

**A STUDY ON WORKING CAPITAL MANAGEMENT  
AND FINANCIAL ANALYSIS OF CPCL**

By

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**PROJECT REPORT**

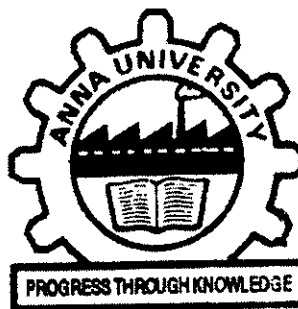
Submitted to the

**FACULTY OF MANAGEMENT SCIENCES**

**In partial fulfillment for the award of the degree**

**Of**

**MASTER OF BUSINESS ADMINISTRATION**



**CENTRAL FOR DISTANCE EDUCATION  
ANNA UNIVERSITY CHENNAI  
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Month, Year  
February 2010

# *Bonafide Certificate*

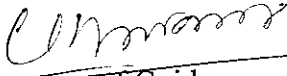
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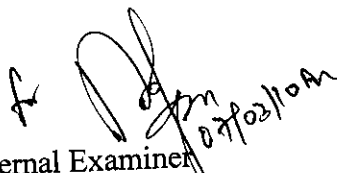
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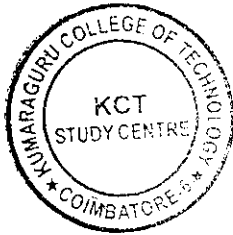
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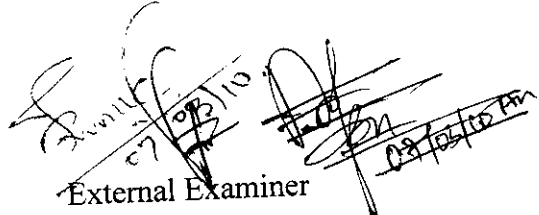
  
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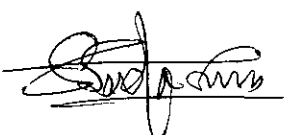
  
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# *Abstract*

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## ABSTRACT

This working capital management and financial analysis explains and over view of the organization annual reports and its information. Management can be retrieval the particulars reports of the company. In the modern business environment finance plays a vital role in every organization. Financial management is an integral part of over all management and is mainly concerned with fund raising operations. At present most of the industrial undertakings are faced with the problem of effective utilization of resources.

To critically analyse the Working Capital requirement of CPCL . Evaluate the operating efficiency of CPCL. To measure utilisation of various assets with the turnover of the company. The study is being carried out, as it is necessary to identify the over utilisation or under utilisation of assets to the turnover of the company.

Corporate financial analysis is largely a study of the relationship among the various financial factors in a business, as disclosed by a single set of statements and a study on the trends of these factors shown in the series of statements of the company with future projections.

Hence financial analysis helps the management to make the best use of its financial strength and to spot out the financial weakness to take corrective actions. Thus it could be stated that it is a starting point for using any sophisticated forecasting and planning procedures.

At present there are 17 refineries operating in the country, 15 in the public sector unit, 1 in private sector. Out of the public sector refineries 7 refineries are owned by Indian Oil Corporation Limited, 2 each by Hindustan Petroleum Corporation limited and Chennai Petroleum Corporation Limited and one each by Bharat Petroleum Corporation limited, Kochi refineries limited, Bongaigon Refineries & Petrochemical Limited and Numaligsh Refinery Limited. The one Refinery in joint sector is Mangalore Refineries and Petrochemical Limited and one by private sector is Reliance Industries Limited.

The installed capacity of the Indian refineries is about 117 million tonnes per annum from which the product availability may be about 108 million tonnes. Taking into account the product availability from the fractionators of about 4.5 million tonnes, the total products availability would be about 113 million tonnes at 100% capacity utilization. While this is on overall basis, product like LPG is in deficit and other products are in surplus, which would necessitate operating refining capacity to match demand or export products depending on refinery economics and logistics.

# *Acknowledgment*

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## **ACKNOWLEDGEMENT**

I acknowledge my sincere thanks to **The Director, Centre for Distance Education, Anna University, Chennai** for giving opportunity to do this project work.

I express thanks and gratitude to **Mr.A.SENTHIL KUMAR, Counselor – MBA Programme, KCT Study Centre Coimbatore.**

I express my proud gratitude to our **Mr.Prof.S.V.DEVANATHAN, Project in charge,** and other members of Project Monitoring committee, KCT Study Centre, coimbatore.

My heartfelt thanks to my project guide **Professor K.R.AYYASWAMY of KCT study centre, Coimbatore** for his availability, friendly approach, encouraging support and guidance in carrying out the project successfully.

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## *Executive Summary*

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## **EXECUTIVE SUMMARY**

### **NEED FOR THE PROJECT**

- The study is needed to analyse the Working Capital Management of the Company.
- The study is being carried out, as it is necessary to identify the over utilisation or under utilisation of assets to the turnover of the company.
- Further, it is also necessary to identify the idle assets and non-utilisation of funds.
- It is necessary to identify the liquidity dimension of Working Capital and the Profitability.
- The study is being carried out to identify the Break-even point of Sales. This is necessary to ascertain Margin of Safety Position of the company.
- The study is needed to identify the Current Position of the company through Z-score Analysis.

# *Objectives*

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## **OBJECTIVES**

The objective of the study is

- To study the Working Capital Management of CPCL by analyzing the profitability, Solvency and Liquidity position of the company
- To critically analyse the Working Capital requirement of CPCL .
- To evaluate the operating efficiency of CPCL.
- To measure utilisation of various assets with the turnover of the company.
- To project the future Sales, Profit and Working Capital requirements of CPCL.

# *Introduction*

---

## INTRODUCTION

In the modern business environment finance plays a vital role in every organization. Financial management is an integral part of over all management and is mainly concerned with fund raising operations. At present most of the industrial undertakings are faced with the problem of effective utilization of resources.

Corporate financial analysis is largely a study of the relationship among the various financial factors in a business, as disclosed by a single set of statements and a study on the trends of these factors shown in the series of statements of the company with future projections. It is the process of identifying the financial strength and weakness of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account. They reflect a combination of recorded facts and accounting refers to the treatment of the information contained in the financial statements in a way so as to afford a full diagnosis of the profitability and financial position of the firm. User of the financial statement is the management, creditors, investors's etc.

The present study is an effort to analysis the financial performance of CPCL over a period of time suggests measures for the smooth running of business and projects the future with the help of the actuals.

Hence financial analysis helps the management to make the best use of its financial strength and to spot out the financial weakness to take corrective actions. Thus it could be stated that it is a starting point for using any sophisticated forecasting and planning procedures.

## INDUSTRY PROFILE

At present there are 17 refineries operating in the country, 15 in the public sector unit, 1 in private sector. Out of the public sector refineries 7 refineries are owned by Indian Oil Corporation Limited, 2 each by Hindustan Petroleum Corporation limited and Chennai Petroleum Corporation Limited and one each by Bharat Petroleum Corporation limited, Kochi refineries limited, Bongaigon Refineries & Petrochemical Limited and Numaligsh Refinery Limited. The one Refinery in joint sector is Mangalore Refineries and Petrochemical Limited and one by private sector is Reliance Industries Limited.

The installed capacity of the Indian refineries is about 117 million tonnes per annum from which the product availability may be about 108 million tonnes. Taking into account the product availability from the fractionators of about 4.5 million tonnes, the total products availability would be about 113 million tonnes at 100% capacity utilization. While this is on overall basis, product like LPG is in deficit and other products are in surplus, which would necessitate operating refining capacity to match demand or export products depending on refinery economics and logistics.

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Date: \_\_\_\_\_

## COMPANY PROFILE

Chennai Petroleum Corporation Limited was incorporated on 30-12-1965 as a public limited company. CPCL's refinery was commissioned in 1969.

CPCL, widely known as MRL(Madras Refineries Ltd.), is a stand alone refiner with two refineries in Southern India - A 9.5 mmtpa (metric tonnes per annum) refinery at Manali, Chennai and another 1mmtpa at Narimanam. Its products include HSD, Kerosene, Petrol, Wax, lubricants and additives.

## CAPACITY OF CPCL

CPCL operates two refineries at Manali, near Chennai with a capacity of 9.5 mmtpa and the Cauvery Basin Refinery (CBR), in Nagapattinam with 1mmtpa. The crude thrupt touched around 10mmtpa of which 9.38 mmtp and Cauvery refinery 0.63mmtpa.

The performance for the first quarter of 2007-2008 had been good. The profit before tax had increased by over 53% and the profit after tax by 10% as compared to th same period in 2006-2007.

## ISO CERTIFICATION

The Manali refinery was originally designed for processing 2.5mmtpa of Darius Crude. CPCL was the first refinery in India to obtain the ISO 9002 Quality System Certificate, on 1 - 9-94. The same was recertified in November 1997 and is valid till November 2000. The company is in the process of equipping itself for a smooth changeover to the new demands and requirements of ISO 9002,.

CPCL-CBR has added another feather to its ISO crown, by gaining the ISO 14001 accreditation for "Environmental Management System Certificaion" on 16- 9 - 98.

## SHARE HOLDING PATTERN

| No. | Name of the Holders          | Percentage of holdings<br>% |
|-----|------------------------------|-----------------------------|
| 1   | Indian Oil Corporation       | 51.81                       |
| 2   | National Iranian Oil Company | 15.38                       |
| 3   | Banks & FIs                  | 13.35                       |
| 4   | Mutual Funds4                | 4.66                        |
| 5   | Corporate Bodies             | 2.24                        |
| 6   | NRI's                        | 1.44                        |
| 7   | FII's                        | 1.16                        |
| 8   | Public                       | 9.96                        |

## **PRODUCTS OF THE COMPANY**

The main products of the Company are :

1. Aviation Turbine Fuel (ATF)
2. Motor Spirit (Petrol)
3. Naptha
4. Superior Kerosene
5. High Speed Diesel
6. Lube Base Oil
7. Sofo Oil
8. Food Grade Hexane
9. LPG
10. Paraffin Wax
11. Furnace Oil
12. Bitumen
13. Sulphur

## **SAFETY AND HEALTH**

The Corporation has been presented the "Safety Award" for the year 1999 by the British Safety Council. The award was presented in recognition & commendation of the services rendered by CPCL, for the cause of safety. Closed Circuit TV Network has been installed at the Manali Plant.

The comprehensive health programs at the center include: modification of stressful working conditions, periodic health examination of employees and health screening of employees for early evidence of asymptotic illnesses namely: hypertension, diabetes mellitus, etc.

## **VISION OF CPCL**

CPCL will be a worl-class energy company. Well respected and consistently profitable, with a dominant presence in South India.

## **MISSION OF CPCL**

To maximize profit through

1. The manufacturing and supply of petroleum products and
2. Other related business in a reliable, ethical and socially responsible manner.

## **PERFORMANCE & PROJECTS DURING 2006-07**

### **Production:**

The crude thrupt for the year 2006-2007 was 6.82 Million Metric Tons which was higher than the previous year's crude thrupt of 6.69 MMT. Chennai Petroleum Corporation Ltd's Manali refinery processed 6.18 mmt and CPCL's Cauvery Basin Refinery processed 0.64 mmt. The MOU ranking assessment for 2006-2007 for overall performance continued to be "excellent".

### **Demand:**

The growth in demand for petroleum products continues to be low and during the year 2006-2007, the overall growth was only 1.4% with respect to sale of products from public sector oil companies. Kerosene and Naptha registered negative growth of 9.9% and 4.2% respectively.

### **Turnover:**

The turnover for the year 2002-03 was the highest ever at Rs. 8630 crore as against Rs. 6273 crore in the previous year. The turnover was higher mainly due to increase in the average international prices of petroleum products in 2006-2007 compared to the previous year.

### **Profit:**

The profit before interest, depreciation and tax for the year 2006-07 is Rs. 693 crores as against Rs. 296 crores during the year 2005-2006. The profit after tax during 2006-07 is Rs. 302.89 crore as against Rs. 64 crores during the last year. Higher refining margins and holding gains on the stocks facillitate the increase in profit.

The performance for the first quarter of 2006-2007 had been good. The profit before tax had increased by over 53% and profit after tax by 10% as compared to the same period in 2006-07.

### **Dividend:**

The Board of Directors has recommended of 35%.

### **Projects:**

#### **TENTH PLAN (2006-11) PROJECTS**

CPCL's X Plan outlay has been finalized as Rs. 2400 crore. As against the approved plan of Rs. 1000 crore for the year 2006-07, the actual was Rs. 1010.17 crore. For the year 2006-07, the outlay has been kept at Rs. 850 crores.

#### **PROJECTS COMPLETED:**

3.0 MMTPA Refinery Expansion cum Modernisation Project:

The project increased the refining capacity from 6.5mmtpa to 9.5mmtpa a increase of 46% in capacity at a total cost of Rs. 2360 crores.



# *Review of Literature*

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# REVIEW OF LITERATURE

## ANALYSIS OF WORKING CAPITAL MANAGEMENT

Working Capital may be regarded as a life-blood of a business. The analysis and interpretation of the working capital are an attempt to determine the liquidity dimension of working capital and profitability of the company.

### Procedure for analysis and interpretation

The objectives of analysis of statements have to be thought about as the techniques of analysis are to be selected on the basis of objectives.

- \$ The assumptions, Principles, Practices etc, followed in the preparations of the working capital management are to be ascertained to understand their significance.
- \$ Additional data and information required as to be collected.
- \$ The data collected has to be presented in a logical sequence by rearranging and readjusting the different items.
- \$ The data is to be analyzed for making comparative statements for ascertaining averages and for estimating trends.
- \$ Facts gathered from analysis are to be interpreted by considering the general state of the market and economy also.

### Techniques of Working Capital Analysis

- \$ Fund Flow Analysis
- \$ Comparative Financial statements
- \$ Common Measurement or Size statements
- \$ Networking Capital Analysis
- \$ Trend Analysis

### Statistical Tools are

- \$ Z-score analysis
- \$ Regression Analysis

### Fund Flow Analysis

It is a statement of sources and applications of funds. It is a technical device designed to analyse the changes in financial position of a business concern between two periods. This analysis is helping in judging credit worthiness, financial planning and budget preparation.

### Comparative Financial Statements

These statements summarize and present related data for a number of years, incorporating therein changes in individual items of financial statements. These statements normally comprise comparative balance sheets, Comparative Profit and Loss Account, comparative statements of change in total capital as well as in Working Capital. They help in making inter period and inter firm comparisons.

## **Common Size Statements**

These statements indicate the relationship of various items with some common items. In the income statements the sales figure will be taken as base and other figures will be expressed as percentage of sales. Similarly, in the Balance sheet the total assets and liabilities will be taken as base and all other figures will be expressed as percentage of this total. The calculated percentage will be compared to corresponding percentages in other periods or other firms and meaningful conclusions are drawn.

## **Networking Capital Analysis**

Networking Capital Statement s is prepared to disclose net changes in Working Capital on two specific dates. It's current assets and current liability on the specified date to show net increase or decrease in Working Capital.

## **Trend Analysis**

'Trend' signifies a tendency and as such the review and appraisal of tendency in accounting variables are nothing but Trend analysis. Trend analysis is carried out by calculating trend ratios or by plotting the accounting data on graph paper or chart. Trend analysis is significant for forecasting and budgeting. Trend Analysis discloses the changes in financial and operating data between specific periods.

### **Break-Even Point**

The Break-Even Point is that point of activity where total revenues and total expenses are equal. It is the point of zero profit and zero loss. It is the level where the sales income will equal the some of its direct cost and its period expenses.

## **Statistical Tools**

### **Z-Score Analysis**

Z-Score reveals the efficiency of Working Capital Management. Edward I Aitman created Z-Score. Aitman found that 5 ratios could be combined to discriminate between the bankrupt and non-bankrupt companies. It is a good analytical tool.

## **Regression Analysis**

This analysis helps to determine the future trend of the business. This is a widely used Statistical technique that helps to find approximate results. The usual regressiona line being used is  $y$  on  $x$  with formula  $yc = a + bx$ .

# *Research Methodology*

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## RESEARCH METHODOLOGY

The project study mainly focuses on the critical assessment of the financial position of CPCL, and deals with financial statement analysis, financial planning and financial control.

### Research Design:

The research design is purely and simply the frame work plan for a study that guides the collection and analysis of data. The function of researcher is to ensure that requires the data collected or accurate and economically.

Analytical research technique was adopted in the project. Generally analytical studies are designed to analysis some thing and it collects data for a definite purpose.

### Primary data:

As part of strengthening the study, personal contacts are made with the officials and staff members of the finance department in the form of discussions and collection of reports.

### Secondary data:

The data are collected from the annual reports, mainly balance sheet, income and expenditure and other brochures of the company.

### Method of collection:

The data for the analysis was collected and gathered from the printed reports of CPCL like annual reports, official files, records and other available related materials.

### Period of Study:

The study has been made for a period of five financial years from 2003-2008.

### Scope of the study:

- The study finds out the operational efficiency of the organization and suggest the proper utilization and allocation of cash resources to improve the efficiency of the organization.
- The financial position of the organization will be further revealed through the adoption of various techniques available for analysis.
- These techniques reveal the measures that can adopt to improve the existing trend.

*Limitation*

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## LIMITATIONS

### Limitations of the study:

- ú The project study will be mainly based on information gathered from secondary data, mainly Balance Sheet and Profit & Loss A/c.
- ú The whole study will be based on observation in the past, which can only be related to laws that operated in the past, as there is no evidence that the laws will continue to operate in future also.
- ú Being the company is under the control of IOC and also under the indirect administration of government it is not possible to fix the prices for some of the major products produced. It is not in a position to enjoy the control of ownership.
- ú The company after the phased dismantling of Administered Pricing Mechanism till 2002, had to face the challenges in international oil market during 2003-2008. The Iraq war also had a major impact on oil prices and ultimately on the profitability of the oil industry as a whole in India. Therefore five year period studied is subject to major fluctuations in term of profitability.



# *Analysis & Interpretation*

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## ANALYSIS AND INTERPRETATION

### WORKING CAPITAL GROUP RATIOS

#### 1. Current Assets to Total Assets Ratio

(Rs. in Lakhs)

| Year      | Current Assets | Total Assets | CA/TA |
|-----------|----------------|--------------|-------|
| 2003-2004 | 176713.14      | 302438.16    | 0.58  |
| 2004-2005 | 172673.84      | 291637.24    | 0.59  |
| 2005-2006 | 157667.36      | 275030.98    | 0.57  |
| 2006-2007 | 211078.23      | 333302.46    | 0.63  |
| 2007-2008 | 203573.14      | 461843.19    | 0.44  |

Mean = 0.56

Correlation = 0.9

Standard Deviation = 0.064

#### INTERPRETATION

This ratio indicates the proportion of Current Assets to the Total assets of the company. The current assets has been on the decreasing trend for the last five years. This is because of reduction in the maintenance of Other Current Assets of the company. Higher ratio indicates maintenance of sufficient cash balance and inventories. Lower ratio indicates lower level of inventory and cash balance.

#### 2. Working Capital to Long-Term Debt

(Rs. in Lakhs)

| Year      | Working Capital | Long-Term Debt | WC/LDT |
|-----------|-----------------|----------------|--------|
| 2003-2004 | 87550.55        | 100585.55      | 0.87   |
| 2004-2005 | 107961.68       | 115245.71      | 0.94   |
| 2005-2006 | 85728.81        | 125793.1       | 0.68   |
| 2006-2007 | 92078.00        | 197567.05      | 0.47   |
| 2007-2008 | 87592.87        | 236530.82      | 0.37   |

Mean = 0.67

Correlation = 0.2

Standard Deviation = 0.22

#### INTERPRETATION

This will indicate the amount of capital employed out of Short-term debt taken by the company. Higher ratio indicates effective utilization of debt whereas the lower ratio indicates diversion of funds to investments. The Company has borrowed in the year 2006-07 and 2007-08 to fund the 3MMTPA Project.

### 3. Working Capital to Total Assets

(Rs. in Lakhs)

| Year      | Working Capital | Total Assets | WC/TA |
|-----------|-----------------|--------------|-------|
| 2003-2004 | 87550.55        | 302438.16    | 0.29  |
| 2004-2005 | 107961.68       | 291637.24    | 0.37  |
| 2005-2006 | 85728.81        | 275030.98    | 0.31  |
| 2006-2007 | 92078.00        | 333302.46    | 0.28  |
| 2007-2008 | 87592.87        | 461843.19    | 0.19  |

Mean = 0.29

Correlation = 0.3

Standard Deviation = 0.058

### INTERPRETATION

This represents the amount of long-term resources used for the purchase of Current Assets, which also form part of the Total Assets. This is also a good indicator of total performance of the company in the industry as a whole.

### 4. Inventory to Current Assets

(Rs. in Lakhs)

| Year      | Inventory | Current Assets | Inventory/C.A. |
|-----------|-----------|----------------|----------------|
| 2003-2004 | 96357.04  | 176713.14      | 0.55           |
| 2004-2005 | 85818.49  | 172673.84      | 0.50           |
| 2005-2006 | 7504.85   | 157667.36      | 0.048          |
| 2006-2007 | 120307.81 | 211078.23      | 0.57           |
| 2007-2008 | 120313.33 | 203573.14      | 0.59           |

Mean = 0.45

Correlation = 0.9

Standard Deviation = 0.20

### INTERPRETATION

This ratio shows the component of inventory over Current Assets. This ratio could be compared with that of the industry to find out whether the company is maintaining the optimum inventory or not. Higher the inventory, higher will be the costs of locking up of funds. This will add up as a burden to the profitability of the company.

## 5. Inventory to Working Capital

(Rs. in Lakhs)

| Year      | Inventory | Working Capital | Inventory/WC |
|-----------|-----------|-----------------|--------------|
| 2003-2004 | 96357.04  | 87550.55        | 1.10         |
| 2004-2005 | 85818.49  | 107961.68       | 0.79         |
| 2005-2006 | 7504.85   | 85728.81        | 0.088        |
| 2006-2007 | 120307.81 | 92078.00        | 1.31         |
| 2007-2008 | 120313.33 | 87592.87        | 1.37         |

Mean = 0.93

Correlation = 0.3

Standard Deviation = 0.47

### INTERPRETATION

This indicates the amount required to purchase of inventory to carry out the production process out of total available working capital. Higher ratio indicates higher amount consumption by inventory and Lower ratio indicates lower proportion of working capital has been utilized for purchase of inventory.

## 6. Current Liabilities to Total Liabilities

(Rs. in Lakhs)

| Year      | Current Liabilities | Total Liabilities | CL/TL |
|-----------|---------------------|-------------------|-------|
| 2003-2004 | 89162.59            | 304914.05         | 0.29  |
| 2004-2005 | 64712.16            | 304803.49         | 0.21  |
| 2005-2006 | 71938.55            | 302853.72         | 0.24  |
| 2006-2007 | 119000.23           | 446095.32         | 0.27  |
| 2007-2008 | 115980.27           | 513644.13         | 0.23  |

Note: Here the total liabilities include networth, short-term and long-term borrowings, and current liabilities.

Mean = 0.25

Correlation = 0.8

Standard Deviation = 0.029

### INTERPRETATION

This indicates the proportion of current liabilities to the total liabilities of the company. Generally, current liabilities will be of short-term nature. This is mainly taken to meet or carry out the day-to-day requirements of the business. This includes credit granted by suppliers that will be limited to certain time period depending on the nature of business transaction. Current Liabilities are such liability that has to be met in the immediate future

## SHORT-TERM SOLVENCY RATIOS

### 1. CURRENT RATIO

(Rs. in Lakhs)

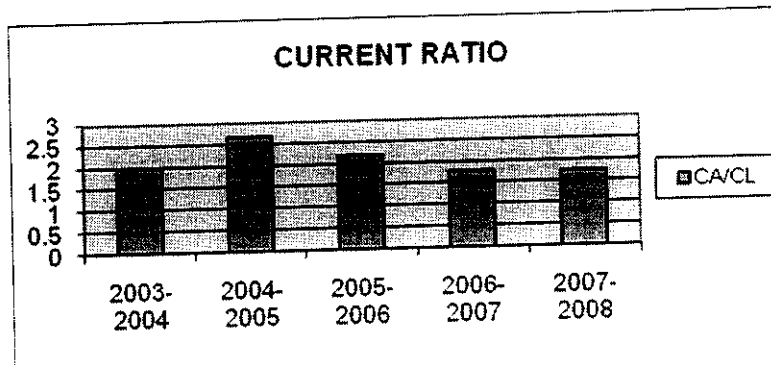
| Year      | Current Assets | Current Liabilities | CA/CL |
|-----------|----------------|---------------------|-------|
| 2003-2004 | 176713.14      | 89162.59            | 1.98  |
| 2004-2005 | 172673.84      | 64712.16            | 2.67  |
| 2005-2006 | 157667.36      | 71938.55            | 2.20  |
| 2006-2007 | 211078.23      | 119000.23           | 1.77  |
| 2007-2008 | 203573.14      | 115980.27           | 1.75  |

Note: Current Liabilities here includes provision also.

Mean = 2.07

Correlation = 0.9

Standard Deviation = 0.34



### INTERPRETATION

The ideal ratio between Current Assets and Current Liabilities is 2:1. This is insisted because even if Current Assets are reduced to half i.e. 1, the creditors will be able to get their dues in full. Here, the ratio is showing a decreasing trend, though it indicates the efficient use of funds it is necessary to maintain ideal ratio. This trend may be due to rise in Production

## 2. QUICK RATIO

(Rs. in Lakhs)

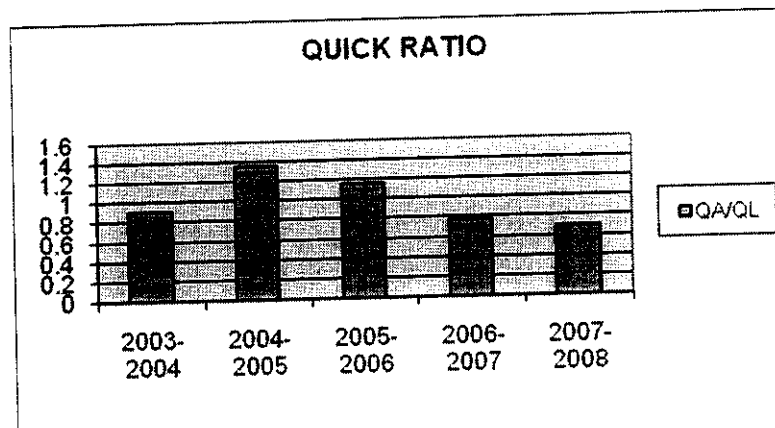
| Year      | Quick Assets | Quick Liabilities | QA/QL |
|-----------|--------------|-------------------|-------|
| 2003-2004 | 80309.63     | 88617.5           | 0.91  |
| 2004-2005 | 86710.09     | 64237.04          | 1.35  |
| 2005-2006 | 81962.52     | 70512.39          | 1.16  |
| 2006-2007 | 90770.42     | 115805.58         | 0.78  |
| 2007-2008 | 83259.81     | 108930.29         | 0.7   |

Note: Quick Liabilities = Current Liabilities less Bank overdraft

Mean = 0.98

Correlation = 0.3

Standard Deviation = 0.24



### INTERPRETATION

The ideal Quick Ratio is 1. This is a ratio between Quick Assets and Quick Liabilities. This ratio is showing a slightly decreasing trend. This is because of non-maintenance of sufficient amount of liquid cash and decrease of sundry debtors. The phenomena is however temporary.

### 3. CASH POSITION RATIO

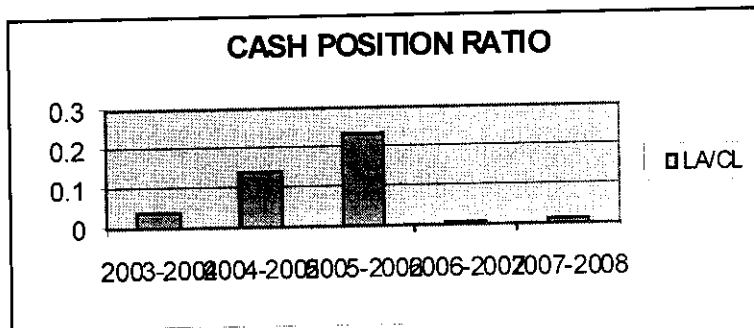
(Rs. in Lakhs)

| Year      | Liquid Assets | Current Liabilities | LA/CL  |
|-----------|---------------|---------------------|--------|
| 2003-2004 | 3472.49       | 89162.59            | 0.039  |
| 2004-2005 | 8737.72       | 64712.16            | 0.14   |
| 2005-2006 | 16584.45      | 71938.55            | 0.23   |
| 2006-2007 | 901.28        | 119000.23           | 0.0076 |
| 2007-2008 | 1242.89       | 115980.27           | 0.011  |

Mean = 0.086

Correlation = 0.9

Standard Deviation = 0.087



### INTERPRETATION

The ideal Cash Position ratio is 0.75:1. This analysis shows that Cash and Bank balances have been maintained however prudentially for the past 5 years and has not defaulted any payment.

## OVERALL SOLVENCY RATIO

### 1. DEBT RATIO

(Rs. in Lakhs)

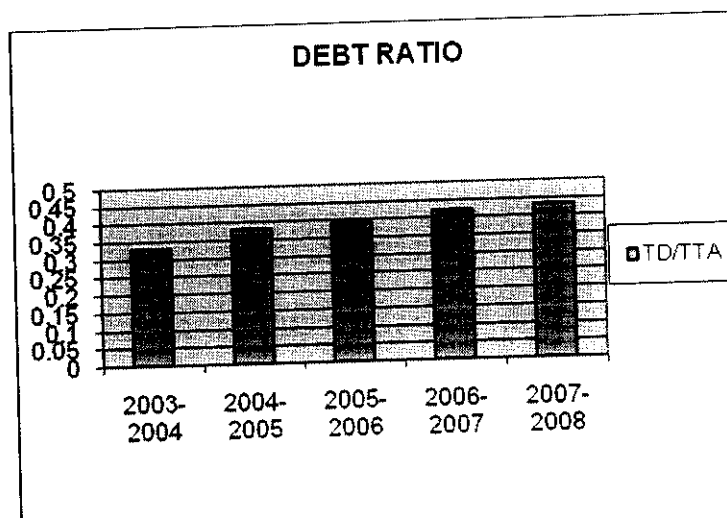
| Year      | Total Debt | Total Tangible Assets | TD/TTA |
|-----------|------------|-----------------------|--------|
| 2003-2004 | 100585.55  | 304914.05             | 0.33   |
| 2004-2005 | 115245.71  | 303369.29             | 0.38   |
| 2005-2006 | 125793.1   | 325835.21             | 0.39   |
| 2006-2007 | 197567.05  | 473224.74             | 0.42   |
| 2007-2008 | 236530.82  | 544162.3              | 0.43   |

Note: Here total debt includes networth, loans and current liabilities. The total tangible assets includes work-in-progress also.

Mean = 0.39

Correlation = 0.9

Standard Deviation = 0.035



### INTERPRETATION

This ratio indicates that overall solvency position of the company is good. Though the ratio is low, it slightly showing an increasing trend that may be due to fluctuations prevailing in the money market and in the overall interest of the Company to reduce the overall weighted average cost of Capital.

## LONG-TERM SOLVENCY RATIO

### 1. FIXED ASSET RATIO

(Rs. in Lakhs)

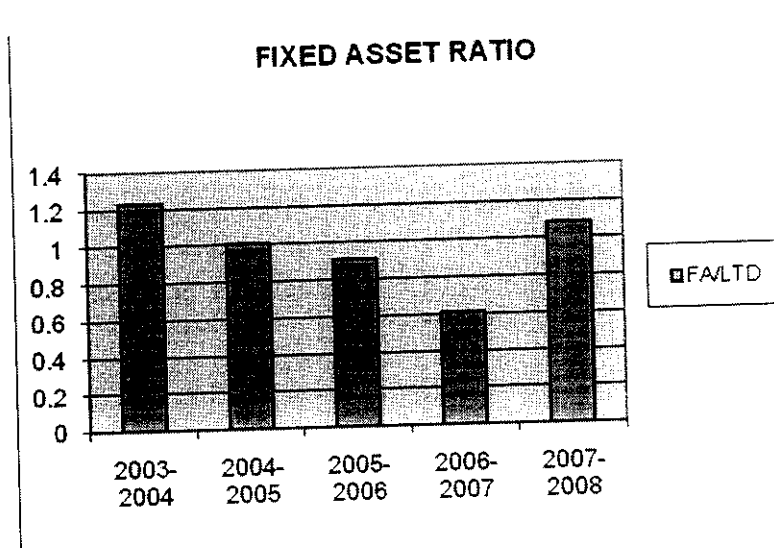
| Year      | Fixed Assets | Long-Term Debt | FA/LTD |
|-----------|--------------|----------------|--------|
| 2003-2004 | 123926.87    | 100585.55      | 1.23   |
| 2004-2005 | 117060.36    | 115245.71      | 1.01   |
| 2005-2006 | 114201.89    | 125793.1       | 0.91   |
| 2006-2007 | 119827.06    | 197567.05      | 0.61   |
| 2007-2008 | 257073.25    | 236530.82      | 1.09   |

Note: Long-term debt means secured loans and unsecured loans.

Mean = 0.97

Correlation = 0.3

Standard Deviation = 0.21



### INTERPRETATION

An ideal Fixed Assets Ratio is 0.67. Ratio more than '1' indicates that fixed assets are purchased either with both equity and short term funds or with any one of the mode of financing. Here, the ratio is slightly more than 1 which indicates the pumping of funds from any of the sources as mentioned above.



## 2. DEBT EQUITY RATIO

(Rs. in Lakhs)

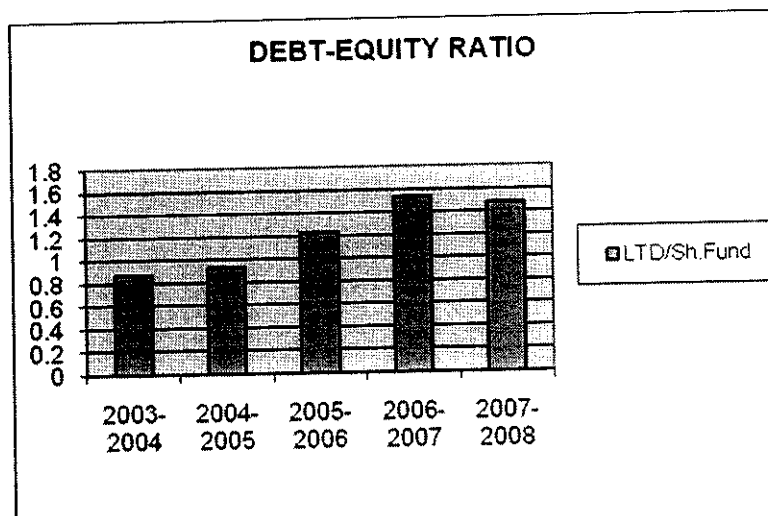
| Year      | Long-Term Debt | Shareholder's Funds | LTD/Sh.Fund |
|-----------|----------------|---------------------|-------------|
| 2003-2004 | 100585.55      | 115165.91           | 0.87        |
| 2004-2005 | 115245.71      | 123411.42           | 0.93        |
| 2005-2006 | 125793.1       | 103190.73           | 1.22        |
| 2006-2007 | 197567.05      | 129333.46           | 1.53        |
| 2007-2008 | 236530.82      | 160991.77           | 1.47        |

Note: Shareholder's Funds and Networth are same.

Mean = 1.204

Correlation = 0.7

Standard Deviation = 0.27



### INTERPRETATION

The ideal Debt-Equity Ratio is 1. In this analysis, it shows that for the past three years the ratio is more than 1 and increasing slightly year by year. This is because of rise in borrowings to fund the rising cost of Raw Material and for the 3MMTPA expansion Refinery.

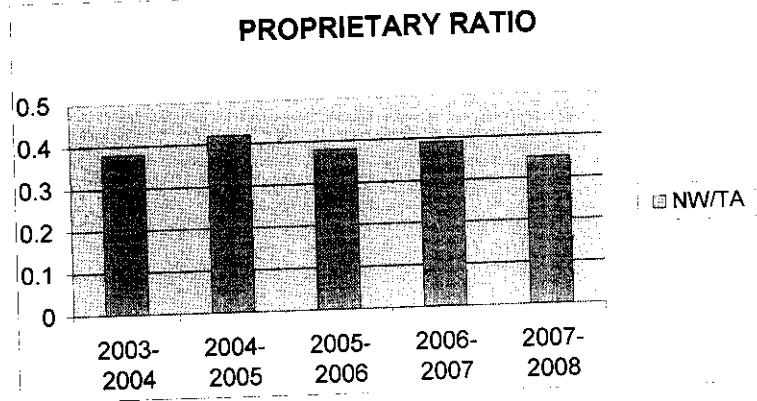
## 2. PROPRIETARY RATIO

(Rs. in Lakhs)

| Year      | Networth  | Tangible Assets | NW/TA |
|-----------|-----------|-----------------|-------|
| 2003-2004 | 115165.91 | 302438.16       | 0.38  |
| 2004-2005 | 123411.42 | 291637.24       | 0.42  |
| 2005-2006 | 103190.73 | 275030.98       | 0.38  |
| 2006-2007 | 129333.46 | 333302.46       | 0.39  |
| 2007-2008 | 160991.77 | 461843.19       | 0.35  |

Note: Tangible assets include investments, current assets and fixed assets excluding work-in-progress.

Mean = 0.384                      Correlation = 0.9  
Standard Deviation = 0.022



### INTERPRETATION

The ideal ratio is 0.5. For the last five years the ratio is moderate and the financial position of the company is fair. Hence it is advisable to rise the shareholder's funds of the company in the long run.

### 3. CAPITAL GEARING RATIO

(Rs. in Lakhs)

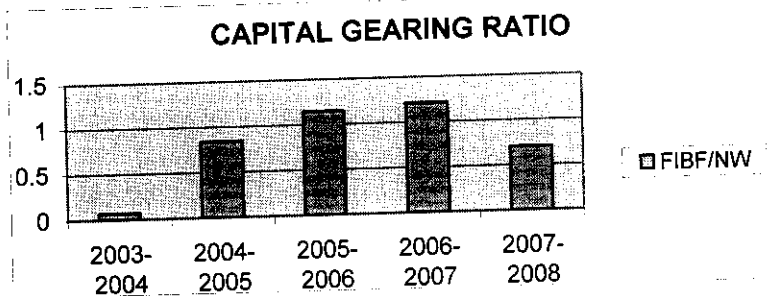
| Year      | Fixed Interest Bearing Funds | Networth  | FIBF/NW |
|-----------|------------------------------|-----------|---------|
| 2003-2004 | 79425.21                     | 115165.91 | 0.069   |
| 2004-2005 | 104035.71                    | 123411.42 | 0.84    |
| 2005-2006 | 118124                       | 103190.73 | 1.14    |
| 2006-2007 | 156872.4                     | 129333.46 | 1.21    |
| 2007-2008 | 112229.4                     | 160991.77 | 0.70    |

Note: Fixed interest bearing funds include unsecured loans, fixed deposits and others.

Mean = 0.79

Correlation = 0.2

Standard Deviation = 0.41



### INTERPRETATION

The capital structure of the company is increased during 2005-2006, 2006-2007 and decreased during 2007-08. The low gearing ratio indicates overcapitalization. This is because of rise in borrowings to fund the procurement of Raw Material and for the 3MMTPA Expansion Refinery.

## TURNOVER RATIOS

### 1. Debtor's Turnover Ratio

(Rs. in Lakhs)

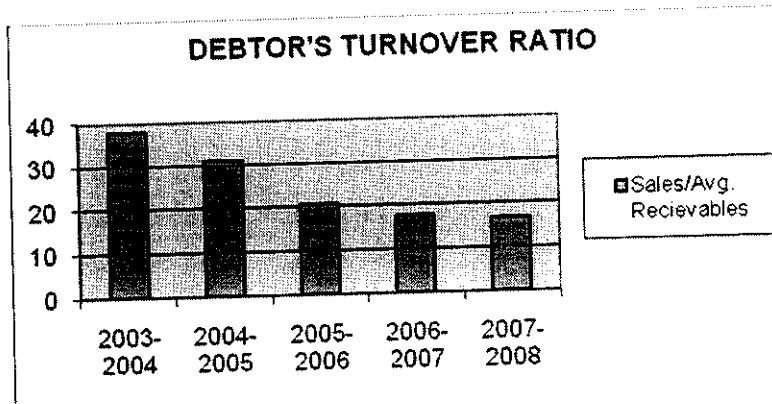
| Year      | Sales     | Average Recievables | Sales/Avg. Recievables |
|-----------|-----------|---------------------|------------------------|
| 2003-2004 | 551429.09 | 14504.91            | 38.02                  |
| 2004-2005 | 713262.28 | 22954.92            | 31.07                  |
| 2005-2006 | 627308.67 | 30501.04            | 20.57                  |
| 2006-2007 | 862995.08 | 48906.84            | 17.65                  |
| 2007-2008 | 947596.46 | 56759.48            | 16.69                  |

Note: Average receivables include opening debtors plus closing debtors divided by 2.

Mean = 24.8

Correlation = 0.9

Standard Deviation = 8.35



## Debtor's Collection period

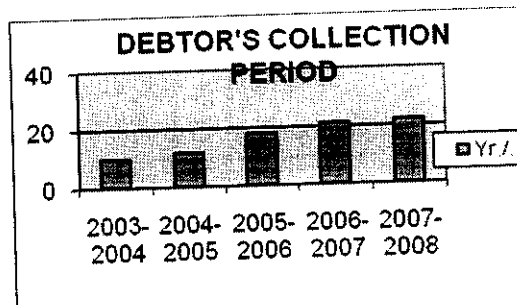
(in Days)

| Year      | Days in a Year | Debtor's Turnover Ratio | Yr./DTO |
|-----------|----------------|-------------------------|---------|
| 2003-2004 | 365            | 38.02                   | 9.6     |
| 2004-2005 | 365            | 31.07                   | 11.75   |
| 2005-2006 | 365            | 20.57                   | 17.74   |
| 2006-2007 | 365            | 17.65                   | 20.68   |
| 2007-2008 | 365            | 16.69                   | 21.87   |

Mean = 16.33

Correlation = 1

Standard Deviation = 4.86



## INTERPRETATION

The turnover for the past five years is decreasing and the collection period is increasing which implies that payment by debtors is delayed. This is because of increase in credit period for the major customers like IOC who is lifting almost 95% of their products.

## 2. Creditors Turnover Ratio

(Rs. in Lakhs)

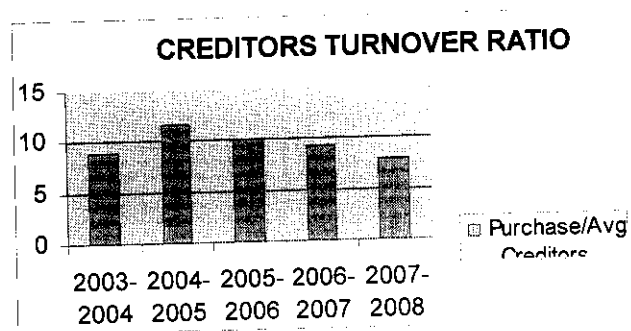
| Year      | Purchase  | Average Creditors | Purchase/Avg. Creditors |
|-----------|-----------|-------------------|-------------------------|
| 2003-2004 | 497888.08 | 56594.67          | 8.80                    |
| 2004-2005 | 628630.94 | 53579.19          | 11.73                   |
| 2005-2006 | 558658.42 | 55809.94          | 10.01                   |
| 2006-2007 | 724122.91 | 77785.64          | 9.31                    |
| 2007-2008 | 768150.85 | 96024.94          | 7.99                    |

Note: Average creditors include opening creditors plus closing creditors divided by 2.

Mean = 9.57

Correlation = 0.6

Standard Deviation = 1.27



## Creditor's Collection Period

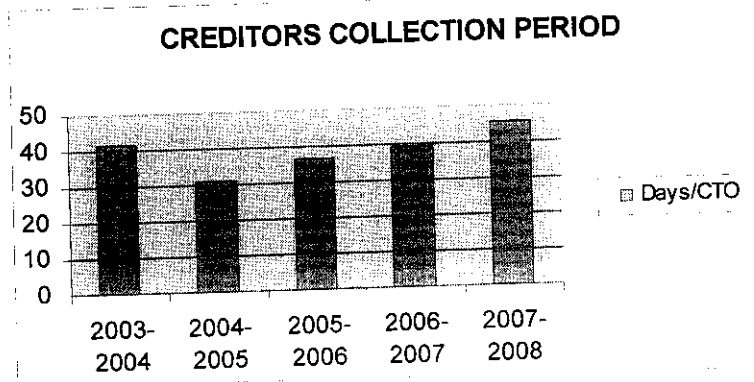
(in Days)

| Year      | Days in a Year | Creditor's Turnover Ratio | Days/CTO |
|-----------|----------------|---------------------------|----------|
| 2003-2004 | 365            | 8.80                      | 41.48    |
| 2004-2005 | 365            | 11.73                     | 31.12    |
| 2005-2006 | 365            | 10.01                     | 36.46    |
| 2006-2007 | 365            | 9.31                      | 39.21    |
| 2007-2008 | 365            | 7.99                      | 45.68    |

Mean = 38.79

Correlation = 0.6

Standard Deviation = 4.88



## INTERPRETATION

This analysis is showing decreasing turnover and increasing number of days in collection period. A lower ratio and high number of days indicate delayed payment to creditors. Depending on the liquidity position of the company, the kind of payables turnover desirable is planned.

### 3. Working Capital Turnover Ratio

(Rs. in Lakhs)

| Year      | Sales     | Net Working Capital | Sales/NWC |
|-----------|-----------|---------------------|-----------|
| 2003-2004 | 551429.09 | 87550.55            | 6.30      |
| 2004-2005 | 713262.28 | 107961.68           | 6.61      |
| 2005-2006 | 627308.67 | 85728.81            | 7.32      |
| 2006-2007 | 862995.08 | 92078.00            | 9.37      |
| 2007-2008 | 947596.46 | 87592.87            | 10.82     |

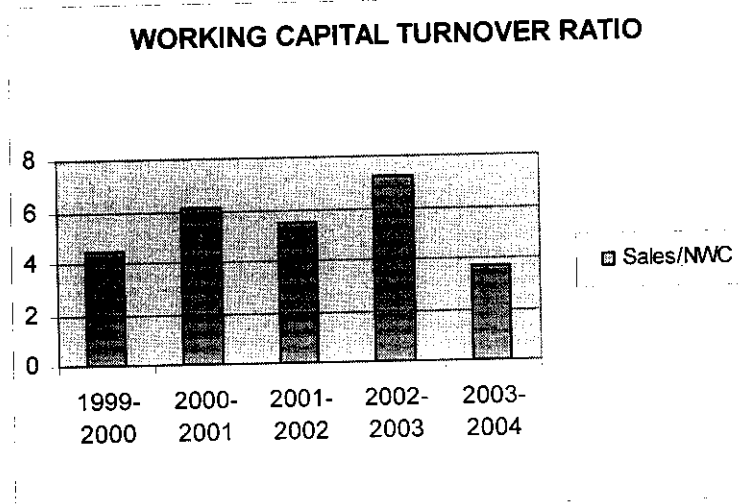
Note: Net Working Capital means Current Assets minus Current Liabilities.

Mean = 8.08

Standard Deviation = 1.74

Correlation = 0.5

Covariance = 21.53%



### INTERPRETATION

This analysis helps to measure effective utilization of Working Capital. The lower ratio for the current year indicates lower investment of Working Capital and more Profit. The investment of Working Capital is high in the year 2006-07. For the remaining years, it is moderate.



#### 4. Fixed Assets Turnover Ratio

(Rs. in Lakhs)

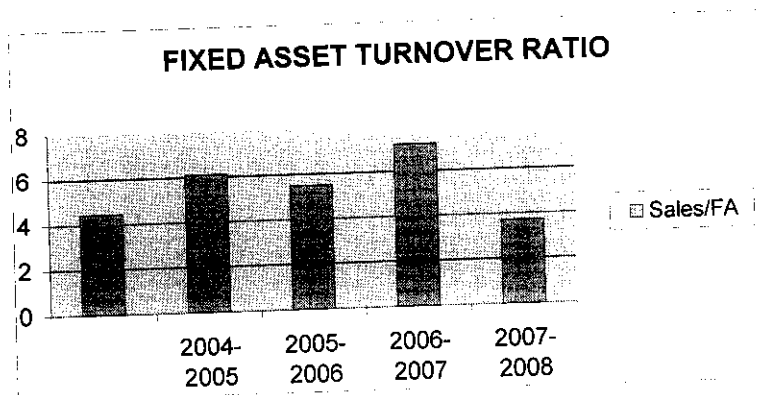
| Year      | Sales     | Fixed assets | Sales/FA |
|-----------|-----------|--------------|----------|
| 2003-2004 | 551429.09 | 123926.87    | 4.45     |
| 2004-2005 | 713262.28 | 117060.36    | 6.09     |
| 2005-2006 | 627308.67 | 114201.89    | 5.49     |
| 2006-2007 | 862995.08 | 119827.06    | 7.20     |
| 2007-2008 | 947596.46 | 257073.25    | 3.69     |

Note: Here Fixed Assets does not include work-in-progress.

Mean = 5.38

Correlation = 0.9

Standard Deviation = 1.23



#### INTERPRETATION

This indicates the efficient utilization of Fixed Assets to the profitability of the business concern. In this analysis the high ratio in the year 2004-05 indicates effective utilization of the Assets and decreasing ratio for the last three years is indicating underutilization of Fixed Asset. This is because of the expansion project being implemented in a phased manner and production is being stabilized in 2008-09.

## 5. Current Asset Turnover Ratio

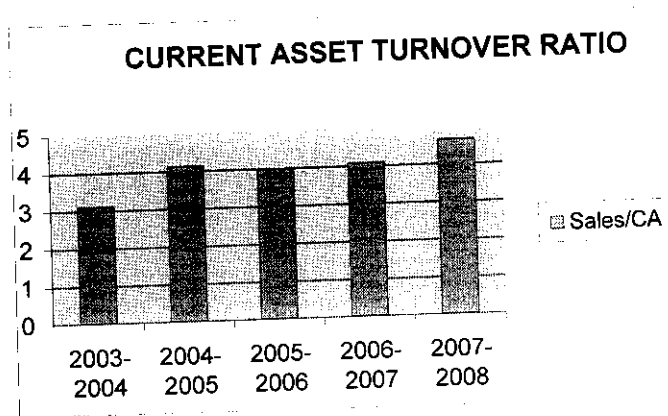
(Rs. in Lakhs)

| Year      | Sales     | Current Assets | Sales/CA |
|-----------|-----------|----------------|----------|
| 2003-2004 | 551429.09 | 176713.14      | 3.12     |
| 2004-2005 | 713262.28 | 172673.84      | 4.13     |
| 2005-2006 | 627308.67 | 157667.36      | 3.98     |
| 2006-2007 | 862995.08 | 211078.23      | 4.09     |
| 2007-2008 | 947596.46 | 203573.14      | 4.65     |

Mean = 3.99

Correlation = 0.6

Standard Deviation = 0.49



### INTERPRETATION

The increasing trend for the last two years indicates the effective utilization of Current Assets to the profitability of the business. The ratio for the year 2005-06 is very low which is only a temporary phenomena.

## 6. Capital Turnover Ratio

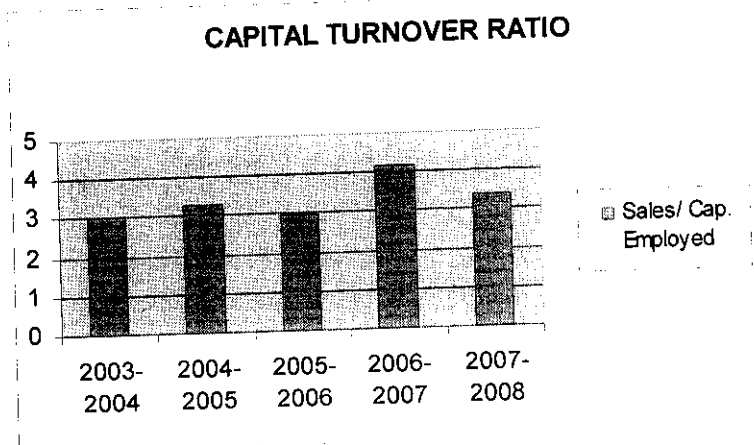
(Rs. in Lakhs)

| Year      | Sales     | Capital Employed | Sales/<br>Cap. Employed |
|-----------|-----------|------------------|-------------------------|
| 2003-2004 | 551429.09 | 182657.75        | 3.02                    |
| 2004-2005 | 713262.28 | 218249.73        | 3.27                    |
| 2005-2006 | 627308.67 | 212476.37        | 2.95                    |
| 2006-2007 | 862995.08 | 205917.88        | 4.19                    |
| 2007-2008 | 947596.46 | 278285.59        | 3.41                    |

Mean = 3.37

Correlation = 0.7

Standard Deviation = 0.44



### INTERPRETATION

This analysis shows the constant usage of Capital in the year 2003-2004, 2004-05 and 2007-08. The ratio is very low in the year 2005-06 due to shut down of the refinery for a part of the year .

## 7. Inventory Turnover Ratio

(Rs. in Lakhs)

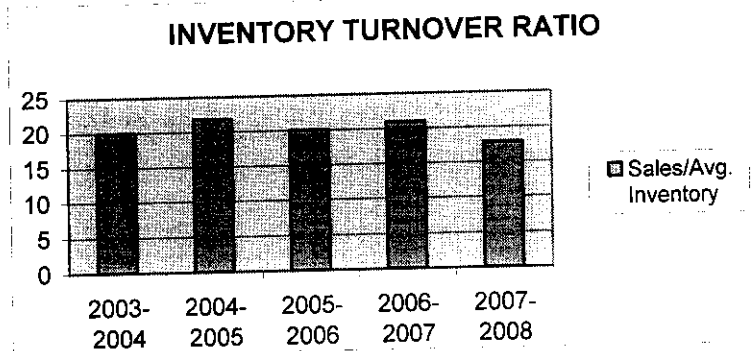
| Year      | Sales     | Average Inventory | Sales/Avg. Inventory |
|-----------|-----------|-------------------|----------------------|
| 2003-2004 | 551429.09 | 27574.91          | 19.99                |
| 2004-2005 | 713262.28 | 32717.91          | 21.80                |
| 2005-2006 | 627308.67 | 31275.14          | 20.06                |
| 2006-2007 | 862995.08 | 41295.17          | 20.89                |
| 2007-2008 | 947596.46 | 53122.37          | 17.84                |

Note: Average inventory includes opening stock plus closing stock divided by 2.

Mean = 20.12

Correlation = 0.1

Standard Deviation = 1.31



### INTERPRETATION

This analysis shows constant ratio in the year 2005-06, 2006-07 and decreased in the year 2007-08 indicating increase in crude prices which is not avoidable. The quantity of crude stock however is maintained at the reasonable levels.

## 8. Inventory Turnover Period

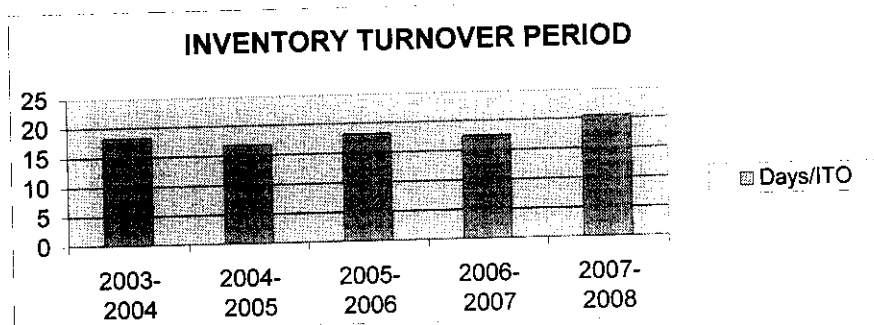
(in Days)

| Year      | Days in a Year | Inventory Turnover Ratio | Days/ITO |
|-----------|----------------|--------------------------|----------|
| 2003-2004 | 365            | 19.99                    | 18.26    |
| 2004-2005 | 365            | 21.80                    | 16.74    |
| 2005-2006 | 365            | 20.06                    | 18.2     |
| 2006-2007 | 365            | 20.89                    | 17.47    |
| 2007-2008 | 365            | 17.84                    | 20.46    |

Mean = 18.23

Correlation = 0.3

Standard Deviation = 1.25



### INTERPRETATION

The general objective is to increase the stock velocity as much as possible or in effect decrease the days or months for which items remain in stock. The current year ratio is high indicating the locking up of more capital due to increase in crude prices.

## 9. Owned Capital Turnover Ratio

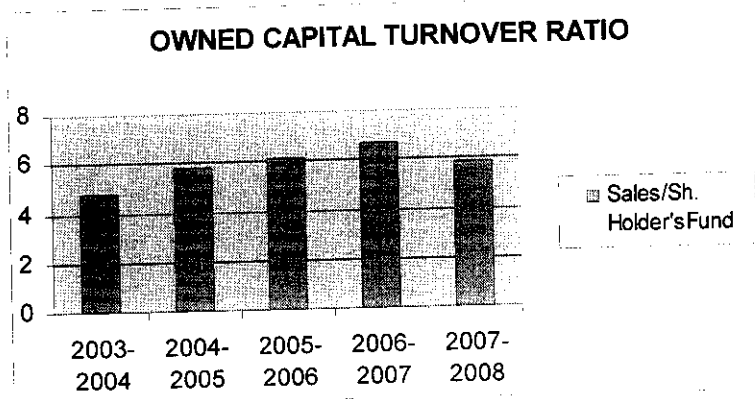
(Rs. in Lakhs)

| Year      | Sales     | Shareholder's Fund | Sales/Sh. Holder's Fund |
|-----------|-----------|--------------------|-------------------------|
| 2003-2004 | 551429.09 | 115165.91          | 4.79                    |
| 2004-2005 | 713262.28 | 123411.42          | 5.78                    |
| 2005-2006 | 627308.67 | 103190.73          | 6.08                    |
| 2006-2007 | 862995.08 | 129333.46          | 6.67                    |
| 2007-2008 | 947596.46 | 160991.77          | 5.89                    |

Mean = 5.84

Correlation = 0.9

Standard Deviation = 0.9



### INTERPRETATION

This analysis indicates the utilization of shareholder's fund in relation to sales. The ratio has increased gradually from 2004-05 and remained almost constant at 2006-07 with slight variation. However, it decreased in 2007-08 reflecting underutilization of shareholder's funds towards the profitability of the concern.

The accretion to Net worth of the Company over the years has been invested in the 3 MMTPA Refinery, the production of which is stabilizing in the year 200-09.

## PROFITABILITY RATIOS

### 1. Return on Shareholder's Fund

(Rs. in Lakhs)

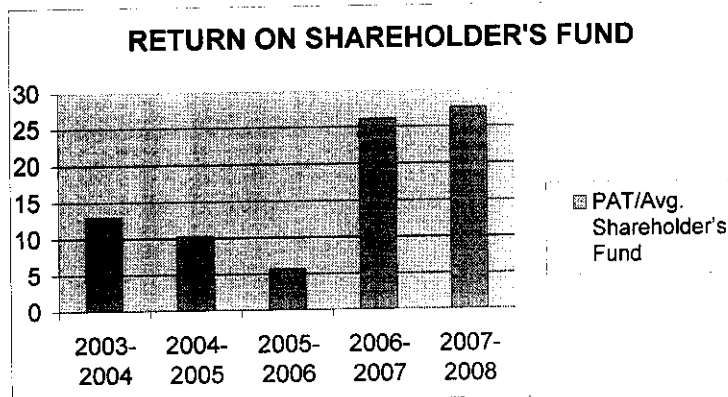
| Year      | PAT      | Avg. Shareholder's Fund | PAT/Avg. Shareholder's Fund *100 |
|-----------|----------|-------------------------|----------------------------------|
| 2003-2004 | 14314.34 | 110725.86               | 12.93                            |
| 2004-2005 | 12243.13 | 119288.67               | 10.26                            |
| 2005-2006 | 6371.19  | 113301.08               | 5.62                             |
| 2006-2007 | 30288.82 | 116262.09               | 26.05                            |
| 2007-2008 | 40004.62 | 145162.62               | 27.56                            |

Note: Average shareholder's fund means opening fund and closing fund divided by 2.

Mean = 16.48

Correlation = 0.5

Standard Deviation = 8.76



### INTERPRETATION

This analysis is viewed from the point of shareholder. The ratio is high in the year 2006-07 and 2007-08 indicates an effective utilization of shareholder's fund to the profitability of the company. The ratio is very low in 2005-06 due to shut down of the Refinery. For the year 2003-04 and 2004-05 the ratio is moderate.

## 2. Return on Investment (ROI)

(Rs. in Lakhs)

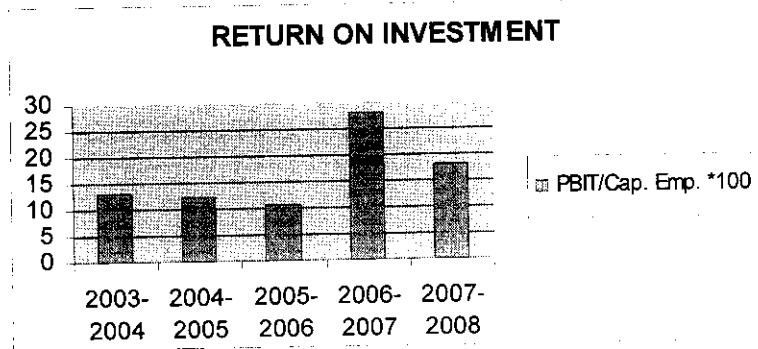
| Year      | PBIT     | Total Capital Employed | PBIT/Cap. Emp. *100 |
|-----------|----------|------------------------|---------------------|
| 2003-2004 | 27766.72 | 211477.42              | 13.13               |
| 2004-2005 | 27889.88 | 225022.04              | 12.39               |
| 2005-2006 | 21697.05 | 199930.7               | 10.85               |
| 2006-2007 | 59461.1  | 211905.06              | 28.06               |
| 2007-2008 | 61905.98 | 344666.12              | 17.96               |

Note: Capital employed includes fixed assets and working capital.

Mean = 16.48

Correlation = 0.7

Standard Deviation = 6.26



### INTERPRETATION

This ratio shows a decreasing trend for the first 3 years indicating the inefficient use of capital employed. There is sudden increase in the use of capital efficiently in the year 2006-07 and decreased in the year 2007-08 which are mainly due to fluctuating prices of both raw material and finished products, the movement of which are not in tandem to each other.



### 3. Return on Capital Employed

(Rs. in Lakhs)

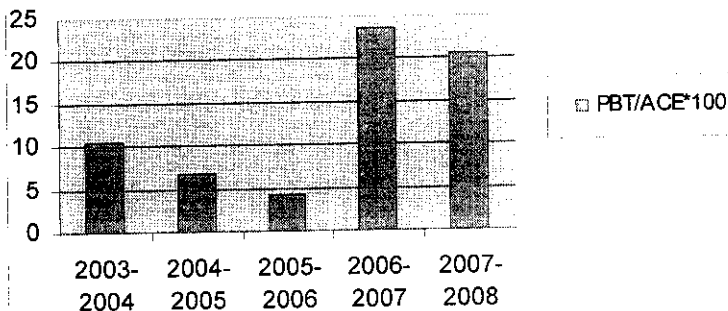
| Year      | PBT      | Average Capital Employed | PBT/ACE*100 |
|-----------|----------|--------------------------|-------------|
| 2003-2004 | 19168.67 | 182657.75                | 10.49       |
| 2004-2005 | 14743.54 | 218249.73                | 6.76        |
| 2005-2006 | 8888.51  | 212476.37                | 4.18        |
| 2006-2007 | 48795.92 | 205917.88                | 23.69       |
| 2007-2008 | 57226.22 | 278285.59                | 20.56       |

Mean = 13.14

Correlation = 0.2

Standard Deviation = 7.67

#### RETURN ON CAPITAL EMPLOYED



#### INTERPRETATION

This analysis shows that the capital employed is efficiently in the year 2006-07 and 2007-08. The decrease is due to shut down of the refinery due to acute water shortage. Here the capital employed is taken on average basis to include the change taken place between the year.

#### 4. Return on Total Assets

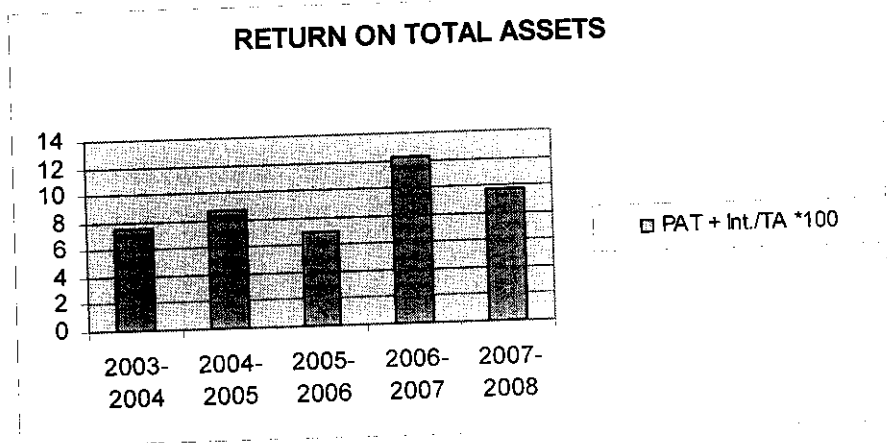
(Rs. in Lakhs)

| Year      | PAT + Int. | Total Assets | PAT + Int./TA *100 |
|-----------|------------|--------------|--------------------|
| 2003-2004 | 22912.39   | 302438.16    | 7.58               |
| 2004-2005 | 25389.47   | 291637.24    | 8.71               |
| 2005-2006 | 19179.73   | 275030.98    | 6.97               |
| 2006-2007 | 40954      | 333302.46    | 12.29              |
| 2007-2008 | 44684.38   | 461843.19    | 9.68               |

Mean = 9.05

Correlation = 0.9

Standard Deviation = 1.87



#### INTERPRETATION

This ratio is used to analyze the productivity of the Total Assets to the profit of the company. Higher ratio indicates more productivity of the total Assets. Lower ratio was due to shut down of the refinery in 2005-06.

## 5. Operating Ratio

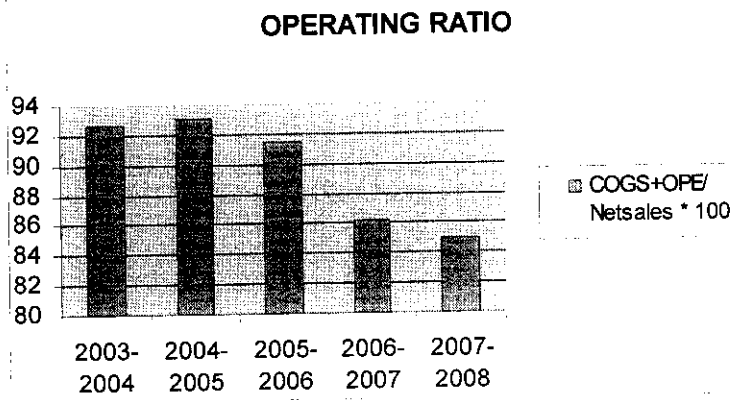
(Rs. in Lakhs)

| Year      | COGS + OPE | Netsales  | COGS+OPE/<br>Netsales * 100 |
|-----------|------------|-----------|-----------------------------|
| 2003-2004 | 510816.82  | 551429.09 | 92.64                       |
| 2004-2005 | 664144.02  | 713262.28 | 93.11                       |
| 2005-2006 | 573992.37  | 627308.67 | 91.50                       |
| 2006-2007 | 743670.63  | 862995.08 | 86.17                       |
| 2007-2008 | 805781.03  | 947596.46 | 85.03                       |

Mean = 89.69

Correlation = 1

Standard Deviation = 3.39



## INTERPRETATION

This analysis helps to identify the expenditure incurred in production, sales and distribution of output. It indicates the operational efficiency of the concern. The lower ratio in the year 2006-07 and 2007-08 indicates the more operational efficiency. The higher ratio in the year 2003-2004 and 2004-05 shows the inefficiency of the concern. The ratio of the year 2005-06 shows the efficiency of the business operation as moderate.

## 6. Operating Profit Ratio

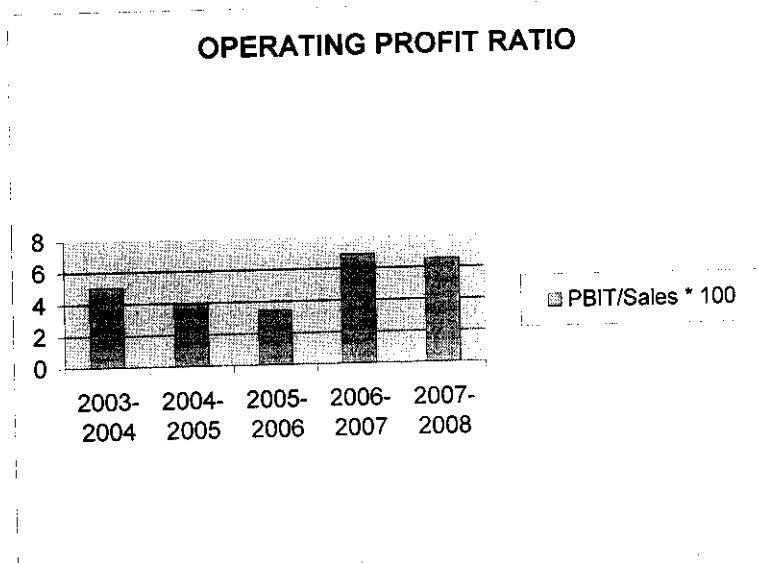
(Rs. in Lakhs)

| Year      | PBIT     | Sales     | PBIT/Sales * 100 |
|-----------|----------|-----------|------------------|
| 2003-2004 | 27766.72 | 551429.09 | 5.04             |
| 2004-2005 | 27889.88 | 713262.28 | 3.91             |
| 2005-2006 | 21697.05 | 627308.67 | 3.46             |
| 2006-2007 | 59461.1  | 862995.08 | 6.89             |
| 2007-2008 | 61905.98 | 927596.46 | 6.53             |

Mean = 5.17

Correlation = 0.9

Standard Deviation = 1.37



### INTERPRETATION

This analysis is used as a measure of management's efficiency in running the routine operations of the business. The higher ratios in the year 2006-07 and 2007-08 indicate the higher efficiency and the lower ratios in the year 2004-05 and 2005-06 indicate lower efficiency.

## 7. Net Profit Ratio

(Rs. in Lakhs)

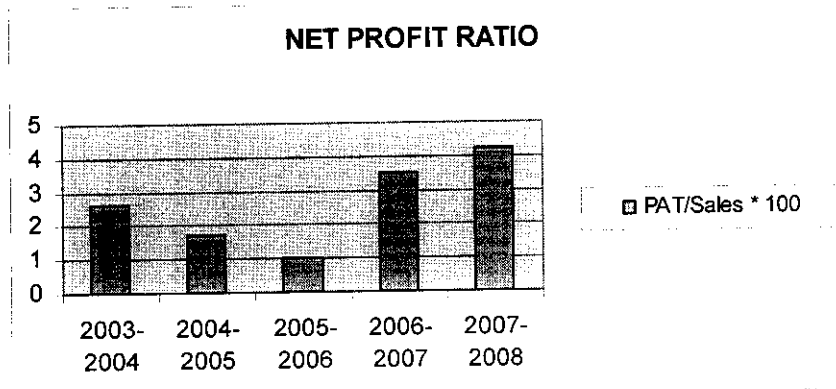
| Year      | PAT      | Sales     | PAT/Sales * 100 |
|-----------|----------|-----------|-----------------|
| 2003-2004 | 14314.34 | 551429.09 | 2.60            |
| 2004-2005 | 12243.13 | 713262.28 | 1.72            |
| 2005-2006 | 6371.19  | 627308.67 | 1.02            |
| 2006-2007 | 30288.82 | 862995.08 | 3.51            |
| 2007-2008 | 40004.62 | 947596.46 | 4.22            |

Note: Here, the profit taken for calculation is Profit after tax.

Mean = 2.614

Correlation = 0.7

Standard Deviation = 1.16



### INTERPRETATION

This analysis measures the efficiency of business operations from owner's point of view. The operation of business is inefficient in the year 2004-05 and 2005-06. It started showing an increasing trend from the year 2006-07 and 2007-08. The current ratio indicates good business operations.

## 8. Gross Profit Ratio

(Rs. in Lakhs)

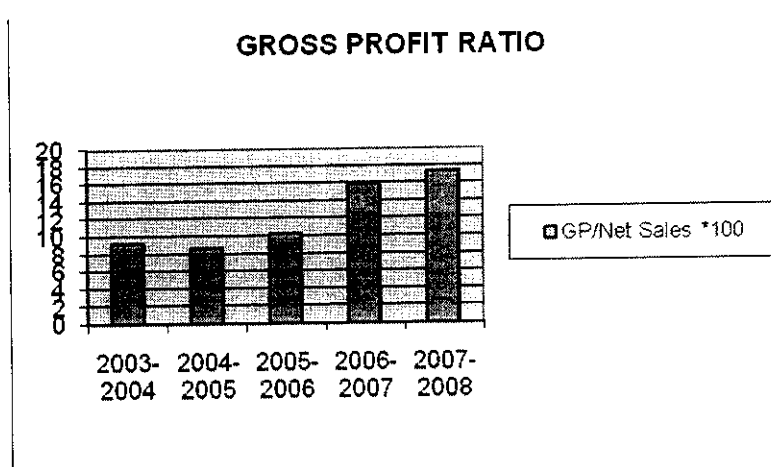
| Year      | Gross Profit | Net Sales | GP/Net Sales *100 |
|-----------|--------------|-----------|-------------------|
| 2003-2004 | 51023.78     | 551429.09 | 9.25              |
| 2004-2005 | 62309.03     | 713262.28 | 8.74              |
| 2005-2006 | 64177.26     | 627308.67 | 10.23             |
| 2006-2007 | 136746.61    | 862995.08 | 15.85             |
| 2007-2008 | 164976.97    | 947596.46 | 17.41             |

Note: Here the Gross profit means cost of goods sold minus sales.

Mean = 12.30

Correlation = 0.9

Standard Deviation = 3.60



### INTERPRETATION

This ratio reveals the ability of the company to adequately cover its fixed interest charges, operating expenses, dividends and transfer to reserves. For the past 5 years, the Gross Profit Ratio shows an increasing trend indicating the increase in sales mix, the proportion of profit with higher gross profit margin.

## 9. Administrative Expenses Ratio

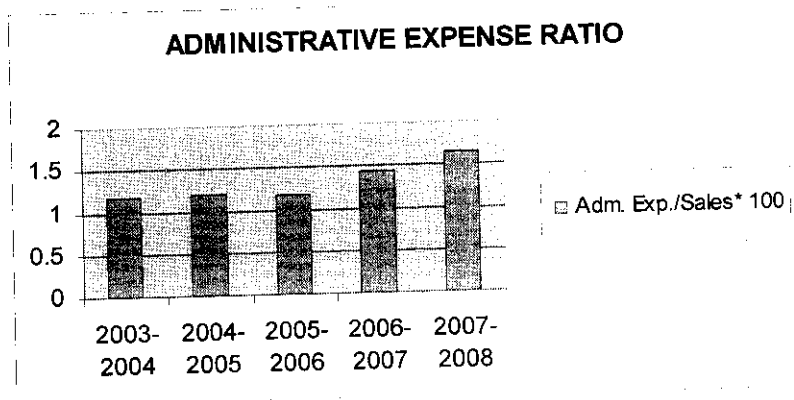
(Rs. in Lakhs)

| Year      | Administrative Expenses | Net Sales | Adm. Exp./Sales* 100 |
|-----------|-------------------------|-----------|----------------------|
| 2003-2004 | 6508                    | 551429.09 | 1.18                 |
| 2004-2005 | 8538                    | 713262.28 | 1.19                 |
| 2005-2006 | 7410                    | 627308.67 | 1.18                 |
| 2006-2007 | 12349                   | 862995.08 | 1.43                 |
| 2007-2008 | 15522                   | 947596.46 | 1.64                 |

Mean = 1.32

Correlation = 1

Standard Deviation = 0.18



### INTERPRETATION

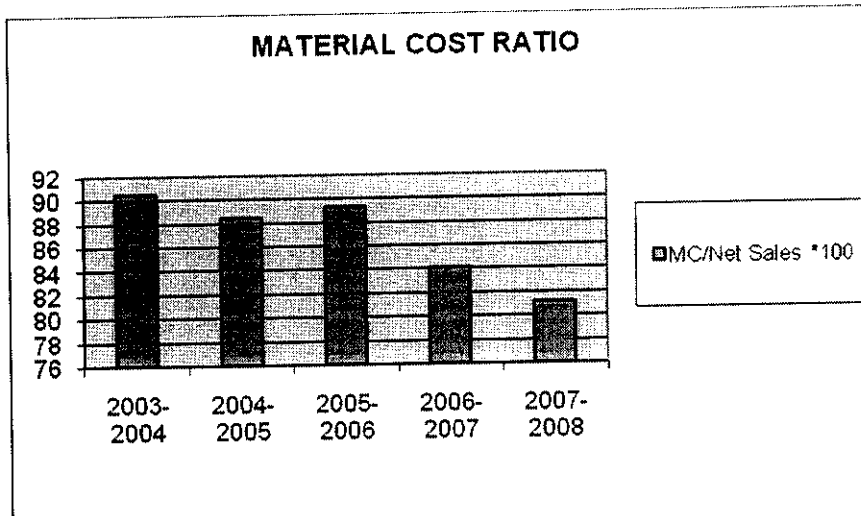
This ratio is also known as supporting ratio. This analysis enables to save expenditure over different items. For the past 5 years the expenditure remained constant with gradual increase. The current year ratio is moderate.

### 10. Material Cost Ratio

(Rs. in Lakhs)

| Year      | Material Cost | Net Sales | MC/Net Sales *100 |
|-----------|---------------|-----------|-------------------|
| 2003-2004 | 498770.49     | 551429.09 | 90.45             |
| 2004-2005 | 630675.65     | 713262.28 | 88.42             |
| 2005-2006 | 559807.38     | 627308.67 | 89.24             |
| 2006-2007 | 725030        | 862995.08 | 84.01             |
| 2007-2008 | 768605.45     | 947596.46 | 81.11             |

Note: Material cost includes raw material consumed plus wharfage cost.  
 Mean = 86.65                                                  Correlation = 1  
 Standard Deviation = 3.52



#### INTERPRETATION

This analysis reveals the cost incurred for materials to achieve the profitability of the business. The decreasing trend of ratio for the last two years indicates low expense on material in comparison to the profitability of the company.



## 11. Labour Expense Ratio

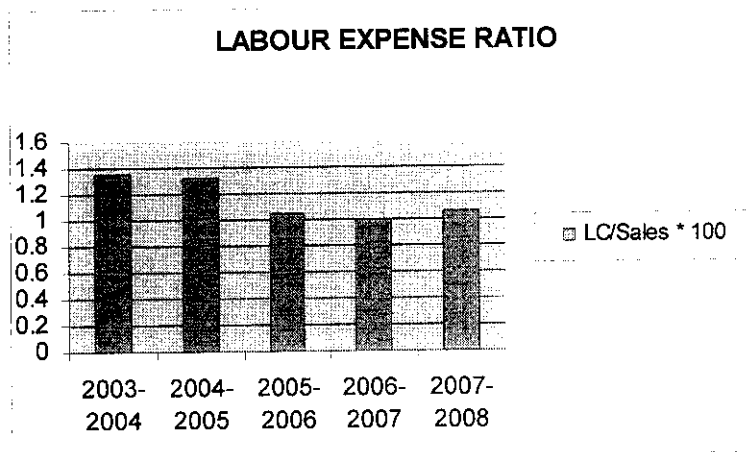
(Rs. in Lakhs)

| Year      | Labour Cost | Sales     | LC/Sales * 100 |
|-----------|-------------|-----------|----------------|
| 2003-2004 | 7451        | 551429.09 | 1.35           |
| 2004-2005 | 9473        | 713262.28 | 1.33           |
| 2005-2006 | 6565.68     | 627308.67 | 1.05           |
| 2006-2007 | 8654.29     | 862995.08 | 1.00           |
| 2007-2008 | 10030.62    | 947596.46 | 1.06           |

Mean = 1.16

Correlation = 0.8

Standard Deviation = 0.15



## INTERPRETATION

This analysis indicates the Labour Cost incurred to achieve the profitability of the business. In the year 2003-2004 and 2004-2005, the labour expenses were higher to the sales of the business. For the last 3 years, the ratio is more or less the same.

## 12. Dividend Cover Ratio

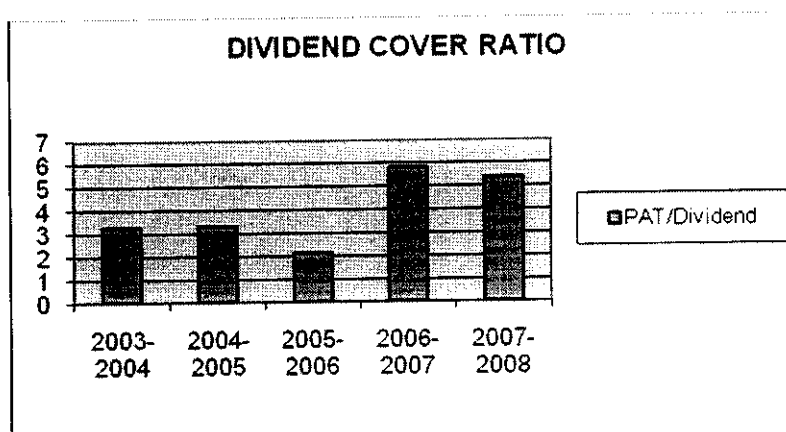
(Rs. in Lakhs)

| Year      | PAT      | Dividend | PAT/Dividend |
|-----------|----------|----------|--------------|
| 2003-2004 | 14314.34 | 4413.07  | 3.24         |
| 2004-2005 | 12243.13 | 3705.30  | 3.30         |
| 2005-2006 | 6371.19  | 2980.07  | 2.14         |
| 2006-2007 | 30288.82 | 5215.14  | 5.81         |
| 2007-2008 | 40004.62 | 7446.13  | 5.37         |

Mean = 3.97

Correlation = 1

Standard Deviation = 1.39



### INTERPRETATION

The Board of Directors may use their discretion to decide the dividend to be paid to equity shareholders and the balance will be carried forward to the Profit and Loss appropriation Account. The company paid good dividend to its shareholders in the year 2006-07 and 2007-08 due to considerable increase in the profit.

### 13. Interest Cover Ratio

(Rs. in Lakhs)

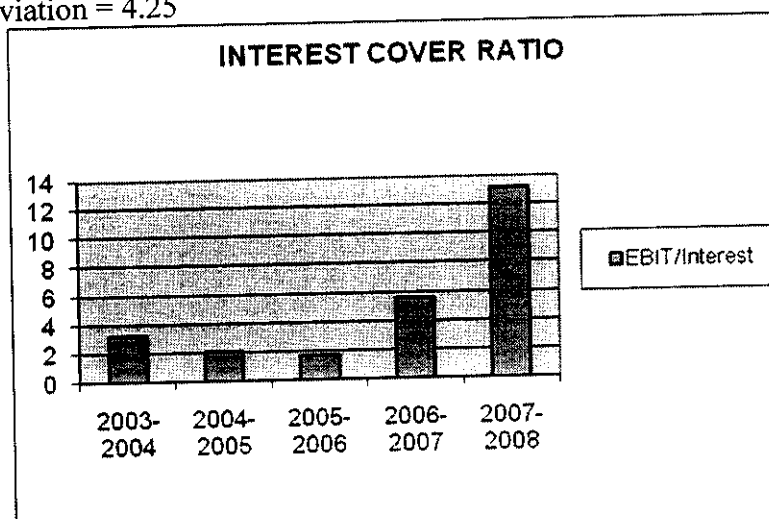
| Year      | EBIT     | Interest | EBIT/Interest |
|-----------|----------|----------|---------------|
| 2003-2004 | 27766.72 | 8598.05  | 3.23          |
| 2004-2005 | 27889.88 | 13146.32 | 2.12          |
| 2005-2006 | 21697.05 | 12808.54 | 1.69          |
| 2006-2007 | 59461.1  | 10665.18 | 5.58          |
| 2007-2008 | 61905.98 | 4679.76  | 13.22         |

Note: The interest here means the interest paid by the company on borrowings taken by it.

Mean = 5.17

Correlation = 0.5

Standard Deviation = 4.25



#### INTERPRETATION

This ratio highlights the ability of the business to meet its commitment to pay interest and to raise additional funds in future. The ratio is very low in 2005-06 indicating the high risk of the company to meet its commitment. The ratio for the year 2007-08 is high indicating the better position for long-term creditors and the company's risk is lower.

#### 14. Debt Service Coverage Ratio

(Rs. in Lakhs)

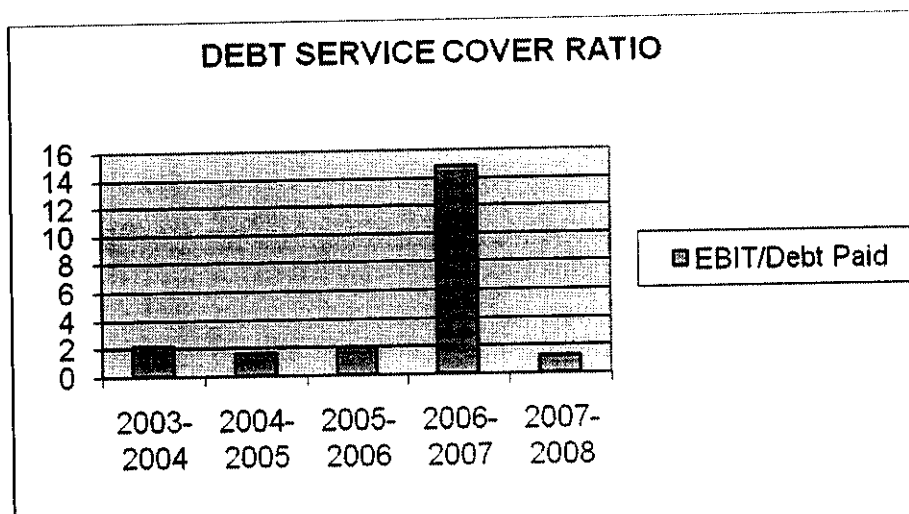
| Year      | EBIT     | Debt Paid | EBIT/Debt Paid |
|-----------|----------|-----------|----------------|
| 2003-2004 | 27766.72 | 13157.4   | 2.11           |
| 2004-2005 | 27889.88 | 17418.66  | 1.60           |
| 2005-2006 | 21697.05 | 11006.4   | 1.97           |
| 2006-2007 | 59461.1  | 4023.05   | 14.78          |
| 2007-2008 | 61905.98 | 51142.8   | 1.21           |

Note: the debt paid here means the loans repaid by the company.

Mean = 4.334

Correlation = 0.9

Standard Deviation = 5.23



#### INTERPRETATION

This ratio reveals the ability of the company to meet its repayment obligations. The ratio is very high in the year 2006-07 indicating the low repayment taken place in that year. For all the other years, the repayment ratio is moderate to the earnings made by the company.

## 15. Retained Earnings Ratio

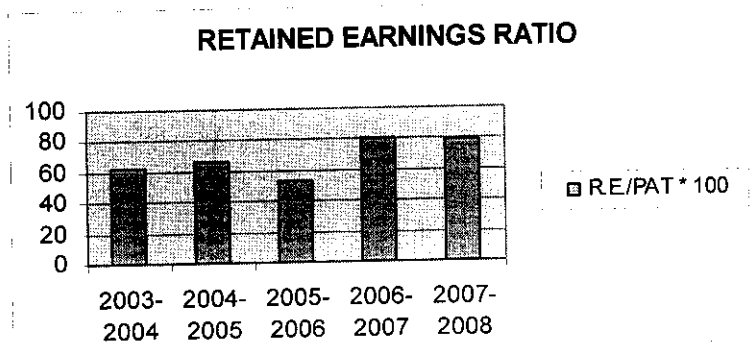
(Rs. in Lakhs)

| Year      | Retained Earnings | PAT      | R.E./PAT * 100 |
|-----------|-------------------|----------|----------------|
| 2003-2004 | 8878.91           | 14314.34 | 62.03          |
| 2004-2005 | 8159.89           | 12243.13 | 66.65          |
| 2005-2006 | 3391.12           | 6371.19  | 53.23          |
| 2006-2007 | 24405.49          | 30288.82 | 80.58          |
| 2007-2008 | 31604.45          | 40004.62 | 79.00          |

Mean = 68.30

Correlation = 1

Standard Deviation = 10.34



### INTERPRETATION

It is statutory to retain atleast 20% of Net Profit before declaring the dividend. This ratio shows the proportion of earnings retained out of current year profit. The proportion is very low in the year 2005-06 and increased suddenly in the year 2006-07 and decreased slightly in the year 2007-08.

## 16. Earnings Per share

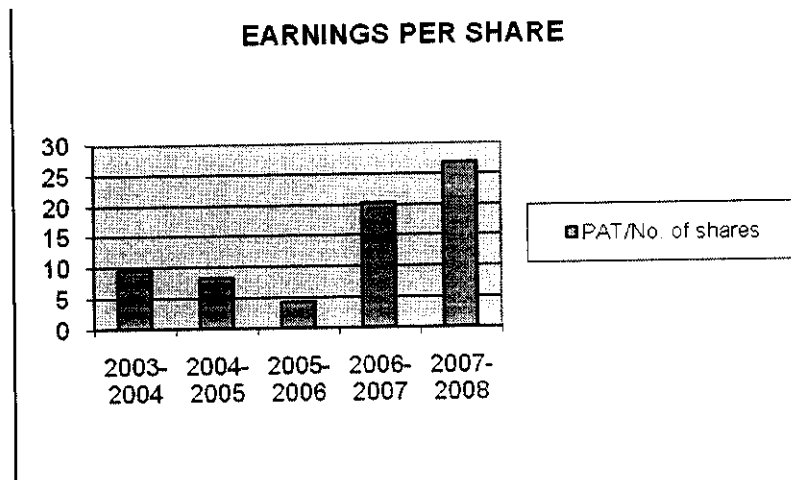
(Rs. in Lakhs)

| Year      | PAT      | No. Of Equity shares | PAT/No. of shares |
|-----------|----------|----------------------|-------------------|
| 2003-2004 | 14314.34 | 149131100            | 9.6               |
| 2004-2005 | 12243.13 | 149131100            | 8.21              |
| 2005-2006 | 6371.19  | 149131100            | 4.27              |
| 2006-2007 | 30288.82 | 149131100            | 20.31             |
| 2007-2008 | 40004.62 | 148943200            | 26.86             |

Mean = 13.85

Correlation = 0.6

Standard Deviation = 8.40



## INTERPRETATION

This analysis reflects the capacity of the concern to pay dividend to its equity shareholders. This analysis determines the market price from the owner's point of view. The increasing trend for the last two years indicates good point to invest in the company from the investor's point of view.

## 17. Price Earnings Ratio

(Rs. in Lakhs)

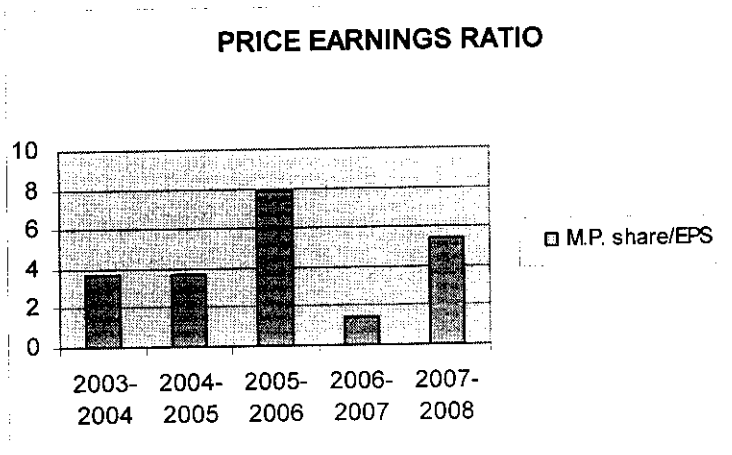
| Year      | Market Price Per Share | Earnings Per Share | M.P. share/EPS |
|-----------|------------------------|--------------------|----------------|
| 2003-2004 | 35.00                  | 9.6                | 3.65           |
| 2004-2005 | 29.95                  | 8.21               | 3.65           |
| 2005-2006 | 33.70                  | 4.27               | 7.89           |
| 2006-2007 | 29.95                  | 20.31              | 1.47           |
| 2007-2008 | 145.55                 | 26.86              | 5.42           |

Note: Here market price per share here indicates year ending share market price of Mumbai Stock Exchange

Mean = 4.42

Correlation = 0.3

Standard Deviation = 2.14



## INTERPRETATION

This ratio indicates earnings per share reflected by the Market Price. This ratio helps the investor to analyze whether to invest in shares at particular market price or not. The market price of the share in the 2005-06 is high and decreased very low in the year 2006-07 and the price is moderate in the year 2007-08.

## 18. Pay Out Ratio

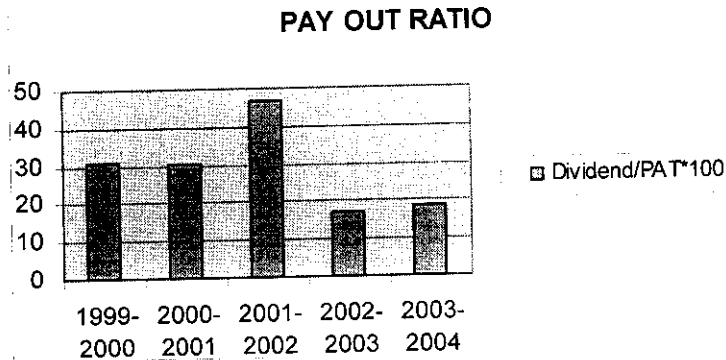
(Rs. in Lakhs)

| Year      | Dividend | PAT      | Dividend/PAT*100 |
|-----------|----------|----------|------------------|
| 2003-2004 | 4413.07  | 14314.34 | 30.82            |
| 2004-2005 | 3705.30  | 12243.13 | 30.26            |
| 2005-2006 | 2980.07  | 6371.19  | 46.77            |
| 2006-2007 | 5215.14  | 30288.82 | 17.22            |
| 2007-2008 | 7446.13  | 40004.62 | 18.61            |

Mean = 28.74

Correlation = 1

Standard Deviation = 10.65



## INTERPRATATION

This analysis indirectly throws light on the financial policy of the management in ploughing back. The company maintained a good pay out ratio with continuous increase from the year 2003-2004 to 2005-2006. There is sudden decrease in the ratio from the year 2006-07 and 2007-08 because of conservation decision policy of management.



## 19. Dividend Yield Ratio.

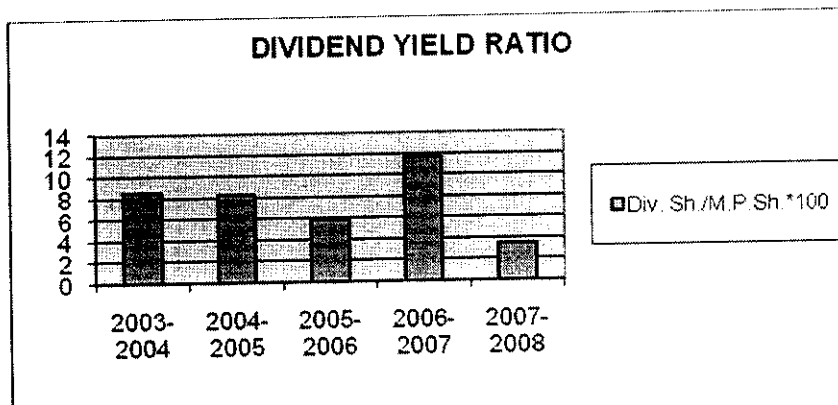
(In Rs.)

| Year      | Dividend per Share | Market Price per Share | Div. Sh./M.P.Sh.*100 |
|-----------|--------------------|------------------------|----------------------|
| 2003-2004 | 3.0                | 35.00                  | 8.57                 |
| 2004-2005 | 2.5                | 29.95                  | 8.35                 |
| 2005-2006 | 2.0                | 33.70                  | 5.93                 |
| 2006-2007 | 3.5                | 29.95                  | 11.65                |
| 2007-2008 | 5.0                | 145.55                 | 3.44                 |

Mean = 7.60

Correlation = 0.3

Standard Deviation = 2.77



## INTERPRETATION

This is useful from investor's point of view. This ratio reveals the dividend income to the market value of the shares. This helps those investors who are interested in dividend income.

## LEVERAGE RATIOS

### 1. Operating Leverage Ratio

(Rs. in Lakhs)

| Year      | Contribution | EBIT     | C/EBIT * 100 |
|-----------|--------------|----------|--------------|
| 2003-2004 | 31610.27     | 27766.72 | 1.14         |
| 2004-2005 | 57191.98     | 27889.88 | 2.05         |
| 2005-2006 | 38701.16     | 21697.05 | 1.78         |
| 2006-2007 | 128591.92    | 59461.1  | 2.16         |
| 2007-2008 | 167867.74    | 61905.98 | 2.71         |

Mean = 1.97

Correlation = 0.9

Standard Deviation = 0.51

### INTERPRETATION

It defines the tendency of the Operating Profit with sales. The high ratio in the year 2006-07 and 2007-08 indicates changes taken place in operating income and sales. The low operating ratio in the year 2003-2004, 2005-06 is considered good as it increases the safety. The ratio is moderate during the current period.

### 2. Financial Leverage Ratio

(Rs. in Lakhs)

| Year      | EBIT     | EBT      | EBIT/EBT |
|-----------|----------|----------|----------|
| 2003-2004 | 27766.72 | 19168.67 | 1.45     |
| 2004-2005 | 27889.88 | 14743.54 | 1.89     |
| 2005-2006 | 21697.05 | 8888.51  | 2.44     |
| 2006-2007 | 59461.1  | 48795.92 | 1.22     |
| 2007-2008 | 61905.98 | 57226.22 | 1.08     |

Mean = 1.62

Correlation = 0.9

Standard Deviation = 0.50

### INTERPRETATION

This ratio shows the changes that have taken place in the income as a result of change income. The ratio shows a increasing trend for the first three years and decreased suddenly in the year 2006-2007 and decreased further in the year 2007-2008. This is due to increase in sales and PBT.

### 3. Combined Leverage Ratio

(Rs. in Lakhs)

| Year      | Operating Leverage | Financial Leverage | OL x FL |
|-----------|--------------------|--------------------|---------|
| 2003-2004 | 1.14               | 1.45               | 1.65    |
| 2004-2005 | 2.05               | 1.89               | 3.87    |
| 2005-2006 | 1.78               | 2.44               | 4.34    |
| 2006-2007 | 2.16               | 1.22               | 2.64    |
| 2007-2008 | 2.71               | 1.08               | 2.93    |

Mean = 3.09

Correlation = - 0.7

Standard Deviation = 0.95

#### INTERPRETATION

This is the combination of Operating Leverage Ratio and Financial Leverage Ratio. The combined ratio shows an increasing trend for the first three years. It decreased in the year 2006-2007 due to the changes in income over expenditure. However, the best combination is low operating leverage with high financial leverage.

### STRUCTURAL GROUP RATIOS

#### 1. Fixed Assets to Total Assets

(Rs. in Lakhs)

| Year      | Fixed Assets | Total Assets | FA/TA |
|-----------|--------------|--------------|-------|
| 2003-2004 | 123926.87    | 302438.16    | 0.41  |
| 2004-2005 | 117060.36    | 291637.24    | 0.40  |
| 2005-2006 | 114201.89    | 275030.98    | 0.42  |
| 2006-2007 | 119827.06    | 333302.46    | 0.36  |
| 2007-2008 | 257073.25    | 461843.19    | 0.56  |

Mean = 0.43

Correlation = 0.9

Standard Deviation = 0.068

#### INTERPRETATION

This ratio indicates the proportion of Fixed Assets to the Total Assets of the company. The ratio for the first three years is almost constant indicating consistency in the maintenance of asset. The ratio has decreased in the year 2006-2007. This may be due to depreciation incurred or sale of assets. It has increased in the year 2007-08 due to acquisition of new assets.

## 2. Fixed Assets to Average Capital Employed

(Rs. in Lakhs)

| Year      | Fixed Assets | Average Capital Employed | FA/A CE |
|-----------|--------------|--------------------------|---------|
| 2003-2004 | 123926.87    | 182657.75                | 0.68    |
| 2004-2005 | 117060.36    | 218249.73                | 0.54    |
| 2005-2006 | 114201.89    | 212476.37                | 0.54    |
| 2006-2007 | 119827.06    | 205917.88                | 0.58    |
| 2007-2008 | 257073.25    | 278285.59                | 0.92    |

Mean = 0.65

Correlation = 0.1

Standard Deviation = 0.14

## INTERPRETATION

This ratio indicates the proportion of Fixed Assets to the Average Capital Employed by the company. Here, the average value is taken to include the changes taken place between the years. Higher ratio indicates higher utilization of assets and lower ratio indicates underutilization of assets to the profitability of the business.

## 3. Debt to Capital Employed

(Rs. in Lakhs)

| Year      | Debt      | Average Capital Employed | Debt/ACE |
|-----------|-----------|--------------------------|----------|
| 2003-2004 | 100585.55 | 182657.75                | 0.55     |
| 2004-2005 | 115245.71 | 218249.73                | 0.53     |
| 2005-2006 | 125793.1  | 212476.37                | 0.59     |
| 2006-2007 | 197567.05 | 205917.88                | 0.96     |
| 2007-2008 | 236530.82 | 278285.59                | 0.85     |

Mean = 0.70

Correlation = 0.6

Standard Deviation = 0.18

## INTERPRETATION

This ratio indicates employment of funds for production activities. Lower ratio indicates lower utilization of funds. This indicates lying of more funds without putting in to use. The interest being paid for those funds will become unnecessary expense. Higher ratio indicates effective utilization of funds for productive purposes.

#### 4. Capital Employed to Total Liabilities

(Rs. in Lakhs)

| Year      | Average Capital Employed | Total Liabilities | ACE/TL |
|-----------|--------------------------|-------------------|--------|
| 2003-2004 | 182657.75                | 304914.05         | 0.59   |
| 2004-2005 | 218249.73                | 304803.49         | 0.72   |
| 2005-2006 | 212476.37                | 302853.72         | 0.70   |
| 2006-2007 | 205917.88                | 446095.32         | 0.46   |
| 2007-2008 | 278285.59                | 513644.13         | 0.54   |

Mean = 0.60

Correlation = 0.2

Standard Deviation = 0.12

#### INTERPRETATION

This ratio indicates proportion of capital employed to networth, borrowings and current liabilities incurred by the company. Higher proportion indicates effective utilization and lower proportion indicates underutilization.

#### 5. Debt to Total Liabilities

(Rs. in Lakhs)

| Year      | Debt      | Total Liabilities | Debt/TL |
|-----------|-----------|-------------------|---------|
| 2003-2004 | 100585.55 | 304914.05         | 0.33    |
| 2004-2005 | 115245.71 | 304803.49         | 0.38    |
| 2005-2006 | 125793.1  | 302853.72         | 0.42    |
| 2006-2007 | 197567.05 | 446095.32         | 0.44    |
| 2007-2008 | 236530.82 | 513644.13         | 0.46    |

Mean = 0.41

Correlation = 0.6

Standard Deviation = 0.046

#### INTERPRETATION

Debt includes short-term and long-term borrowings made by the company whereas the Total Liability includes networth, current liabilities and also debt. Higher ratio indicates higher proportion of borrowings made by the company. Lower ratio indicates low proportion of borrowings by the company.

## 6. Fixed Assets to Networth

(Rs. in Lakhs)

| Year      | Fixed Assets | Networth  | FA/Networth |
|-----------|--------------|-----------|-------------|
| 2003-2004 | 123926.87    | 115165.91 | 1.08        |
| 2004-2005 | 117060.36    | 123411.42 | 0.95        |
| 2005-2006 | 114201.89    | 103190.73 | 1.11        |
| 2006-2007 | 119827.06    | 129333.46 | 0.93        |
| 2007-2008 | 257073.25    | 160991.77 | 1.60        |

Mean = 1.134

Correlation = 0.7

Standard Deviation = 0.24

### INTERPRETATION

Networth includes Shareholder's Funds, Reserves and Surplus less Miscellaneous Expenditure. Higher ratio indicates effective utilization of assets to the networth and lower ratio indicates underutilization of assets.

## PROFIT ALLOCATION RATIOS

### 1. Income Tax Provision to Net Profit

(Rs. in Lakhs)

| Year      | Income Tax Provision | Net Profit | I.T./NP |
|-----------|----------------------|------------|---------|
| 2003-2004 | 4854.33              | 14314.34   | 0.34    |
| 2004-2005 | 2500.41              | 12243.13   | 0.20    |
| 2005-2006 | 2517.32              | 6371.19    | 0.39    |
| 2006-2007 | 18507.1              | 30288.82   | 0.61    |
| 2007-2008 | 17221.6              | 40004.62   | 0.43    |

Mean = 0.394

Correlation = 0.8

Standard Deviation = 0.13

### INTERPRETATION

This analysis indicates Income Tax provision over Net Profit. Higher ratio indicates maintenance of high provision in proportion to profit. Lower ratio indicates maintenance of low provision in proportion profit. This is analyzed from Profit after Tax figure.

## 2. Income Tax Provision to Profit Before Taxes

(Rs. in Lakhs)

| Year      | Income Tax Provision | PBT      | IT/PBT |
|-----------|----------------------|----------|--------|
| 2003-2004 | 4854.33              | 19168.67 | 0.25   |
| 2004-2005 | 2500.41              | 14743.54 | 0.17   |
| 2005-2006 | 2517.32              | 8888.51  | 0.28   |
| 2006-2007 | 18507.1              | 48795.92 | 0.38   |
| 2007-2008 | 17221.6              | 57226.22 | 0.30   |

Mean = 0.28

Correlation = 0.8

Standard Deviation = 0.068

### INTERPRETATION

This analysis indicates provision for taxes before tax is deducted from profit. Here, higher ratio indicates higher profit and lower ratio indicates lower profit. In the year 2004-05 the ratio decreased indicating maintenance of low tax policies by the company and increased consecutively for the last three years reflecting changes in Government Policies regarding taxation.

## 3. Proposed Dividend to PBT

(Rs. in Lakhs)

| Year      | Proposed Dividend | PBT      | Div./PBT |
|-----------|-------------------|----------|----------|
| 2003-2004 | 4413.07           | 19168.67 | 0.23     |
| 2004-2005 | 3705.30           | 14743.54 | 0.25     |
| 2005-2006 | 2980.07           | 8888.51  | 0.34     |
| 2006-2007 | 5215.14           | 48795.92 | 0.11     |
| 2007-2008 | 7446.13           | 57226.22 | 0.13     |

Mean = 0.212

Correlation = 1

Standard Deviation = 0.68

### INTERPRETATION

This ratio reflects the proportion of dividend approved in light of profit. The higher ratio in the year 2005-06 indicates approving of higher dividend proportion despite the low profit made by the company in that year. The lower ratio for the last

two years indicates the proportion of dividend approved by the company is not in line with profits made during that year.

#### 4. Total Provisions to Net Profit

(Rs. in Lakhs)

| Year      | Total Provisions | Net Profit | Total Prov./NP |
|-----------|------------------|------------|----------------|
| 2003-2004 | 25948.01         | 14314.34   | 1.81           |
| 2004-2005 | 15534.03         | 12243.13   | 1.27           |
| 2005-2006 | 6726.82          | 6371.19    | 1.06           |
| 2006-2007 | 17618.40         | 30288.82   | 0.58           |
| 2007-2008 | 10591.39         | 40004.62   | 0.26           |

Mean = 0.996

Correlation = 0.3

Standard Deviation = 0.54

#### INTERPRETATION

This ratio reflects total provisions to be made by the company in proportion to net profit achieved by the company. In the year 2003-2004, the proportion is more because of stringent policy measure adopted by the company. It has decreased considerably in the last four years indicating some relaxation in government policies.



## Z-SCORE ANALYSIS

### Z-SCORE ANALYSIS FOR THE YEAR 2003-2008

Z = Financial Health score

X1= Working Capital / Total assets \* 100

X2= Retained earnings / Total assets \* 100

X3= Earning before interest and tax / Total assets \* 100

X4= Net worth / Total liability \* 100

X5= Sales / Total assets \* 100

| <u>Year</u>      | <u>X1</u>    | <u>X2</u>   | <u>X3</u>    | <u>X4</u>    | <u>X5</u>     |
|------------------|--------------|-------------|--------------|--------------|---------------|
| <b>2003-2004</b> | <u>28.95</u> | <u>2.94</u> | <u>9.18</u>  | <u>38.0</u>  | <u>182.33</u> |
| <b>2004-2005</b> | <u>37.0</u>  | <u>2.8</u>  | <u>9.56</u>  | <u>42.32</u> | <u>244.58</u> |
| <b>2005-2006</b> | <u>31.17</u> | <u>1.23</u> | <u>7.89</u>  | <u>37.52</u> | <u>228.00</u> |
| <b>2006-2007</b> | <u>27.63</u> | <u>7.32</u> | <u>17.84</u> | <u>38.8</u>  | <u>258.92</u> |
| <b>2007-2008</b> |              |             |              |              |               |

| <u>Year</u>      | $\frac{0.012X1 + 0.014X2 + 0.033X3 + 0.006X4 + 0.010X5}{0.010X5}$ | <u>Z-SCORE</u><br><u>VALUE</u> |
|------------------|-------------------------------------------------------------------|--------------------------------|
| <b>2003-2004</b> | <u>0.</u>                                                         |                                |
| <b>2004-2005</b> |                                                                   |                                |
| <b>2005-2006</b> |                                                                   |                                |
| <b>2006-2007</b> |                                                                   |                                |
| <b>2007-2008</b> |                                                                   |                                |

# *Findings*

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## FINDINGS

The main observations from the financial statements are:

- 1 Liquidity, which reflects the organization ability to meet its short-term obligation, is satisfactory.
- 2 Profitability indicates the efficiency and the effectiveness in which the operation of the organization is carried on. Here the profitability in both the cases of operations and investments are seems to be satisfactory.
- 3 Profit for the year 2007-2008 of the company has increased. It is due to sudden increase in sales of the company and also increases in income from other sources and also decreases in the interest amount.
- 4 The average collection period of the company shows an increasing trend. This due to rise in the credit period policy given by the company to its debtors. From the year 2005-2006 the credit period has been changed from 3 days to 15 days. For some Petrochemicals products even 30 days credit is given.
- 5 The return on capital employed and circulated in the business is increased suddenly. The company's long term financial position is sound since its debt equity is satisfactory.
- 6 The company is financial sound for the last three years and there is a positive way of increase in the financial position of the company.
- 7 The company's fixed assets contributes more than 50% of the total assets and it is revealed that the loan funds contribute a major portion and the company's has more reserves & surplus to meet the future contingencies.
- 8 It is found that Break Even Point of the company shows an increasing trend because of higher fixed cost and P/V ratio also reflects the fluctuating trends because of changes in the Contribution due to varying price levels of both crude oil and finished products.
- 9 Margin of Safety seems to be satisfactory. This is due to increase in sales at the same time the company achieves the BEP at early stage itself. So this is the indicator for having better margin of safety.
- 10 It is found from the analysis that the company has changed its policy after Administered Pricing Mechanism(APM). This effect has been mainly focused on Loans & Advances. Two items namely "stock of crude oil on load with others & includes deposits made towards crude oil received on loan" have been eliminated from the year 2003-2004 in line with industry's practice.
- 11 It is found that there is an increase in Reserves & Surplus and also indicate that there is an increase in total resources of the company, which will contribute to a major constituents for the company in future.

- 12 There is a sudden decrease in maintaining the cash balance, which could be a year-end phenomenon. There is a prudent investment / portfolio management being forward in the company.
- 13 The working capital turn over ratio indicates that the company is sufficient in utilizing the current assets.
- 14 A part of working capital is from long-term funds.
- 15 The working capital is sufficient during the period of the study and it not suffering from inadequacy.
- 16 It is projected from the regression analysis that there will be a decrease in profits for the forth-coming years that may, be due to changes in the government policy, wild fluctuation in crude oil prices etc. Due to the sample constraint, the number of years taken for study being five years this analogy may not be however sustainable.

## RECOMMENDATIONS

- 1 The company may maintain the same Debt- Equity ratio in future. So that it can increase the EPS.
- 2 The company may to reduce its inventory holding period by using the inventory management techniques such as EOQ and ABC analysis.
- 3 The credit policy can be reviewed once again. So that the funds that are not locked up in debtors. This will also increase the cash balances of the company.
- 4 The company may go for raising of capital which may be cheaper. It is also advantageous for the company to have sufficient funds to meet its working capital requirements rather than going for bank borrowings.
5. For their new products, it is better to choose too cheaper. An alternative proposal of External Commercial Borrowings will be cheaper for the company based on terms and conditions of the foreign fluctuations etc.

## *Conclusion*

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**LEVERAGE RATIO**

| Year    | Structural Group Ratio |         |         |           |         | Project Allocation Ratios |                            |              |                    | TTL Provision - Net Proff. |                       |      |
|---------|------------------------|---------|---------|-----------|---------|---------------------------|----------------------------|--------------|--------------------|----------------------------|-----------------------|------|
|         | Oper. Lever. Ratio     | Join LR | Comb LR | FA./ TILA | FA -ACE | Debt. Cop. Employed       | Capital emp/ TTL Liability | FA - Network | Income Tax Prov NP |                            | Proposal Divident PBT |      |
| 2003-04 | 1.14                   | 1.45    | 1.65    | 0.41      | 0.68    | 0.55                      | 0.33                       | 1.08         | 0.34               | 0.25                       | 0.23                  | 1.81 |
| 2004-05 | 2.05                   | 1.89    | 3.87    | 0.4       | 0.54    | 0.53                      | 0.38                       | 0.95         | 0.2                | 0.17                       | 0.25                  | 1.27 |
| 2005-06 | 1.78                   | 2.44    | 4.34    | 0.42      | 0.54    | 0.59                      | 0.42                       | 1.1          | 0.396              | 0.28                       | 0.34                  | 1.06 |
| 2006-07 | 2.16                   | 1.22    | 2.64    | 0.36      | 0.58    | 0.96                      | 0.44                       | 0.93         | 0.61               | 0.38                       | 0.11                  | 0.58 |
| 2007-08 | 2.71                   | 1.08    | 2.93    | 0.56      | 0.92    | 0.85                      | 0.46                       | 1.6          | 0.43               | 0.3                        | 0.13                  | 0.26 |



**TURNOVER RATIOS**

| Year    | Return on sha<br>Journal | ROI   | Return on<br>capital<br>employed | Ret on TTAS | Opening<br>Ratio | Opr. Project<br>Ratio | Net<br>PROJEC<br>T Ratio | Gross<br>project<br>ratio | Additional<br>exp. | Mar.cost R | Labour<br>expratio | Divided<br>Cov.Rati | Inter<br>cover<br>ratio | Debt<br>service<br>cover<br>ratio | Retained<br>earning<br>Ratio | Earning<br>Per share | Price<br>earning<br>Ratio | Pay out<br>ratio | Divided<br>yiled<br>ratio |
|---------|--------------------------|-------|----------------------------------|-------------|------------------|-----------------------|--------------------------|---------------------------|--------------------|------------|--------------------|---------------------|-------------------------|-----------------------------------|------------------------------|----------------------|---------------------------|------------------|---------------------------|
| 2003-04 | 12.93                    | 13.13 | 10.49                            | 7.58        | 92.64            | 5.04                  | 2.6                      | 9.25                      | 1.18               | 90.45      | 1.35               | 3.24                | 3.23                    | 2.11                              | 62.03                        | 9.6                  | 3.65                      | 30.62            | 8.57                      |
| 2004-05 | 10.26                    | 12.39 | 6.76                             | 8.71        | 93.11            | 3.91                  | 1.72                     | 8.74                      | 1.19               | 88.42      | 1.33               | 3.3                 | 2.12                    | 1.6                               | 6.65                         | 3.65                 | 3.65                      | 30.26            | 8.35                      |
| 2005-06 | 5.62                     | 10.85 | 4.18                             | 6.97        | 91.5             | 3.46                  | 1.02                     | 10.23                     | 1.18               | 89.24      | 1.05               | 2.14                | 1.69                    | 1.97                              | 53.23                        | 7.89                 | 7.89                      | 46.7             | 5.93                      |
| 2006-07 | 26.05                    | 28.06 | 23.69                            | 12.29       | 86.17            | 6.89                  | 3.51                     | 15.85                     | 1.43               | 84.01      | 1                  | 5.81                | 5.58                    | 14.78                             | 80.58                        | 1.47                 | 1.47                      | 17.2             | 11.65                     |
| 2007-08 | 27.56                    | 17.96 | 20.56                            | 9.68        | 85.03            | 6.53                  | 4.22                     | 17.41                     | 1.64               | 81.11      | 1.06               | 5.37                | 13.2                    | 1.21                              | 79                           | 5.42                 | 5.42                      | 18.61            | 3.44                      |

**TURNOVER RATIOS**

| Deb. TR | Deb.Col.Period | Cr. Tr | Cr. Coll. Period | WE TR | FA TR | FA TR | CA TR | IN TR | INV. TR | Owened Capital. T.O |
|---------|----------------|--------|------------------|-------|-------|-------|-------|-------|---------|---------------------|
| 4       | 38.02          | 8.8    | 41.48            | 6.3   | 4.45  | 3.12  | 0.02  | 19.99 | 18.26   | 4.79                |
| 5       | 31.07          | 1.73   | 31.12            | 6.61  | 6.09  | 4.13  | 3.27  | 21.8  | 16.74   | 5.78                |
| 6       | 20.57          | 10.01  | 36.46            | 7.32  | 5.49  | 3.98  | 2.95  | 20.06 | 18.2    | 6.08                |
| 7       | 17.65          | 9.31   | 39.21            | 9.37  | 7.2   | 4.09  | 4.19  | 20.89 | 17.47   | 6.67                |
| 8       | 16.69          | 7.99   | 45.68            | 10.82 | 3.69  | 4.65  | 3.41  | 17.84 | 20.46   | 5.89                |

| C.A.- TTL AR | Working capital Group Ratio |             |           |           |             | Short term solvency ratio |      |        |      |      | Long - Term Solvency Ratio |      |       |  |  |
|--------------|-----------------------------|-------------|-----------|-----------|-------------|---------------------------|------|--------|------|------|----------------------------|------|-------|--|--|
|              | WC Short Term Dept          | WC-TTL Ass. | Inv. - CA | Inv. - WC | Cl.-TTL Lia |                           |      |        |      |      |                            |      |       |  |  |
| 0.58         | 0.87                        | 0.29        | 0.55      | 1.1       | 0.29        | 1.98                      | 0.91 | 0.039  | 0.33 | 1.23 | 0.87                       | 0.38 | 0.069 |  |  |
| 0.59         | 0.94                        | 0.37        | 0.5       | 0.79      | 0.21        | 2.67                      | 1.35 | 0.14   | 0.38 | 1.01 | 0.93                       | 0.42 | 0.84  |  |  |
| 0.57         | 0.68                        | 0.31        | 0.048     | 0.088     | 0.24        | 2.2                       | 1.16 | 0.23   | 0.39 | 0.91 | 1.22                       | 0.38 | 0.14  |  |  |
| 0.63         | 0.47                        | 0.28        | 0.57      | 1.31      | 0.27        | 1.77                      | 0.78 | 0.0076 | 0.42 | 0.61 | 1.53                       | 0.39 | 1.21  |  |  |
| 0.4          | 0.37                        | 0.19        | 0.59      | 1.37      | 0.23        | 1.75                      | 0.7  | 0.011  | 0.43 | 1.09 | 1.47                       | 0.35 | 0.7   |  |  |



# Balance Sheet

Balance sheet as at March 31, 2003 -- March 31-2008

|                                                                             | Schedule                               |                                          | March 31, 2003   |
|-----------------------------------------------------------------------------|----------------------------------------|------------------------------------------|------------------|
| <b>SOURCES OF FUNDS</b>                                                     |                                        |                                          |                  |
| 1. Shareholders' Funds:                                                     |                                        |                                          |                  |
| a) Capital                                                                  | A                                      | 14900.39                                 |                  |
| b) Reserves and Surplus                                                     | B                                      | 114627.65                                |                  |
|                                                                             |                                        |                                          | 129528.04        |
| 2. Loan Funds:                                                              |                                        |                                          |                  |
| a) Secured Loans                                                            | C                                      | 17500.00                                 |                  |
| b) Unsecured Loans                                                          | D                                      | 180067.05                                |                  |
|                                                                             |                                        |                                          | 197567.05        |
| 3. Deferred Tax Liability (Net)                                             |                                        |                                          | 27324.00         |
| Total                                                                       |                                        |                                          | <u>354419.09</u> |
| <b>APPLICATION OF FUNDS</b>                                                 |                                        |                                          |                  |
| 1. Fixed Assets                                                             |                                        |                                          |                  |
| a) Gross Block                                                              | E                                      | 226518.60                                |                  |
| b) Less: Depreciation                                                       |                                        | 106691.54                                |                  |
| c) Net Block                                                                |                                        | 119827.06                                |                  |
| d) Capital Work-in-Progress                                                 | F                                      | 139922.28                                |                  |
|                                                                             |                                        |                                          | 259749.34        |
| 2. Investments                                                              | G                                      |                                          | 2397.17          |
| 3. Current Assets, Loans and Advances:                                      |                                        |                                          |                  |
| a) Inventories                                                              | H                                      | 120307.81                                |                  |
| b) Sundry Debtors                                                           | I                                      | 61635.06                                 |                  |
| c) Cash and Bank Balances                                                   | J                                      | 901.28                                   |                  |
| d) Other Current Assets - Interest accrued on Investments / Bank Deposits.  |                                        | 10.41                                    |                  |
| e) Loans and Advances                                                       | K                                      | 28223.67                                 |                  |
|                                                                             |                                        | 211078.23                                |                  |
| 4. Less: Current Liabilities and Provisions:                                |                                        |                                          |                  |
| a) Current Liabilities                                                      | L                                      | 101381.83                                |                  |
| b) Provisions                                                               | L-I                                    | 17618.40                                 |                  |
|                                                                             |                                        | 119000.23                                |                  |
| 5. Net Current Assets (3-4)                                                 |                                        |                                          | 92078.00         |
| 6. Miscellaneous Expenditure<br>(to the extent not written off or adjusted) | L-II                                   |                                          | 194.58           |
| Total                                                                       |                                        |                                          | <u>354419.09</u> |
| 7. Statement of Significant Accounting Policies                             | Q                                      |                                          |                  |
| 8. Notes on Accounts                                                        | R                                      |                                          |                  |
| 9. Other Schedules forming part of Accounts                                 | S to X                                 |                                          |                  |
| 10. Balance Sheet Abstract and Company's General Business Profile           | Y                                      |                                          |                  |
| 11. Cash Flow Statement                                                     | Z                                      |                                          |                  |
| (M.S. Ramachandran)<br>Chairman                                             | (S.V. Narasimhan)<br>Managing Director | (K. Narayanan)<br>Director (Finance) i/c | (V. ...)<br>Con  |
| As per our attached report of even date                                     |                                        |                                          |                  |
| for B.V. Rao & Co.                                                          |                                        |                                          |                  |
| Chartered Accountants                                                       |                                        |                                          |                  |
| B.A.S.P. Ranga                                                              |                                        |                                          |                  |
| Partner                                                                     |                                        |                                          |                  |
| Chennai                                                                     |                                        |                                          | for M. T...      |
| May 24, 2003                                                                |                                        |                                          | Chartered        |
|                                                                             |                                        |                                          | A. I...          |
|                                                                             |                                        |                                          | P.               |

# Profit & Loss Account

## PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED MARCH 31, 2003 - March

|                                                                      | Schedule | March 31, 2003   |
|----------------------------------------------------------------------|----------|------------------|
| <b>INCOME</b>                                                        |          |                  |
| 1. Sale of Products                                                  |          |                  |
| Less: Commission and Discounts                                       |          | 864911.28        |
|                                                                      |          | <u>1259.78</u>   |
| 2. Company's use of own Products                                     |          | 863651.50        |
| 3. Net claim from / (surrender to) Industry Pool Accounts            |          | 337.50           |
| 4. Increase / (Decrease) in Stocks                                   |          | (993.92)         |
| 5. Interest and other Income                                         | M        | 17703.76         |
| Total Income                                                         | N        | <u>4039.19</u>   |
|                                                                      |          | <u>884738.03</u> |
| <b>EXPENDITURE</b>                                                   |          |                  |
| 1. Purchase of products for resale                                   |          |                  |
| 2. Manufacturing, Admn., Selling & Other Expenses                    |          | 335.57           |
| 3. Duties                                                            | O        | 757017.89        |
| 4. Depreciation and Amortisation                                     |          | 57478.05         |
| 5. Interest Payments on :                                            |          | 10201.93         |
| a) Fixed period loans from Banks/<br>Financial Institutions / Others |          |                  |
| b) Short Term Loans from banks                                       |          | 9514.70          |
| c) Public Deposits                                                   |          | 57.53            |
| d) Others                                                            |          | 808.24           |
|                                                                      |          | <u>284.71</u>    |
| Total Expenditure                                                    |          | <u>10665.18</u>  |
| <b>PROFIT FOR THE YEAR</b>                                           |          | <u>835698.62</u> |
| Income / (Expenses) pertaining to previous years (Net)               | P        | 49039.41         |
| <b>PROFIT BEFORE TAX</b>                                             |          | <u>(243.49)</u>  |
| Provision for Tax (net)                                              |          | 48795.92         |
| - Current year                                                       |          |                  |
| - Previous year                                                      |          | 16110.19         |
|                                                                      |          | <u>(13.66)</u>   |
| <b>PROFIT BEFORE DEFERRED TAX</b>                                    |          | <u>16096.53</u>  |
| Provision for Deferred Tax                                           |          | 32699.39         |
| <b>PROFIT AFTER TAX</b>                                              |          | <u>2410.57</u>   |
| <b>DISPOSABLE PROFIT</b>                                             |          | <u>30288.82</u>  |
| <b>APPROPRIATIONS</b>                                                |          | <u>30288.82</u>  |
| Proposed Dividend                                                    |          |                  |
| Dividend Distribution Tax                                            |          | 5215.14          |
| General Reserve                                                      |          | 668.19           |
|                                                                      |          | <u>24405.49</u>  |
| 6. Earning Per Share (Rupees) (Basic & Diluted)                      |          | <u>30288.82</u>  |
| 7. Statement of Significant Accounting Policies                      |          | <u>20.31</u>     |
| 8. Notes on Accounts                                                 | Q        |                  |
| 9. Other Schedules forming part of Accounts                          | R        |                  |
| 10. Balance Sheet Abstract and Company's General Business Profile    | S to X   |                  |
| 11. Cash Flow Statement                                              | Y        |                  |
|                                                                      | Z        |                  |

(M.S. Ramachandran) Chairman  
 (S.V. Narasimhan) Managing Director  
 (K. Narayanan) Director (Finance) i/c  
 (V. Sri) Company

As per our attached report of even date  
 for B.V. Rao & Co.  
 Chartered Accountants  
 B.A.S.P. Ranga  
 Partner

Chennai  
 May 24, 2003

for M. Thom  
 Chartered Ac  
 A. Roza  
 Partner