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for a sustainable future

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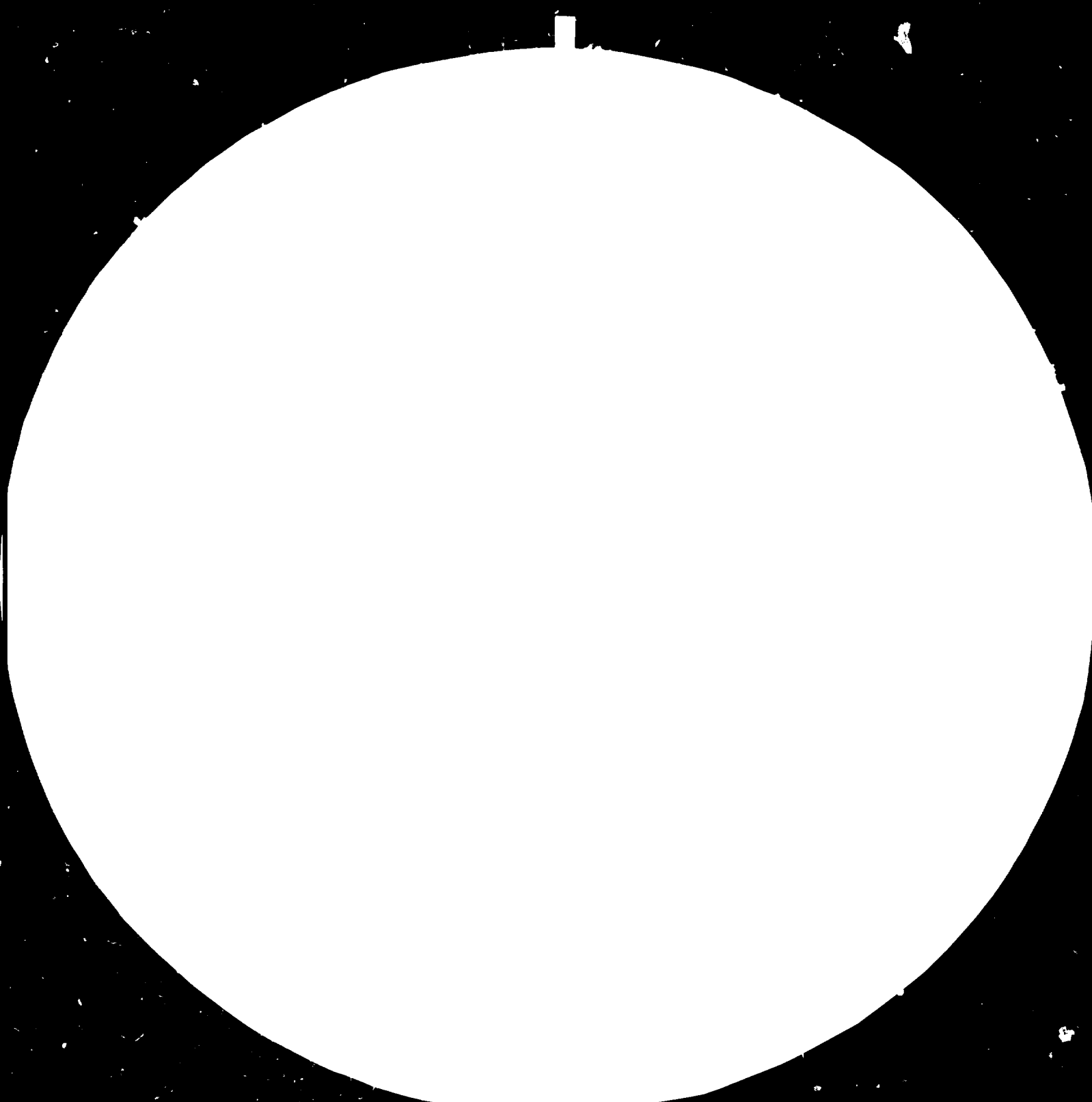
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FINAL REPORT

ESCOLA CENTRAL DE PETROLEOS SUMBA - ANGOLA .

Reference : UNIDO Contract No. 82/13
Project No. DP/ANG/82/014
DP/ANG/82/011
Activity Code. DP/01/32.1
Period : 1/1/82 - 31/1/83

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1. FOREWORD

This report refers to the management activities of the ECP of Sumbe during the period from 1/1/82 to 31/1/83 in conformity with the agreement 82/13 UNIDO Project No. DP/ANG/81/014 and DP/ANG/82/011, activity code DP/01/32.1.

The services estimated at 114 man/months concerned managing and maintenance assistance of the ECP, completion of training courses, research into training requirements for the oil industry sector, assistance with coordination of practical training courses and conducting seminars.

In the following pages the activities of the CSOIW during the above period, and the action of UNIDO personnel in the various planned types of assistance are illustrated (see table 1).

NAME SURNAME	
<u>GENERAL</u> - [REDACTED]	
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<u>GENERAL</u> - [REDACTED]	
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<u>GENERAL</u> - [REDACTED]	

2. MANAGEMENT ACTIVITIES

The personnel charged with the management of the ECP during the above period had to face a series of logistic and organizational problems of some significance as a consequence of the increase in number of students. The work carried out within the framework of close cooperation between Angolan and Unido personnel enabled very satisfactory results to be obtained.

2.1 Maintenance Sector

The maintenance activities of the ECP were performed regularly. Routine and periodic maintenance actions in the various fields (mechanical, electrical, civil engineering) were carried out.

In the mechanical field maintenance of the vehicle fleet as well as the water supply system (pumps, filters, line) and workshop and laboratory equipment for practical exercises, was also carried out.

Besides this activity, the training action of the Angolan personnel in charge of this field was continued.

Although some good results, particularly in the field of vehicle maintenance, were achieved; the level of autonomy attained so far cannot be deemed satisfactory owing to the high turn-over which did not permit the training activity to achieve the required continuity.

Generally, the problem of total "cultural and technical" acquisition of preventive maintenance action is still to be solved, and cannot be solved in the short term. In the electrical field, maintenance concerning the refrigerating and air-conditioning units as well as the generating sets and motive power lighting plants installed in the school was performed.

In this field, contrary to the mechanical field, and so far as training is concerned, more satisfactory results were achieved thanks to greater stability of the Angolan personnel.

In fact, during 1982 electric maintenance was above all carried out by local personnel.

In the civil sector, maintenance work was carried out on buildings, houses and in particular hydraulic and WC units, frames, painting, etc.

As for this sector, from the training standpoint the results may be summarized as follows:

Although satisfactory levels of skill were achieved, as in the mechanical sector, the problem of full acquisition of preventive maintenance has still to be solved.

2.2 Administrative and Logistic Sector

The ECP's administrative sector fully managed by Angolan personnel, performed its activity even with the present difficulties in processing materials, in a very satisfactory way. The action of the Unido personnel with the ECP was directed above all towards optimizing management procedures for personnel and materials.

3. EDUCATIONAL AND ORGANIZATIONAL ACTIVITIES

3.1 Educational Activities

The training course of the ECP's students includes:

- A 1st theoretical-practical training phase in the ECP of Sumba, for 7 to 12 months
- A 2nd practical training phase with the petroleum companies lasting 6-9 months, at the end of which students obtain a certificate.

During the period 1/1/82 - 31/1/83 the following vocational training courses were carried out in the ECP:

- Electricians
- Outside operators (3rd course - underway)
- Vehicle motor mechanics
- Mechanical fitters
- Rotary machine mechanics
- Pipe welders
- Accident prevention and safety operators
- Oil storage and transportation operators
- Chemistry laboratory operators (2nd course underway)
- Outside refinery operators (4th course underway).

47 students finished the practical courses in that period with the companies, and obtained a certificate as skilled:

- Tool operators
- Production operators
- Refinery operators
- Electricians.

Moreover, a seminar for the selection and recruiting of personnel was held.

A general schedule on the above is shown in Table II. Also, for every course an information sheet stating the main details is attached therewith.

In connection with educational activities in the ECP, the following general considerations may be made:

- At present the level of preparation attained by ECP's students may be deemed satisfactory, as may be seen from the companies' reports on the courses and the intake of the students into the various companies.
- Also from a quantity standpoint the ECP obtained excellent results; this is supported by the fact that during the period 1/1/81 - 31/1/83 10 courses took place out of the 13 that the ECP is equipped to handle with an average number of 90 students/month.
- As for the period of the practical course, which is particularly important for the completion of the training cycle, the sector, aided by the educational teaching staff, at the end of each course drew up some course guidance literature relating to each skill with a view to assimilating both theoretical and practical notions acquired by the students during the courses at the ECP with the professional capacities that they will acquire with the companies.
- Finally, it should be noted that:
Contacts between ECP -MINPET-user companies are increasingly improving, and this to the advantage of a better use of the ECP and of the human resources of the country for training executives.

3.2 Planning and Organization

An analysis and an educational planning exercise were carried out with a view to optimizing the results of the courses, while bearing in mind the requirements of both companies and bodies concerned.

In addition, periodic meetings between monitors and management executives took place, so that the educational and organizational activities might be better coordinated.

The library archives were organized, and the consumption materials of workshops and laboratories arranged.

Texts and forms relating to the external refinery operator, production operator and chemistry laboratory operator courses were re-printed.

No.	Description	Unit		Quantity										Total				
		Unit	Rate	1	2	3	4	5	6	7	8	9	10		11	12		
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15



...

4. ANGOLAN TEACHING PERSONNEL

The teaching personnel was also involved in a high turn-over. This entailed a number of problems, some of which were solved both by backing up the Italian instructors and by continuing some training spot actions in the educational technique and engineering up-dating field.

To date, the overall results may be regarded as highly satisfactory; many specific subjects have been completely managed by Angolan instructors as well as all other basic subjects.

During 1982, particular attention was given to the periodic supervision of educational actions through weekly meetings between Italian instructors and monitors; this allowed a substantial uniformity to be achieved in conducting the activities and a thorough investigation of pedagogical and engineering subject matter.

The training action of the teaching personnel, particularly that intended for conducting the 2nd phase courses, is implemented through an "instructors course".

5. OTHER ACTIVITIES5.1 Seminars

As estimated, the Unido personnel in the period 1-12 February 1982, carried out a theoretical-practical seminar at the ECP, concerning selection and recruitment activities of the personnel, in which the following representatives of the Angolan companies and ministries participated:

- | | |
|---------------------------------|--------------------------------|
| . Cabinda Gulf | Jacinto Munto Pio |
| . Cimangola | Manuel Ferreira dos Santos |
| . Escola Central de Petroleos | Frederico Sapalo |
| . Engineering laboratory | Ana Paula da Conceicao Campina |
| | Domingas Paulo Alexandre |
| . Building Ministry | Joao Carlos Manuel |
| . Industrial Petroleum Ministry | Mariana de Jesus da Silva |
| . Planning Ministry | José Antonio Gaspar |
| . State Safety Ministry | Pedro Neto |
| | Antonio Matias |
| | Elias Godinho Carlos |
| . Paviterra | José da Silva Gomes |
| . Sonefe - Cambambe | Antonio José Domingos |
| . Sonangol | Jorge Candrebe Cuandeca |
| . Texaco | Laurentino da Silva |

This seminar took place in two phases, a theoretical phase and a practical phase, with a view to selecting and recruiting future ECP instructors.

5.2 Cultural and Recreational Activities

During 1982, the following cultural and recreational initiatives were performed:

- UNICEF seminars
- Football matches vs. various local teams
- Film shows
- Table-tennis and baby-football matches.

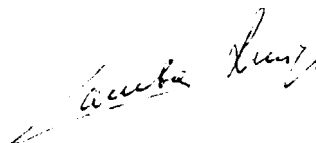
5.3 Outside Contacts

Many contacts between the ECP and various Angolan and international bodies and organisms took place.

Particularly, the ECP was visited by international delegations (UNDP-UNIDO-UNICEP-SADCC, Italian, Norwegian delegations) as well as by the members of the various ministries and institutions of the People's Republic of Angola (International Mini Cooperation: Education Ministry, Health Ministry, Sports Ministry, Party) and of the oil companies.

The Team Leader

22.3.83



INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: MECHANICAL FITTERS

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 1/1/82

END: 4/12/1982

PROFESSORS:

UNIDO

ANGOLAN

FLORIS

BARRUCCI

ERMOSINI

TRAINEES:

NAME

FRO:

ALMEIDA JONAS FERNANDO

HUAMBO

ANTONIO CIDE

K. SUL

DOMINGOS CANOQUELA

CABINDA

JOSE MABIALA

CABINDA

JUSTO SUKA

HUAMBO

MAURICIO ELAVOCO

HUAMBO

RAUL ALBERTO LAFAYETT RODRIGUES

BENGUELA

BICTOR NETO JUNIOR

LUANDA

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: MECHANICAL FITTERS

PHASE 2 - PRACTICAL TRAINING c/o COMPANIES

BEGINNING: 20/12/82

END: UNDERWAY

COORDINATOR:

UNIDO

ANGOLAN

GIULIO CORRAINI

SIMAO

N° OF TRAINEES

COMPANY

I

SONEFE

4

PETRANGOL

I

SONANGOL

I

GULF OIL

INFORMATION CARD
REGARDING COURSES IN 1982

COURSE: VEHICLE MOTOR MECHANICS

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 1/1/82

END: 4/12/82

PROFESSORS:

UNIDO

ANGOLAN

FLORIS

MONTEIRO

BARRUCCI

ALOTTA

TRAINEES:

NAME

FROM

ANTONIO CUBILA

LUANDA

ANTONIO LUCIANO MANUEL

K.SUL

ANTONIO PAULO PINGI

CABINDA

CANDIDO MINEZES

HUAMBO

DOMINGOS DE SOUSA KIAKU VASONIA

LUANDA

FRANCISCO CARDOSO MANUEL

CABINDA-GUL

GERALDO CASITICA

HUAMBO

INANCIO ALBERTO CAGANJO

SONAN LOBI

LOURENCO MANUEL

DONDO

SALOMAO ISALINO DOS SANTOS

LUANDA

SANTOS TOLVE

VIGE

VIRGILIO PAULO DOMINGOS VELASCO

LUANDA

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: VEHICLE MOTOR MECANICS

PHASE 2 - PRACTICAL TRAINING c/o COMPANIES

BEGINNING: 20/12/82

END: UNDERWAY

COORDINATOR:

UNIDO

ANGOLAN

GIULIO CORRINI

SIMAO

Nº OF TRAINEES

COMPANY

2

MOBIL OIL

4

SONANGOL

2

GULF OIL

1

TEXACO

2

PETRANGOL

INFORMATION CARD
REGARDING COURSES IN 1982

COURSE: ROTARY MACHINE MECANICS

PHASE I - Theoretical and practical part in the ECP

BEGINNING: 1/1/82

END: 4/12/82

PROFESSORS:

UNIDO

ANGOLAN

FLORIS

BARRUCCI

ALOTTA

CAPONERA

TRAINEES:

NAME

FROM

ADELIO LUIS BASTOS	HUAMBO
ANTONIO PAULO DA COSTA	LUANDA
BENJAMIN A DA COSTA	HUAMBO
CARLOS MANUEL RICARDO	LUANDA
DESLANDES RAFAEL	LUANDA
DOMINGOS ANTONIO TEXEIRA	LUANDA
FERNANDO JORGE BORGIA DOS SANTOS	LUANDA
JOAO BALTAZAR DA SILVA	PETRANGOL
JOAO CASSEQUELO	PETRANGOL
JOEGE JAIME	WAKO KUNGO
KIALA MAVA SIMAO	LUANDA
LUTERO SACHOLOMBO	HUAMBO
FEDRO ZAU GIMBI	CABINDA-GUL
JOAO ANDRE AFONSO	SONEFE

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: ROTARY MACHINE MECHANICS

PHASE 2 - PRACTICAL TRAINING c/o COMPANIES

BEGINNING: 20/12/82

END: UNDERWAY

COORDINATOR:

UNIDO

ANGCLAN

GIULIO CORRAINI

SIMAO

N° OF TRAINEES

COMPANY

10

PETRANGOL

1

GULF OIL

1

SONANGOL

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: PIPE WELDERS

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 1/2/82

END: 3/10/82

PROFESSORS:

UNIDO

ANGOLAN

MINOLDO

QUARESMA

PICCALUGA

KEMBO

FOGLI

TRAINEES:

NAME

FROM

CARLOS NAPOLEAO PITRA

LUANDA

DANIEL MAVONGO

CABINDA

DANIEL PESSÉLA

HUAMBO

FIGUEREDO FIRMINO LOURENGO

HUAMBO

JOAO BAPTISTA

ZAIRE

JOAO MACANHO DE ARAUJO

K SUL

JOAQUIM ANTONIO

BENGUELA

NORBERTO DE ALMEIDA FERREIRA

LUANDA

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: PIPE WELDERS

PHASE 2 - PRACTICAL TRAINING c/o COMPANIES

BEGINNING: 18/10/82

END: UNDERWAY

COORDINATOR:

UNIDO

ANGOLAN

GIULIO CORRINI

SIMAO

N° OF TRAINEES

COMPANY

2

PETRANGOL

1

GULF OIL

1

SONEFE

2

MOBIL OIL

2

SONANGOL

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: INDUSTRIAL SAFETY OPERATORS

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 1/3/82

END: 10/10/82

PROFESSORS:

UNIDO

RUTIGLIANO

ANGOLAN

QUARESMA

ROLA MENDEZ

KEMBO

TRAINEES:

NAME

FROM

AFONSO SALONBONGO

HUAMBO

BERNARDO SUKETE

HUAMBO

DAMIAO BUITI

CABINDA

DOMINGOS ANTONIO MASSANGA

HUAMBO

FRANCISCO ANTONIO

CATUMBELA

INACIO FRANCISCO PIRES

CABINDA

JOSE SUNDA FRANCISCO

CABINDA

JOSE VICTORINO

HUAMBO

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: INDUSTRIAL SAFETY OPERATORS

PHASE 2 - PRACTICAL TRAINING c/o COMPANIES

BEGINNING: 25/10/82

END: UNDERWAY

COORDINATOR:

UNIDO

ANGOLAN

GIULIO CORRAINI

SIMAO

N° OF TRAINEES

COMPANY

1

PETRANGOL

3

GULF

1

ELF AQUITAINE

3

SONANGOL

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: OIL STORAGE AND TRANSPORT OPERATORS

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 1/2/82

END: 8/10/82

PROFESSORS:

UNIDO

ANGOLAN

GRASSO

QUARESMA

CAMBI

ROLA MENDEZ

TRAINEES:

NAME

FROM

ALBERTO SANJAMBELA

HUAMBO

LUIS COSTANTINO

SONANGOL K. NORTE

MATEUS BRAZ CHOCOLATE

CABINDA

MIGUEL PADO

CABINDA

N'DOMASI

LUANDA

NICOLAU MULATO

UIGE

ZUZI LUVETAMO

PETRANGOL

PAULO FRANCISCO SEBASTIANO

CABINDA

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: OIL STORAGE AND TRANSPORT OPERATORS

PHASE 2 - PRACTICAL TRAINING c/o COMPANIES

BEGINNING: 25/10/82

END: UNDERWAY

COORDINATOR:

UNIDO

ANGOLAN

GIULIO CORRINI

SIMAO

N° OF TRAINEES

COMPANY

2

PETRANGOL

3

GULF

1

MOBIL

2

SONANGOL

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: EXTERNAL REFINERY OPERATORS (3° Course)

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 7/6/82

END: UNDERWAY

PROFESSORS:

UNIDO

ANGOLAN

GIOVANNONE

KEMBO

GRASSO

ROLA MENDES

N'SIMBA

MAYKA

TRAINEES:

NAME

FROM

ANTONIO MANUEL JOAO

PETRANGOL

ANTONIO N'GUNSONI

"

CRISTOVAO MPANZO MONIZ

"

DOMINGOS DIOGO AUGUSTO

"

JOSE MANUEL MARIO

"

LUSAUIKWENA DOMINGUE

"

MBIANANGO DAMBAXE

"

MUSSA WENGA

"

NERCIO ANDRE

"

N'ZAU LANGO ANTENIO

"

PAULO MORAIS VITA

"

PEDRO BAPTISTA

"

PEDRO YAKALONGA

"

ROBETO ALEX

TANZANIANO

SOMARI SAIDI GOMA

"

TOMAS FAMOROSO

PETRANGOL

TONDO MBOLOSO

"

TUSSEYO TUAKANDO

"

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: EXTERNAL REFINERY OPERATORS (4° Course)

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 11/10/82

END: UNDERWAY

PROFESSORS:

UNIDO

GIOVANNONE

GRASSO

ANGOLAN

KEMBO

M'BAMBI

N'SIMBA

MAYKA

TRAINEES:

NAME

FROM

ADBERTO CAMPOS NICOLAU

PETRANGOL

DOMINGOS MANUEL DE JESUS NUNES

"

DANIEL VIEGAS

"

ELOI JOAO DA REISSOREICAO

"

LUBIENGA PAULO

"

LUTOTO LUYEYE JUSTINO

"

MAPUNJA JOSE

"

MANUEL VIERRA

"

N'SASUMUNA-SALA

"

M'PANZU KIAKU ARIDA RICARDO

"

PANDI SALVADOR JULIO

"

SEBASTIAO M'BONGO MATONDO

"

EDUARDO FRANCISCO DA SILVA MOTA

"

BERNARDO AFONSO SOBRINHO

"

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: PRODUCTION OPERATORS (3° Course)

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 19/7/82

END: UNDERWAY

PROFESSORS:

UNIDO

ANGOLAN

SALICA

QUARESMA

GIOVANNONE

ROLA MENDEZ

FRANCUCCI

KEMBO

TRAINEES:

NAME

FROM

ANTONIO BAZOLA

CAB-GULF

ARANLDO DIOGO DO NASCIMENTO

PETRANGOL

BENJAMIN DOMINGOS C. GASPAR

"

CARLOS MANUEL FERNANDES

"

DANIEL BAPTISTA

"

EDUARDO LUIS SENGO MACOSSO

CAB-GULF

HASHTMU RAJABU FENESI

TANZANIA

JOAO ADRIANO JUNIOR

PETRANGOL

JOSE PAULO ALVARO DA CUNHA

"

JOAO JOSE

"

JOSE DOMINGOS

"

JOSE JULIO

"

JOSE SUCA LONDA

"

MANUEL BORGE SIMOES

"

MANUEL GINGA

"

MIGUEL GINGA

"

OSWALDO RUI FERNANDES

"

SALVATORI MCHONDE

TANZANIA

VICENTE FUTILA MAZEBO

PETRANGOL

INFORMATION CARD

REGARDING COURSES IN 1982

COURSE: CHEMISTRY LABORATORY OPERATORS

PHASE 1 - Theoretical and practical part in the ECP

BEGINNING: 19/7/82

END: UNDERWAY

PROFESSORS:

UNIDO

ANGOLAN

RICCHI

M'BAMBI

TRAINEES:

NAME

FROM

ALVARO DAMIAO ANDRE DOS SANTOS

PETRANGOL

DOMINGOS PEDRO PANZU

"

EDUARDO JAIME C.D. e SILVA

"

GASPAR A. PITA CABOCO

"

JOAO DA SILVA

"

JOAO DIAS DOS SANTOS

"

JOSE LUSOTA

GULF-OIL

LUZONZO MASSALA

PETRANGOL

PEDRO ARMANDO

"

