company shall be indemnified out of the Assets of the Company against any liability incurred by him in defending any proceedings, whether civil or criminal in which judgement is given in his favour or in which he is acquitted or is in connection with any application in which relief is granted to him by the Court.

ARBITRATION

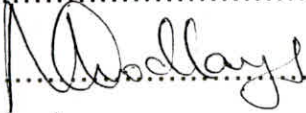
22. If and whenever any dispute or difference shall arise between the Company and any of the members or their respective representatives touching upon the construction or meaning of any of the Articles herein contained or any act matter or thing made or done or omitted to be done or with regard to the rights or liabilities arising here under or arising out of the relation existing between the parties by reasons of these Articles or the Act, such differences shall (unless a sole arbitrator be agreed upon) forthwith be referred to the arbitration of three 3) arbitrators, one to be appointed by each party and the third to be appointed by the first two or, in the event of failure to agree within (Cap. 15) or any then existing statutory modifications or re-enactment thereof shall apply.

23.

NAMES, ADDRESS AND DESCRIPTIONS OF SUBSCRIBERS	NUMBER OF SHARES TAKEN BY EACH SUBSCRIBER	SIGNATURES OF SUBSCRIBERS
YIN XU P.O. Box 8086 DAR ES SALAAM	7500	
DICKSON MKONO P.O. Box 8086 DAR ES SALAAM	2500	

Dated at DSM this 27th day of March 2013

WITNESS to the above Signatures:

Name : MERCY - G. JILALA
Signature : 
Address : DSM
Postal Address : 11591 DSM
Qualification : ADVOCATE

MERCY GODLAY JILALA
Advocate, Notary Public &
Commissioner of Oaths
P.O.Box 11591 DSM

FEASIBILITY STUDY

FOR

MS. XUDICK MINERALS COMPANY LIMITED

GOLD AND COPPER PROCESSING PROJECT

PREPARED BY

MS. XUDICK MINERALS COMPANY LIMITED

Dar es Salaam

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1.0 INTRODUCTION

1.1 Foreword

The Tanzania Government is emphasizing p on its long – term industrial plan of strengthening the metal and engineering sub- sector in the country.

The private sector has also been paying a vital role in the development of this basic industry, mainly by establishing service- oriented engineering workshops which provide maintenance and repair services.

The National demand was established to be more than 400,000 tons per annum .Indications that the demand is increasing fast and is now closed to 700,000 tons per annum

One of the basic necessities for the establishment of this basic industry is the availability of an adequate local market for its output. It is rational for local Governments, therefore , to encourage and promote the growth of the local engineering sub- sector which will ultimately consume the local based copper & iron and steel industry's output. A recently established local firm, **MS. XUDICK MINERALS COMPANY LIMITED** has realized the potential this country has in terms of steel scrap, Copper and steel products markets. It is now contemplating putting up a complex that will refine steel and copper to produce various types of goods.

1.2 Objective of Study

The purpose of this feasibility study is to work out the technical and commercial details and financial viability for the establishment of Melting / refinery facilities for Copper and metal products for various and users such as civil work construction and engineering works.

1.3 Project Promoters

The proposed copper and steel mill is being promoted by a locally registered company namely **MS. XUDICK MINERALS COMPANY LIMITED** of P.O Box 8086, Dar es Salaam

Name of Director	Percentage Share	Nationality
Yin Xu	75	CHINESE
Dickson Mkono	25	TANZANIAN

2.0 EXECUTIVE SUMMARY

2.1 Introduction

This study examines the possibility for the establishing a Melting facilities for Copper and metal to produce copper bars and Various metal products by using induction furnace and hot rolling technologies and locally available metal products and imported copper from Zambia . A techno- economic evaluation has been carried out to determine the viability of the project idea.

2.2 Market and Marketing Aspect

The market survey carried out reveals that he demand for steel and copper products raising rapidly.

The survey concludes that the proposed production of about 4,800 tons of Metal copper products per annum will not face any market problems.

2.3 Process and Technology

There are various methods for Smelting/ Refining copper and metal. The most widely used method is the basic process. The method for iron smelting is of two type's .This includes the converted and the heath methods. The electric methods fall under the heath method and employ electricity as the energy for melting the inputs.

Two methods are used, namely the arc furnace and induction furnace. The former uses electrodes for current circulation while the latter used frequency. The proposed project will employ the induction method, a method which is more economical for high quality steel.

The process involved sorting out the crucible of the furnace, heating and melting it and finally pouring the liquid steel into moulds where they solidify. Thereafter the ingots are reheated to even internal temperatures and then hot- rolled .The requisite machinery for the production include

a 4 tone charge induction furnace, a reheating furnace and steel re-rolling induction accessories such as pouring and moulding equipment.

2.4 Production Inputs

The most critical inputs in to the plant are metal and copper, electric power in the magnitude of 2000 KVA will be required and this amount will be required and this amount will be supplied by Tanzania Electric Supply Company Limited

A considerable amount of water will be required for cooling .However, it will be recycles. Other production inputs include fuel oil, alloying elements, graphite powder and limestone.

2.5 Location

The plant will be located at Tanzania.

2.6 Manpower Requirements

The plant Management will comprise 3 people out of a total workforce of 142 people. There will be 81 operators, 4 expatriates and the rest in direct workforce. The plant will operate on a3- shift per day basis. The plant will be organized into three departments, namely production, , finance and Administration and technical services(repair , maintenance and quality control).

2.7 Implementation

The Major activities include registration and approval by the Tanzania Investment Centre and mobilization of funds from sponsors and banking instutions. Civil works design, tendering and construction will be carried out immediately after project is approved and would take about six months.

Machinery will be ordered after funds are committed. These will be fabricated shipped for activities related to machinery up to their receipt at site .

Training machinery installation and commissioning will be undertaken within another two months.

Activities related to civil works and machinery will take place simultaneously.

2.8 Project Economics

2.8.1 Capital Investment Requirements

DESCRIPTION	TOTAL
Land and Building	900,000
Plant & Machinery	1,200,000
Furniture & Fitting	90,000
Vehicle	800,000
Pre- Operational Expenses	40,000
Working Capital	
TOTAL INVESTMENT	3,030,000

2.8.2 Financing Scheme

i) Fixed Assets and Pre- Operational Costs

US\$

Equity	3,030,000
Total	3,030,000

2.9 Recommendations

The study shows that steel & copper production is both technically and financially feasible. Furthermore, it will cut down on imports of this important product. In view of the findings the project is recommended for implementation

3.0 MARKET AND MARKETING

3.1 Product

The product which this steel and copper plant is going to produce for sale is various copper and metal products.

3.2 Demand

Demand for the proposed product has been derived on the basis of the end use method. The products are used in various ways from buildings and other civil work constructions, in manufacturing of security grills and fences and as raw materials for manufacture of industrial products and machinery parts to industries.

Copper also is one of the basic chemical elements. In its nearly pure state, copper is a reddish- orange metal known for its high thermal and electrical conductivity. It is commonly used to produce a wide variety of products, including electrical wire, cooking pots and pans, pipes and tubes, automobile radiators and many others .Copper is also as a pigment and preservative for paper, paints, textiles and wood. It is combined with zinc to produce brass and with tin to produce bronze.

There is high demand for steel & copper products as Raw materials for manufacture of Industrial products and machinery parts. The demand for these products as raw material for the manufacture of industrial products and machinery parts, analysis has revealed there is an increase which is caused by shortage of raw materials, old machineries and import of manufactured goods.

Given the current improvements in the national economy, it is expected that the average capacity utilization of the past 5 years to at least 70%. It is also expected that the average growth rate of usage of steel bars as raw materials will equal to the growth rate of GDP for the industrial sector, currently at 3.4 %.

3.3 Supply

There exist numerous factors which supply metal and copper products. The quantity has been declining over the years. The declining trend is as

a result of increasing number of steel companies being opened in the country.

Distribution Channels

Steel & Copper products are heavy and bulky products. Hence they can be easily distributed to find consumers either directly (one level channel) to final consumers or by using only one intermediary who will resale to final consumers (two level channel)

3.4 Promotion

Experience of selling this product prescribes that they can be easily sold through personal selling (personal solicitations of orders) to potential big customers and advertisement with emphasis on product availability quality and persuasion.

4.0 PRODUCTION PROCESS AND TECHNOLOGY

4.1 Production Processes for Steel

On the basis of steel refining steel making processes fall into two chemical divisions namely:

- Acidic process
- Basic process

The terms acid and basic refer to the furnace linings and the nature of the slag formed. The bulk of steel production today is in basic processes. This is because of the quality of iron ore mostly used.

Modern steel making processes are divided into two groups as follows:-

a) Converter Method

In this method air or oxygen is blown from the top or bottom of a converter through molten iron oxidizing the impurities. Air blown processes include the Bessemer's method (acidic) in which the melting vessel is lined with silica and basic Bessemer (Thomas method) where a converter acts as a basic lining

Oxygen blown process is divided into top blown which is good for phosphorus poor and which oxygen is injected through nozzles set in the

converter bottom. There are a methods differing in the way oxygen is fed. The converter method is best used for refining and alloying of steel.

b) Hearth Process

In the health process iron is melted and refined into steel in the same vessel .The process included open heart, electric air furnace, and plasma and induction methods .In the heath process the source of melting energy can be electricity.(e.g in electric are furnace induction furnace ad plasma method) gas or oil (e.g in open hearth furnace) and the input raw material ranges from liquid metal to solid metal e.g scrap.

When special technological properties and / or clean steel are required, other methods or secondary metallurgy are employed i.e treatment of steel ousted the melting vessel- ladle metallurgy.

c) Induction Furnace and Hot Rolling

The induction furnace steel making and hot rolling processes are the technologies desired by the project promoters. The details or the said processes are as under.

The induction furnace steel- making process is most suitable and economical for production of steel castings and high quality steel grades.

This is because in this furnace the durability of based refractories is quite low and meets more frequent relatively small furnaces and the largest is about 10 tons of liquid steel per heat. Other steel production technologies are advisable when producing large steel quantities and low quality steel.

In the frequency induction furnace the heat for melting and superheating the scrap in the furnace crucible is generated in the charge itself by eddy currents induced by the magnetic field set up by an alternating current, i.e the charge acts as the secondary circuit and copper coils at the

primary winding circuit. Due to its oscillating nature nature the current changes polarity many times per second thus melting the change very rapidly.

Induction furnaces use mainly steel scrap as raw material and electricity as a source of melting energy. Availability of adequate quantities when planning for this technology. Noteworthy is that scrap prices change in accordance with supply and demand therefore the economics of this type of steel- making depends primarily on scrap availability.

d) Scrap Processing

Scrap can be from machining works e.g chips, trimmings,. Forging and stamping wastes, worn out machines, rolling stock, vehicle, rails, domestic appliances etc.

In view of the different sources, scrap can be of varying composition and does not have uniform composition.

Scrap is contaminated with sulphure – containing lubricating oils, chips etc, and non- ferrous metals (lead aluminum, tin, copper, zinc, etc) These metals are harmful to the working personnel, steel making equipment and steel quality.

Scrap processing is normally associated with the following activities and facilities:-

- Sorting the scrap for unwanted materials
 - Large size scrap are broken into pieces with hammers or hydraulic press or cut into smaller pieces using oxygen/ acetylene flame.
 - Steel chips or light scrap are crushed and presses into bales
 - Special furnaces are employed for scrap burning (to burn off wood, plastics, oils etc)
- i. Scrap Melting and steel Refining and Alloying

The sorted steel scrap will be put into baskets and fed into the crucible of the furnace where it is melted by induction method as described above.

Some additives which regulate the composition of the steel are also added into the crucible.

e) Ingot Casting

After the steel copper scrap in the furnace has melted down the furnace will be tilted and the melted surface charges will pour through the launder into a teeming ladle placed below it.

The liquid metal in the ladle is then poured (cast) into a number of specially prepared smaller containers (ingor moulds) Thereafter the melt is allowed to solidify.

It is advisable to retain 10% of liquid steel in the furnace to facilitate the melting of fresh scrap.

f) Re- Heating the Ingots

After the ingots have solidified, it may be worked immediately. However the ingots tend to be somewhat cooler on their outside than their centres. Therefore before they are rolled they will be put into a reheating furnace in which the sectional temperatures of the ingots are equalized .Uniform temperature is important before rolling, otherwise it results into rolled products with cracks and fissures.

Recommended rolling temperatures for mild steel is around 1100C.

The recommended technology offers a considerable saving in energy because ingots from the steel mill will be sent for re- rolling almost immediately. Only slight reheating will therefore be required.

g) Steel Hot- Rolling Process

The hot steel ingots are then fed into the rolling mills.

Rolling is the process of passing a heated ingot between the rolls revolving at the same peripheral speed and in opposite directions.

As the roll grip the work piece, they apply forging and kneading pressure the effect being that of increasing the work piece length appreciably and the width slightly.

Thereafter the rolled bars are left to cool and sold as final product.

4.2 PRODUCTION PROCESS FOR COPPER

Copper is one of the basic chemical elements. In its nearly pure state, copper, is a reddish orange metal known for its high thermal and electrical conductivity. It is commonly used to produce a wide variety of products, including electrical wire, cooking pots and pans, pipes and tubes, automobile radiators and many others. Copper is also used as a pigment and preservative for paper, paint, textiles and wood. It is combined with zinc to produce brass and with tin to produce bronze.

4.2.1 Raw Materials

Pure copper is rarely found in nature, but is usually combined with other chemicals in the form of copper ores. There are about 15 copper ores mined commercially in 40 countries around the world. The most common are known as sulfide ores in which the copper is chemically bonded with sulfur. Others are known as oxide ores, carbonate areas or mixed ores depending on the chemicals present. Many copper ores also contain significant quantities of commercially useless material. The most common sulfide ore chalcopyrite, Cu_2S , is another sulfide ore, Cuprite or red copper ore, Cu_2O , is an oxide ore Malachite or green copper ore, $\text{Cu}(\text{OH})_2 \cdot \text{CuCO}_3$, is an important carbonate ore, as is

azurite or blue copper carbonate, $\text{Cu}(\text{OH})_2 \cdot 2\text{CuCO}_3$. Other ores include tennantite, boronite, chrysocolla, and atacamite. In addition to the ores themselves, several other chemicals are often used to process and refine copper. These include sulfuric acid, oxygen, iron, silica and various organic compounds, depending on the process used.

4.3.2 THE MANUFACTURING PROCESS

Process

The process of extracting copper from copper ore varies according to the type of ore and the desired purity of the final product. Each process consists of several steps in which unwanted materials are physically or chemically removed, and the concentration of copper is progressively increased. Some of these steps are conducted at the mine site itself, while others may be conducted at separate facilities.

Here are the steps used to process the sulfide ores commonly found in the western United States.

(a) Mining

Most sulphide ores are taken from huge open pit mines by drilling and blasting with explosives. In this type of mining, the material located above the ore, called the overburden, is first removed to expose the buried ore deposit. This produces an open pit that may grow to be a mile or more across. A road to allow access for equipment spirals down the interior slopes of the pit.

1) The exposed ore is scooped up by large power shovels capable of loading 500- 900 cubic feet (15-25 cubic meters) in a single bite. The ore is loaded into giant dump trucks, called haul trucks, and is transported up and out of the pit.

(b) Concentrating

The copper ore usually contains a large amount of dirt, clay, and a variety of non-copper bearing minerals. The first step is to remove

some of this waste material. This process is called concentrating and is usually done by the flotation method.

- 1) The ore is crushed in a series of cone crushers. A cone crusher consists of an interior grinding con that rotates on an recent vertical axis, inside a fixed outer cone. As the ore is fed into the top of the crusher, it is squeezed between the two cones and broken into smaller pieces.

- 2) The crushed ore is then ground even smaller by a series of mills. First it is mixed with water and placed in a rod mill, which consist of a large cylindrical container filled with humorous short lengths of steel rod. As the cylinder rotates on its horizontal axis, the steel rods tumble and break up the ore into pieces about 0.13 in (3 mm) in diameter .The mixture of ore and water is further broken up in two ball mills, which are like a rod mill except steel balls are used instead of rods. The slurry of finely ground ore that emerges from the final ball mill contains particulars about 0.01 in(0.25 mm) in diameter.

- 3) The slurry is mixed with various chemical reagents, which coat the copper particles. A liquids, called a frothier, is also added. Pine oil or long- chain alcohol are often used as frothers.This mixture is pumped into rectangular tanks, called floatation cells, where air is injected into the slurry through the bottom of the tanks.The chemical reagents make the copper particles cling to the bubbles as they rise to the surface. The frothier forms a thick layer of bubbles are allowed to condense and the water is drained off. The resulting mixture, called a copper concentrate, contains about25 - 35% copper along with various sulphides of copper and iron, plus smaller concentrations of gold, silver and other material ..The remaining materials in the tank are called the gangue or tailings. They are pumped into setting ponds and allowed to dry.

- 4) The process of extracting copper from copper ore varies according to the type of ore and the desired purity of the final product. Each process consists of severally removed, and the concentration of copper is progressively increased.

c) Smelting

Once the waste material have been physically removed from the ore, the remaining copper concentrate must undergo several chemical reactions to remove the iron and sulfur. This process is called smelting and traditionally involves two furnaces as described below .Some modern plants utilize a single furnace, which combined both operations.

- 1) The copper concentrate is fed into a furnace along with a silica material called a flux. Most copper smelters utilize oxygen Enriched air is forced into the furnace to combust with fuel oil. The copper concentrate and flux melt, and collect in the bottom of the furnace .Much of the iron in the concentrate chemically combines with the flux to form a slag , which sculpture in the concentrate combines with the oxygen to form sulphur dioxide which is exhausted from the furnace as a gas and is further treated in an acid plant to produce sulphuric acid. The remaining molten mixture in the bottom of the furnace is called the matte. It is a mixture of copper sulphide and iron sulphides and contains about 60% copper by weight.
- 2) The molten matter is drawn from the furnace and poured into a second furnace called a converter .Additional silica flux is added and oxygen is blown through the molten material .The chemical reactions in the converter are similar to those in the flash furnace. The silica flux reacts with the remaining sulphur to form sulphur dioxide. The slag may be fed back into the flash furnace to act as a flux , and the sulphur dioxide is processed through the acid plant .After the slag is removed , a final injection of oxygen removes all but a trace of sulphur .The

resulting molten material is called the blister and contains about 99% copper by weight.

d) Refining

Even though copper blister is 99% pure copper, it still contains high enough levels of sulfur, oxygen and other impurities to hamper further refining. To remove or adjust the levels of these materials, the blister copper is first fire refined before. It is sent to the final electro refining process.

- 1) The blister copper is heated in a refining furnace, which is similar to a converter described above. Air is blown into the molten blister to oxidize some impurities. A sodium carbonate flux may be added to remove traces of arsenic and antimony. A sample of the molten material is drawn and an experienced operator determines when the impurities have reached an acceptable level. The molten copper, which is about 99.5% pure, is then poured into moulds to form large electrical anodes, which act as the positive terminals for the electro refining process.
- 2) Each copper anode is placed in an individual tank, or cell, made of polymer-concrete. There may be as many as 1,250 tanks in operation at one time. A sheet of copper is placed on the opposite end of the tank to act as the cathode, or negative terminal. The tanks are filled with an acidic copper sulphate solution, which acts as an electrical conductor between the anode and cathode.

When an electrical current is passed through each tank, the copper is stripped off the anode and is deposited on the cathode. Most of the remaining impurities fall out of the copper sulphate solution and form a slime at the bottom of the tank. After about 9-15 days, the current is turned off and the cathodes are removed. The cathodes now weigh about 300 lb (136 kg) and are 99.95-95% pure copper.

3) The slime that collects at the bottom of the tank contains gold, silver, selenium and tellurium. It is collected and processed to recover these precious metals.

e) Casting

1) After refining, the copper cathodes are melted and cast into ingots, cakes, billet or rods depending on the final application. Ingots are rectangular or trapezoidal bricks, which are remelted along with other metals to make brass and bronze products. Cakes are rectangular slabs about 8 in (20 cm) thick and up to 28 ft (8.5m) long. They are rolled to make copper plate, strip, sheet and foil products. Billets are cylindrical logs about 8 in (20cm) in diameter and several feet (meters) long. They are extracted or drawn to make copper tubing and pipe. Rods have around cross-section about 0.5 in (1.3 cm) in diameter. They are usually cast into very long lengths, which are coiled. This coiled material is then drawn down further to make copper wire.

e) Quality Control

Because electrical applications require a very low level of impurities, copper is one of the few common metals that are refined to almost 100% purity. To ensure this purity, samples are analyzed at various steps to determine whether any adjustment to the process is required.

4.3.2 PRODUCTS/ WASTE

The recovery of sulfuric acid from the copper smelting process only provides a profitable byproduct, but also significantly reduces the air pollution caused by the furnace exhaust. Gold, silver and other precious metals are also important byproducts. Waste products include the overburden from the mining operation, the tailing from the concentrating operation, and the slag from the smelting operation. This waste may contain significant concentrations of arsenic, lead, and other chemicals, which pose a potential health hazard to the surrounding area.

The Future

Demand for copper is expected to remain high, especially in the electrical and electronics industries. The current trends in copper processing are towards methods and equipment that use less energy and produce less air pollution and solid waste.

One encouraging trend is the increased use of recycled copper, Currently over half the copper being produced in the world comes from copper machining operations, such as screw forming and 45% comes from the recovery of used copper products, such as electrical wire.

4.4 Power Utilization

In the operation of electrical facilities, the most favorable installation for power costs is attained at preferably high utilization with preferably low power peak. This is achieved in modern medium- frequency melting by provision of constant power supply in the converters and through selective switching of power feed units.

4.5 Environment Protection

During the process of melting steel scrap there will be the emission of dust and gaseous fumes. Fumes especially are toxic and of complex composition. The most common are sulphur and nitrogen oxides (SO_x, NO_x) In the developed world where there are many steel works this is of concern, Therefore, it is recommended to arrest this problem right from the beginning in countries entering the steel industry. In the recommended technology i.e induction furnace, the amount of hazardous gases emitted will be very small especially because only cleaned raw materials will be used. There is therefore no environment hazardous waste expected from this project

5.0 Plant Location and Civil Works

The plant will be located in Tanzania. Production Building Required which is an open shed roofed with GCI sheets, and constructed from reinforced concrete slab in site is ideal for both the furnace and rolling mill facilities. The scrap and finished products would both be stored in the open

6.0 Utility Services

a) Water

The site has already been supplied with water. A 3 inch diameter pipeline connects the plot to the main pipeline. The plant water requirement is basically for cooling purposes and water will be recycled. About 10,000 litres of water will be required per day. Therefore a water reservoir of capacity 30,000 litres is recommended to be constructed.

b) Electricity

The site will tap its power from substation nearby. A number of machines will be premedial operated. There will therefore be a need to have a central compressor station which will generate the compressed air requirements. A central compressor station will be provided to provide compressed air for some of the production units.

As said elsewhere in this report, the source of energy for meeting the scrap will be electric power. Power is consumed in very large quantities and it is among the biggest cost element in this type of steel production. The demand for this plan is estimated at around 2000Kva

c) Material Handling Equipment

The plant will require the services of an overhead crane which will be employed for lifting the scrap containers for feeding the furnace as well as move the ladles with liquid steel into the casting area.

d) Weighing Scales

A road vehicle weigh bridge and a portable dial platform scale will be required at the plant site for weighing incoming trucks with scrap and weighing the production inputs during production

e) Oxygen and Acetylene Gas Cutting Equipment

Several gases cutting equipment of the type mentioned above and their corresponding cutting torches will also be required for the steel mill.

f) Workshop Facility

In order to enable the company to handle small repairs to its aassets we recommend the acquisition of a minimum number of metal working machines such as one lathe, a milling/drilling machine power hacksaw and tool kits.

7.0 MANPOWER AND ORGANISATION

The proposed copper and metal plant complex will have three Independent departments, namely administration and finance production and technical staff.

Organisation

The top people in the day- to day running of the company will be General Manager .Under the General Manager's office will e three department, namely finance/ administration production and technical services. Each department will be under a Manager and will comprise a number of sections each headed by section head such as Finance/ Personnel Department Production Department.

Each section will be manned by a number of personnel with varying education levels and work experiences. The management team will comprise the General Manager, Chief Accountant and the four expatriates who will head the different production and service department.

He will also be responsible for repair and maintenance for company assets and research and development activities.

The technical department will comprise three sections, namely:

- a) The repair and maintenance section which would be responsible for all repair works. An expatriate will be employed to train the local technician in the machinery repair works.
- b) Laboratory section which will be responsible for quality control of both the raw materials and finished goods.
- c) Research and development section.

7.1 Production Department

The production department will comprise two sections, namely steel mill and rolling mill.

Finance and Administration Department

An Administration and Finance Manager will head the department. He will be responsible for the administration of the company as well as overseeing the financial aspect of the company

7.2 Manpower Requirement

The manpower requirement for running the proposed steel and rolling mill is 142 people .The administration staff will work on one shift per Day. The production and technical departments will work on 3 shifts per Day basis.

8.0 INVESTMENT AND FINANCING

8.1 Assumptions

The financial projections to determine the viability of the Copper and metal Project is based on the following key assumptions:

- The project will operate at 50% capacity in year 1 , 60% in year 2, 70% in year 4 and thereafter
- Plant will operate on three shifts per day for 250 days per year.
- The whole project output will be sold locally

8.2 Summary of Capital Costs

The total initial investment required for undertaking the project is estimated at US\$ 2,85 million. Spread over a year as shown. The breakdown of the capital investments is presented in table below:

DESCRIPTION	Total
Land and Building	900,000
Plant & Machinery	1,200,000
Furniture & Fitting	90,000
Vehicle	800,000
Pre- Operational Expenses	40,000
Working Capital	
TOTAL INVESTMENT	3,030,000

8.3 Building and Civil Works Costs

The premises will be renovated e for constructions for plant installation only. These are Estimated and given under cost of machinery

8.4 Plant Machinery and Equipment Costs

The main machinery for the envisaged project will be electric furnace, steaming ladles and moulds reheating various tools, accessories etc.

8.5 Furniture and Fittings

The items to be purchased will comprise office furniture and computers for office and factory.

8.6 Vehicles

A 15 toner truck and a 5 toner truck that will be used for transportation of raw Materials and finished products and other office activities are recommended. A Bus of 45 seats will be provided for workers' transport and two saloon cars for the top management

8.7 Pre- Production Capital Expenditures

These include project development cost for feasibility study and start-expenses

Including interest on loan taken for capital investment in the pre-production Period

8.8 Initial Working Capital

Initial Working capital requirements for the proposed steel mill project works Out at about US\$0,20 Million

8.9 COST OF OPERATION

The anticipated costs for operating the project are detailed in the following Sections the capacity utilization has been assumed to grow at a rate of 50% in year 1, 60% in year 2, 70% in year 3 while stabilized production is envisaged From the fourth year at 80% of rated capacity. 80% will be the sustainable Production level.

8.10 Repair and Maintenance

Annual repairs and maintenance of the machinery and equipment have been Worked out to cover all costs including spare parts.

8.11 Vehicle Running Expenses

Vehicle running expenses include fuel, lubricants, tear and wear, road licence Insurance etc, This cost item has been estimated at 35% of the original cost of the vehicle annually

8.12 Salaries and Wages

The total wage package is estimated at US\$ 0,070 million for the first two years

8.13 Administrative Overheads.

The main item in the administrative cost is insurance of fixed assets. The administrative costs are estimated at US\$0,010 million/ annum

Dividends for the first 5 years during which are company will have to meet other

Commitments like loan repayment, costs for technology training etc.

9.0 FINANCIAL ANALYSIS

9.1 Income and Expenditure

9.1.1 Income

The proposed steel and copper mill project expects to earn its income through the sale of reinforcement copper and steel products mainly at sustainable level of production, the total sales are expected to stand at US\$ 1,632 million from the Fourth year of production onwards by selling a total of 4800t of final products.

9.1.2 Cash Flow Statement

The project's cash flow is impressive as the need for external assistance arises Only in the initial stages of the project investment.

10.0 Economic Benefits

The successful operation of this processing plant will contribute significant Economic benefit to Kilimanjaro region people and Tanzania as whole . In summary the benefits which will be realized are as follows:

- The execution of this project will bring about employment opportunities
- Provision of income to other services providers, thus contributing to the reduction of poverty. The income to be earned will help in improving standard of living of the workers and other people residing in the region
- The direct income for the workers combined with help in overall efforts of alleviation of poverty in the Region
- This project will facilitate opportunities to increase foreign exchange earnings through export of some of its value products
- Project will create Government Revenue through Taxation

11.0 Conclusion

The investment and development of these products processing undertaking is in Line with the Government objective of encouraging proper development of Industries in the country. It will have a positive

impact on the development of the region as, it would Generate a number of benefits and more positive impact on the economy of the region
This document has provided a full analysis on the financial , Techno-economic viability and have established that the proposed project is technically sound financially viable , and economically/ socially beneficial.

MS. XUDICK MINERALS COMPANY LIMITED
INVESTMENT COST

DESCRIPTION	TOTAL
Land and Building	900,000
Plant & Machinery	1,200,000
Furniture & Fitting	90,000
Vehicle	800,000
Pre- Operational Expenses	40,000
Working Capital	
TOTAL INVESTMENT	3,030,000

MS. XUDICK MINERALS COMPANY LIMITED

PROJECT FINANCING

US\$

DESCRIPTION	FOREIGN	TOTAL
Equity	3,030,000	3,030,000
TOTAL INVESTMENT	3,030,000	3,030,000

MS. XUDICK MINERALS COMPANY LIMITED

DEPRECIATION SCHEDULE

		Rate		1	2	3	4	5	6	7	8	10-Sep
Land & Building		4%	900,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000
Plant & Machinery		12.50%	1,200,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Furniture & Fitting		12.50%	90,000	11,250	11,250	11,250	11,250	11,250	11,250	11,250	11,250	11,250
Vehicles		25%	800,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Pre Operational Expenses		20%	40,000	8,000	8,000	8,000	8,000	8,000	8,000	-		
TOTAL				405,250	405,250	405,250	405,250	405,250	405,250	397,250	397,250	397,250

**MS. XUDICK MINERALS COMPANY LIMITED
PROFIT & LOSS FORECAST**

	1	2	3	4	5	6	7	8	9	
	60%	80%	90%							
PNOVER	979000	1,305,600	1632000	1632000	1632000	1632000	1632000	1632000	1632000	1632000
Sale of Steel & Copper Products										
	979000	1,305,600	1632000	1632000	1632000	1632000	1632000	1632000	1632000	1632000
RECT COSTS	242000	322000	403000	403000	403000	403000	403000	403000	403000	403000
Total Direct Cost	242000	322000	363000	403000	403000	403000	403000	403000	403000	403000
LOSS PROFIT	737000	939600	1229000	1229000	1229000	1229000	1229000	1229000	1229000	1229000
OTHER COSTS	200750	200750	200750	200750	200750	200750	196750	196750	196750	200750
Depreciation										
Profit before tax	536250	738850	1,028,250	1,028,250	1,028,250	1,028,250	1,032,250	1,032,250	1,032,250	1,032,250
ERATING PROFIT	536250	738850	1,028,250	1,028,250	1,028,250	1,028,250	1,032,250	1,032,250	1,032,250	1,032,250
Taxation 30%	160875	221655	308475	308475	308475	308475	309675	309675	309675	309675
GROSS PROFIT	375375	517195	719775	719775	719775	719775	722575	722575	722575	722575
MULATIVE	375375	892570	1,612,345	2,332,120	3,051,895	3,771,670	4,494,245	5,939,395	5,939,395	6,661,970

MS. XUDICK MINERALS COMPANY LIMITED
PROJECTED CASH FLOW

	0	1	2	3	4	5	6	7	8	
Source										
Profit before interest and Depreciation		737000	939600	1229000	1229000	1229000	1229000	1229000	1229000	1229000
Equity	3,030,000									
Total Sources	3,030,000	737000	939600	1229000	1229000	1229000	1229000	1229000	1229000	1229000
Duplications	3,030,000									
Capital Expenditure	3,030,000									
Tax	3,030,000	536250	738850	1,028,250	1,028,250	1,028,250	1,028,250	1,032,250	1,032,250	1,032,250
Sub Total	3,030,000	536250	738850	1,028,250	1,028,250	1,028,250	1,028,250	1,032,250	1,032,250	1,032,250
Capita Duplications	3,030,000	536250	738850	1,028,250	1,028,250	1,028,250	1,028,250	1,032,250	1,032,250	1,032,250
Net working capital		200750	200750	200,750	200,750	200,750	200,750	196,750	196,750	196,750
Acumulated Cash		200758	401500	602,250	803,000	1,003,750	1,204,500	1,401,250	1,598,000	1,794,750

