# ANANDRATHI

## LUBRICANT

### Mansingh Deshmukh Analyst

mansingh@rathi.com +91 22 6637 7000 (Ext 7113)

Bloomberg Code: CSTRL@IN
Reuters Code: CAST.BO
NSE Symbol:CASTROL
BSE Code: 500870
Expected Share Price:
Expected Dividend yield(%) 4.5

Market Data
Sensex:
CMP:
Target Price
52-Week Range(H/L): 278/154
Market Cap (\$ mn): 573.7
Shares O/S (mn):
Free Float (mn):
3 m Avg. Volume :

Price Performance: (%)						
	3m	6m	12m			
Absolute	35	-9	-2			
Relative	18	-15	-48			

Relative Price Movement
200
150
100
50
0
Sep-05 Sep-05 Oct-05 Nov-05 Nov-05 Apr-06 Apr-06 Apr-06 Aug-06 Sep-06 Sep-06

### BUY Castrol India Ltd.

We initiate our coverage with a Buy rating on the stock and a target price of Rs.287.

### Investment Arguments

- Dominant player in the domestic lubricant industry, Castrol (CIL) enjoys premium brand positioning in the market. Innovative marketing strategy like the introduction of "Bazaar Trade Segment" goes to its credit and has transformed the way lubricants are sold today. Recent strategic initiatives like the launch of 2-Wheeler Servicing Station "Bike Zone" could once again revolutionize the market place and help build strong brand loyalty for CIL's products.
- Lube Oil Base Stock (LOBS) forms the major cost component in CIL's Revenue Statement (31% to Sales and 42% to Total Op. Cost). Other than the rising crude price, it's the mismatch in demand supply equation that has impacted Base Oil prices badly. With this equation getting back to normal, we expect prices to start easing from 1Q 2007.
- An ability to pass on cost addition has helped CIL maintain its operating margins in bad times and yield bumper profits when the equation turns in its favour. The 66 % rise in LOBS prices in 2006 has been a little too hard for CIL to absorb and it was able to recover the cost increase in value only. Efficiency in terms of managing Operating Overheads has helped CIL manage some pressure at EBIDTA levels.
- ➤ Volume growth to remain subdued, and is more on account of improvement in automobile engine, we consider Castrol to be at an advantage given the strong parent technology support. With the transition of engine technology from the old to new ones gaining significant size by 2009-10, we expect growth from fresh automobile sales to again trigger lube consumption growth. Premium pricing for new generation lubricants would also add to margins for Castrol.

### Risk Factors

Crude prices and its impact on LOBS price would continue to be a major concern for margins and our projection. We consider prices to stabilize from early 2007, while easing demand-supply equation could lead to downward revision in price. On a conservative basis we have considered an 8 % rise in base oil price for 2007 and 4 % for 2008.

## <u>Valuations</u>

Initiating our coverage based on an earning forecast of Rs.16 and Rs.18.5 for FY06 & FY07 respectively. Proven management commitment towards returning cash to shareholders, we expect dividend payout at 60 %, providing an attractive dividend yield of 5% (FY07). At a CMP of Rs.225 and DCF-based target price of Rs. 287, the stock provides a 27.5% upside potential.

Y/E Dec (Rs. mn)	FY04	FY05	FY06E	FY07E	FY08E
Net Sales	13,051	14,304	18,655	21,186	22,602
Growth (%)	11.5	9.5	15.2	12.0	12.0
EBIDTA	2,010	2,146	3,208	3,626	4,950
EBIDTA Margin (%)	16.6	15.8	17.0	17.0	21.9
Net Profit	1,275	1,468	1,984	2,253	3,151
EPS (Rs.)	10.3	11.9	16.0	18.2	25.5
P/E. (x)	21.2	18.4	13.6	12.0	8.6
EV/EBIDTA (x)	12.3	11.7	8.3	7.3	5.2
Price/Book Value (x)	7.5	6.9	6.0	5.2	4.8
RoCE (%)	73.8	74.1	84.2	87.3	105.7
RoE (%)	35.4	37.6	43.9	43.2	55.8

Bazaar Trade, dominant market strategy for Castrol...

Recent slowdown in sales volume growth compensated through pricing growth...

Premium brand positioning provides strong pricing capabilities to Castrol...

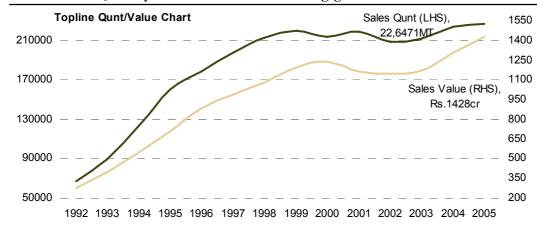
A truck which replaces oil every 1000KM now needs replacement after 18000KM...

### Investment Arguments

### Dominant player with strong brand positioning -

Castrol has been a leader in terms of evolving revolutionary marketing strategies, which over a period of time has helped it transform the way business is done in the industry and has thus shown consistent growth in market share. Pioneers in the conceptualization of "Bazaar Trade Segment", CIL, over the years has created a strong foothold for itself amongst the 3 PSU majors. The Indian lubricant market, which had predominantly been a PSU play in the early nineties, with bulk of the trade routed through their wide network of petrol pump outlets was cracked down by Castrol. CIL for the first time launched its product through an alternate route, of private garages, automobile mechanics and auto-ancillary outlets, thus bringing its product closer to the end user and invited experts in the decision making process. On the back of this, Castrol today boasts a strong 30% market share in the automotive lubricant market that accounts for almost 86% of the total lubricant sales in the country.

Chart-1 Sales Quantity V/s. Sales Value - in strong growth trend...



Source - Company, Anand Rathi Institutional Research

This Strategic positioning of CIL has always helped it show consistent volume and value growth thus surpassing the industry average growth rate 2 percent. 10 year CAGR for Castrol has shown a 3.2% pa growth in terms of sales volume and 6.5% pa growth in terms of sales value. The recent five years on the contrary has shown a drop in volume growth, down to 1% pa levels on a CAGR basis, while sales value growth is down to 2.4% pa levels. Even though there is no reliable source computing industry volumes growth, going by the industry understanding this drop in sales volume and sales value for CIL has been much sober as compared to the other PSU majors. And it's the "Bazaar Trade" strategy of Castrol that has safeguarded it in maintaining above industry average growth rate. The premium positioning of the Castrol brand in the market place, has helped it maintain a relatively stronger ability to raise prices. This has been especially beneficial at times when cost increase had been a major concern, for the industry and the company.

### Changing face of the user industry -

One of the main factors for low volume growth in the industry has been the technological transformation taking place in the Indian automobile sector. With the implementation of Euro emission norms, the working efficiency of automobiles in the country has been consistently improving. A truck which needed to replace its engine oil every 10,000 KMs till now has to now replace its engine oil after every 18,000 KMs. The same vehicles in the developed countries like Europe and US have to change after every 36,000 KMs and would very much the same in India few years from now. Thus the additional volume growth in terms of new vehicles is getting subdued due to technology improvement in terms of repeat purchase. But, with the transition expected to be significantly absorbed by 2008-09 and new engines forming substantial percent of the total automobile population, it would bring normal growth back to the lubricant industry.

New initiatives of 2-wheeler service center "Bike Zone" would enhance brand loyalty in the long run...

Crude pricing a major factor for base oil prices...

Rising crude oil prices took its toll on EBIDTA margin, but maintained above the previous low of 14.7%...

### New initiatives: driving force behind future growth -

Castrol has taken on new initiatives to enhance its brand positioning and to meet the new evolving challenges of Indian lubricant industry. The company has launched a chain of 2-wheeler servicing centers under the brand name of "Castrol - Bike Zone" involving local automobile mechanics and professionals. The centers are specifically targeted towards new generation of 2-wheeler owners and trying to fill the gap of professional and transparent service centers. This has already been introduced in Bangalore and Chennai with the third city Hyderabad being added recently. CIL is planning to extend these centers in 16 other cities over the next two years, and is trying out a different financial model with its partners. This business over a period would evolve into a new business segment for CIL (service revenue) adding fresh growth to the topline.

Other than this, the new service provides an opportunity to enhance its "Castrol Brand Image" by filling the transparency gap in the automobile (2-wheeler) maintenance and services business. Also the new generation affluent population being seeded with the "Castrol Brand Image" and loyalty points thus accumulated would percolate down to other automobile segments as this population migrates to 4-wheelers and other lifestyle categories. On the financial front the model evolving in terms of structure of revenue sharing would reduce the volatility and quality of future earnings. But since the business division currently lacks any clarity in terms of revenue sharing model, we have not considered revenue from this division in our projections. Actual revenue would only add to our valuation as we expect the revenue to be on a cost plus basis for the company.

### Base oil prices should peak out in the coming year -

Rising base oil (LOBS) prices, which forms a major cost component in CIL's revenue statement (accounting for 31 % to sales and 42.5 % to total operating cost, 2005) has taken a heavy toll on CIL's operating performance. Base oil price, which started rising from 2002 levels of Rs.16 per liter, has shown a strong CAGR of 17.8 % for the past five years. LOBS prices are already ruling in the range of USD 900 to USD 1000 per ton against USD 575 per ton a year ago, an increase of 56% on the lower price band. This has been a major burden for Castrol on the margin front and it's only the strong brand value of CIL that has provided support for the company to pass on the cost increase to its end product. But the company has already taken a beating on the gross contribution margin (sales realisation net of raw material cost).

### Chart-2 LHS - Base oil (LOBS) price (Rs/liter) and RHS - EBIDTA Margin (%)



Source - Company, Anand Rathi Institutional Research

Page 3 October 2006

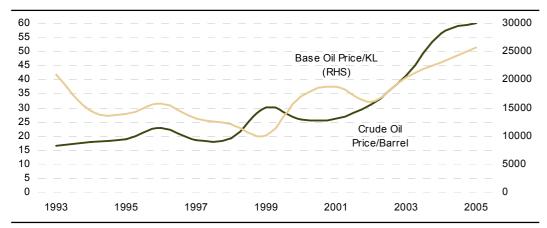
Other demand-supply factors made the matter worse for base oil (LOBS) price trend in the past...

Ratio of LOBS to crude oil prices at 12-15 times...

### Crude prices have direct impact on base oil prices -

Crude prices have always been the major factor defining base oil price trends. But in recent times the scenario had had many other factors leading to price increase to the extent unwarranted for. Some of the factors that lead to this scenario can be listed as:

### Chart-3 LHS - Crude Oil Price/Barrel V/s. RHS - Base Oil (LOBS) Price/KL



#### Source - Company, CMIE, Anand Rathi Institutional Research

- Rising crude prices and at the same time US gasoline prices ruling above the prices of 100N Group I lubricant oil prices, lead to some US refining capacities shifting to gasoline production.
- Natural disasters (like Katrina and Rita) that hit the Gulf of Mexico last year also pushed some capacity off production, making the matter worse for base oil industry.
- Accidents due to fire and explosions in the European production facilities, while some planned and emergency turnarounds in the Asian lube oil capacities added further to the short supply situations leading to spike in lube oil price in 2005.
- Other than this one of the major fundamental changes that has lead to the Group I base oil prices rising was the unprecedented short-term demand emanating from the growth in automobile population world over. As against this, there still exist huge surplus in the Group II plus and above range of base oil, which is subject to correction in due course.

The ratio of LOBS prices is said to be in a ratio of 12-15 times crude oil prices, i.e. considering crude prices ruling in the USD70 per barrel levels, LOBS prices were 12.8 to 14.3 times ruling in the range of USD900 to USD 1000 per metric ton. With crude prices already down to below USD 60 per barrel range LOBS prices are expected to follow suit. Crude itself being a highly volatile commodity with lot of factors influencing the price trends, the sharp run-up in the prices over the past few year provides sound argument for a cool-off from current levels. We expect prices to ease for crude oil and rule in between USD 60 - 63 per barrel levels on an average for CY 2007. This itself provides for a strong argument for LOBS prices to correct from current levels. Other developments like the advancement in GTL technology would further ease pricing pressure on LOBS.

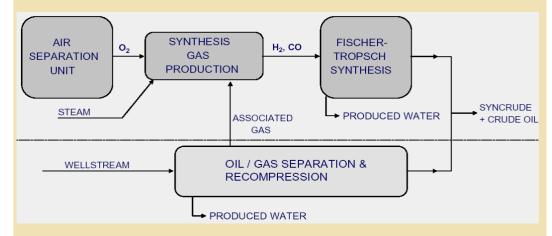
Page 4 October 2006

Gas-to-Liquid, GTL technology based refining capacities to become the future source of LOBS supply...

Improving supply would ease pressure on base oil (LOBS) prices, 2007 onward...

### GTL Technology -

Gas to liquid technology, GTL, is quite an old technology originally innovated to eliminate the problem of flaring of gas-release during the oil exploration process. The technology over a period of time has turned out to be of a major economic value as Fischer Tropsch Wax Synthesis Chemistry extended the utilization of this technology. Also the initial capital cost which had been a major hurdle for the older technology was replaced by newer cost-efficient ones. Back in 1991 the Petro SA GTL plant which had an estimated cost of USD60,000 per BPD of plant capacity has already come down to just over USD20,000 per BPD for Shell GTL in 2002. This along with the potential of different fuels and lube oils that can be produced has drastically improved the economic viability of this technology. Today we have almost six major projects at various stages of development world over.



The lower pollutant level along with elimination of additives in the final lubricant manufacturing process enhances the demand potential for the base stock. With the expansion of new generation Euro III and above-compliant vehicles in the world market, the need for Group II + and above grades of LOBS would only increase in the coming future.

### Increasing capacity to ease demand-supply equation -

But this scenario is expected to improve in the coming years. If global capacity numbers are anything to go with, then we expect continuing addition of over 7.2 million metric tons per annum (MMTPA) every year for the next five year starting 2006. This translates to a total global LOBS capacity growth of 20% in five years. As against this, global demand for LOBS is expected to grow at a much sober rate of 25% over the next fourteen years. This would tilt the demand-supply equation in favour of the user industry with prices easing from current levels.

Other than this new initiative in terms of GTL, technologies under various stages of implemention are expected to further add to the lube capacity. This, though, is a much long term development and would help reduce speculative interest from the price trend. World refining major, Exxon Mobil through their JV project at Qatar is projected to add around 30 KBPDs of LOBS starting from 2010-11 as against total world throughput of about 700 KBPD in 2005. Other projects from Shell, Chevron, Sasol, Syntroleum and Texaco are further expected to add another 30-40 KBPD approx.

Page 5 October 2006

Increasing demand for synthetic base oil (which is in surplus) to reduce temporary supply crunch...

It's faster rise in LOBS price which has eaten margins; with base oil prices easing margins would get a fillip as seen in 2000 and 2003...

Margins to improve on the back of its marketing strength...

### Technology advancement favours use of synthetic base oil demand -

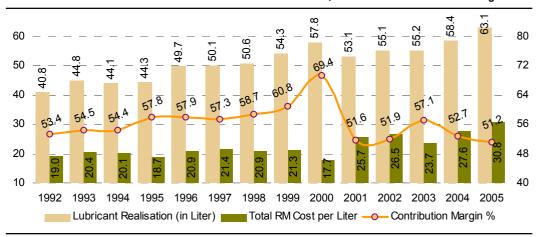
Another argument in favour of the base oil prices (especially the Group I prices) easing in the coming future is based on the changing preference in terms of viscosity and thus temporary higher demand of Group I base oil. Increasing population of new generation vehicles, emission norms getting more stringent (implementation of Euro IV, Euro V and later Euro VI norms in 2005, 2008 and 2010 respectively), the lube market would witness increased demand for premium-end lubricant leading to deficit in the Group I base oil diminishing. This would be a positive for the Group I base oil prices.

### Strong resilience in terms of ability to pass on cost additional to the end price -

Castrol has demonstrated strong ability to pass on cost addition in terms of its end prices of lubricant. The chart below clearly shows gross contribution margin (margins net of excise and raw material cost) fairly in the range of 51 to 69 percent, with the average for the past 10 years at 57 percent.

The last three years has witnessed a consistent cost increase from Rs.23.7 per liter of finished lube oil to Rs.30.8 per liter (rise of 30%) and CIL has managed to raise its average lubricant prices by 14.3% in the same period, with the gross contribution margin slipping down by 6%. Contrary to this, in the current year 2006, LOBS prices had increase by 66% to Rs.42,580 per MT as against Rs.25,650 per MT leading to the total cost per liter of lube oil rising by 50.1% to Rs.50.7 per liter as against Rs.33.8 per liter in 2005. CIL, after four subsequent price hikes in the recent one year has managed to cover the cost increase in value terms only. The efficiency this year would be in terms of managing operational overheads thus conserving EBIDTA margins to a certain extent.

Chart-4 LHS - Lube Realisation & Raw Material Cost /Liter, RHS - Gr. Contribution Margin



Source - Company, Anand Rathi Institutional Research

Looking at the overall scenario in the international price trends, both in base oil and additives, we expect the factors dominating high price growth to start easing from the first quarter of the coming year 2007. This would be a major turning point for Castrol, as its ability to maintain prices (dominant player in the automotive segment) would help improve margins strongly. To be on the conservative side, we have considered base oil and additive prices to rise 8% and 5% for 2007 and 2008 giving us a gross contribution margin at 17.7% and 18.3% for 2007 and 2008 respectively. At the gross operating level we expect margins this year to be around 14% as against 20.8% last year.

Considering the year 2006 half yearly price levels as our base levels i.e. sales realization per liter of lubricant (lube) and cost of raw material computed on input output ratio and the price per MT of both additives and base oil at 2006 price levels, we have worked out various scenarios of changes in sales realisation and raw material cost to find its resultant impact on EPS.

Page 6 October 2006

This Sensitivity table below considers the base prices and some base data as follows;

#### Base Level -

Average Sales Realization Rs./liter (2006)	81.36
Average RM cost Rs./ liter (2006)	50.67
Other Op RM cost Rs./ liter (2006)	19.20
Production of finished goods KL (2007)	241,702
Sale of finished goods KL (2007)	232,513
Base oil consumption ratio MT : KL of lubricant	0.8754:1
Additives consumption ratio MT : KL of lubricant	0.1543:1
Basel oil price Rs./ MT (2006)	42,581
Additives prices Rs./ MT (2006)	86,794
Gr. contribution (Rs. Liter of lube) (2006 / 2007)	11.5 / 16.2

Considering either the cost-to-sales realization remaining constant the table below gives impact on gross contribution margin for both the scenario under various percentage changes in prices and EPS. As for computing our forecasted revenue statement we have considered sales realization to grow by 12% to Rs.91 per liter of lubricant. Base oil price constitutes almost 74% (Rs.37 of Rs.50.6) of the raw material cost per unit of production of finished goods.

And with the prices of base oil already up by 66% to Rs.42,580 per MT due to abnormal demand-supply pressures, which are expected to ease in the coming year as stated in our investment argument. Even though there is all probability of even a price revision on a downward direction, to be on a conservative side, we have considered an 8% increase in prices for the year 2007. We would reconsider revising this pricing as and when there are some indications in the market. On the revenue side we have considered a 12% upside revision in prices on the back of 8% revision in base oil prices as the company was not able to pass on the entire cost increase this year.

Table-1 Sensitivity Study - impact of LOBS/fiinished lube price change on Gr. contribution margin & EPS.

Sensitivity based on change in lube price realization (2007) at no change Raw material cost (2006)								
Change in sales realization	-10%	-5%	0%	5%	10%	15%		
Sales realization (Rs./liter of lube)	73.2	77.3	81.4	85.4	89.5	93.6		
Net sales turnover (Rs. mn)	17,025	17,971	18,916	19,862	20,808 2	21,754		
Gr. contribution (Rs./liter of lube)	3.3	7.4	11.5	15.6	19.6	23.7		
Net profit (Rs. mn)	(60)	1,272	2,610	3,947	5,285	6,623		
EPS (Rs.)	(0.5)	10.3	21.1	31.9	42.8	53.6		

Sensitivity based on change in raw material cost (2007) at no change in lube price realization (2006)							
Change in RM cost	-10%	-5%	0%	5%	10%	15%	
Raw material cost / liter of lube oil	64.8	67.3	69.9	72.4	74.9	77.5	
EBIDTA (Rs. mn)	2,259	1,661	1,063	466	(132)	(730)	
Gr contribution (Rs/liter of lube oil)	16.6	14.0	11.5	9.0	6.4	3.9	
Net profit (Rs. mn)	2,745	1,946	1,147	348	(348)	(946)	
EPS (Rs.)	22.2	15.7	9.3	2.8	(2.8)	(7.6)	

Page 7 October 2006

Its the transition stage in terms of new technology engines which has made a dent on lubricant demand growth...

Strong economic growth and improving road infrastructure would maintain growth momentum for CVs...

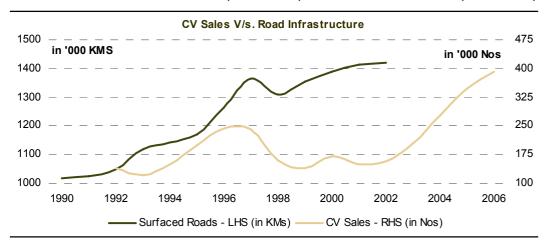
## Volume growth to remain subdued on the back of technology changes in user industry -

The growth in volumes for the lubricant industry is directly proportional with the growth in economic activity with the factors of growth determining both from consumer spending (Capital consumption - automobile sales growth & consumption-led transport growth). Amongst the industrial factors relates to the increased capital formation (growth in engineering goods) and higher production (leading to higher machine maintenance). Other than the normal growth in the underlying factors of growth i.e. automobile and engineering (and especially the automobile the largest consumer of lube oil), usage efficiency has also impacted the net growth in lube consumption. Effeciency in terms of lubricant usage per running kilometers being on the rise, additional demand from new vehicle has been relatively slower. With every new vehicle added to the automobile population, a part of this addition has been replacing the older version of high lubricant consuming vehicle. Thus the net usage increase for lubricants has been falling on a relative basis. With the percentage population of the new vehicle as part of the total population gaining significant size by 2008-09, growth is expected to come back to the lubricant industry demand.

## Automobile Growth - product of high economic activity and surplus income growth

With growth in economic activity and resultant growth in increased personal income demand for consumer white goods and automobile has been showing consistent growth. The commercial vehicles sales have shown 7.1% CAGR growth over the last 10 year which has increased to 20.7% for the recent 5 years. This is a direct result of improved road infrastructure and higher transport demand on the back of strong economic growth which averaged around 6.7% for the past five year (on GDP-fc basis). As seen from the chart below CV sales has a direct relation with the road infrastructure in the country. With the completion of Golden Quadrangle, North-South East-West corridors and the governments renewed policies in terms of connecting these networks with major ports and industrial hubs, CV sales are expected to show continuing strong growth in the coming years.

Chart-5 LHS - Road Infrastructure (in '000KMs), RHS - CV Annual Sales (in '000 Nos)



Source - CMIE, Anand Rathi Institutional Research

Even though this is not a direct measure of the total CV population in the country which finally becomes the consumption source for the lubricant industry the downward impact of scrapping of 15 years and above vehicles in the country and 8 years and above vehicles in the metro region had its impact on the demand for lubricant.

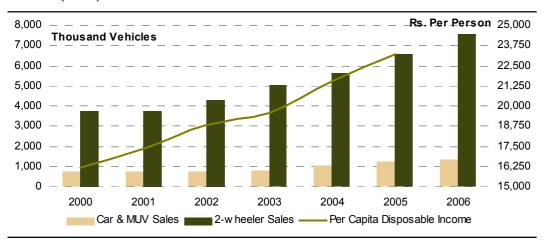
As far as the relative demand growth for the lubricant industry is concerned another important factor which has been impacting in recent times is the technological advancement in the

Page 8 October 2006

automobile industry. Improvement in operating efficiency both in terms of fuel oil and other consumables (like engine / brake oil) is something the lubricant industry is facing today. A truck which required replacement of oil every 10,000 KMs in the past now with the technological advancement requires replacing every 18,000 KMs. The trend in the international market shows engine oil replacement every 36,000 KMs and this technology advancement would very soon catch up in India too. This has been the major factor for the subdued volume growth in the industry for the past two years. With no clear industry aggregate numbers available going by the industry understanding the low volume growth trend is expected to recover from 2008-09 onward as the transition takes place and new engines comprise significant proportion of CV population.

As for the domestic 2-wheeler & car sales, the rising per capita disposable income in the Indian economy on the back of robust economic growth has been a major positive for the industry growth. As seen from the chart given in the continuing page there is a strong co-relation between the per capita disposable income and the consumer automobile sales. We have considered at 15% estimated CAGR growth for the car segment and 18-20% CAGR growth for the 2-wheeler segment in the coming few years. The increased sale of 4-stroke bikes in the premium segment would further boost demand for premium brands like Castrol. Market information also support this argument as the separate chamber for the lube oil storage and involvement of service professionals both at private and company-assigned service stations has also helped demand for Castrol brands.

Chart-6 LHS - Car & 2-Wheeler Sales (in '000Nos), RHS - Per Capita Disposable Income (in Rs)



Source - CMIE, Anand Rathi Institutional Research

## Risk Factor

Crude price has been the major determinant for the base oil price determination but the price trend in recent times had been impacted more on account of the changing demand-supply equation in the base oil market. This no doubt would come back to normal and crude oil prices would play a major role of price definition on the base oil prices again. Considering the 12-15 times ratio and our expectation of crude price to average around USD64 per barrel levels for the year 2007, base oil prices should stabilize in the region of USD775 – 875 per MT range instead of USD900 – 1000 per MT currently. Since the market has not shown any confirmed signs of trend reversal on the downward direction till now we have resorted to a conservative 8% increase in base oil prices for 2007 and 4% increase there after in 2008. With the prices of base oil showing confirmed signs we would revise our financial model for Castrol appropriately.

Strong per capita disposable income growth maintained the growth momentum for cars and 2-wheelers...

Page 9 October 2006

## Company Profile

Incorporated in 1979 the company stands to be a leading brand manufacturing premium automobile and industrial brands of lubricants. Marketed under two brand names of Castrol and BP after the international merger of Castrol with BP Group worldwide, CIL enjoys leadership positions in most of the automobile lubricant segments in which it operates including car engine oils, premium 2-stroke and 4-stroke oils and multigrade diesel engine oils. The company enjoys the country's largest manufacturing and marketing network with five manufacturing facilities across the country, including a state-of-the-art plant in Silvassa. Other plant includes the ones located at Patalganga, Paharpur, Silvassa and Tondiarpet.

OEM Players	Segment	Brand	Nature of Tie-up
Tata Motors - Commercial Vehicles Division	Trucks & Busses	Castrol RX Super Max - endorsed by Tata Motors	20 years of exclusive tie-up for supply of engine oil and specialty products to Tata Motors Dealers and Service Network. Involved in joint development and promotion of its brand of products.
Tata Motors - Car Division	Cars -diesel engine oils	Castrol GTD 15W/40 Diesel Engine Oil - endorsed by Tata Motors	Strategic alliance for exclusive supply of engine oils and specialty products to Tata Motors dealerships and authorized service network. The company has endorsed this largest selling diesel car engine oil in the country.
Mahindra & Mahindra - Farm Equip Division	Tractors	Castrol CRB Prima - a variant of Castrol CRB Plus is a specially designed lube for Mahindra Tractors.	An exclusive tie-up for the supply of Diesel engine oils for Mahindra tractors. Endorsed by the tractor manufacturer, the lube is also sold through Mahindra authorised workshops.
Maruti Udyog - largest car manufacturer	Cars - all range of engine oils & specialty products	Engine oils and other specialty products	An exclusive association for the first fill and distribution through Maruti Authorised Dealership and Service network for Engine Oil, Brake Fluid and transmission oils.
JCB India - Road Equipment mfg.	Road Equipment Vehicles	Range of Hydraulic & Transmission Fluids	An exclusive alliance for supply of a range of products for initial fill in the plant as well as service fill in the JCB network

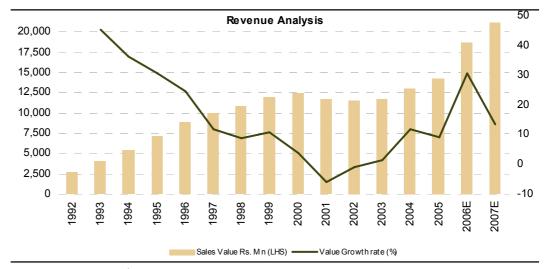
Premium brand and strong OEM association provides impetus for continuous growth...

Page 10 October 2006

## Financial Analysis

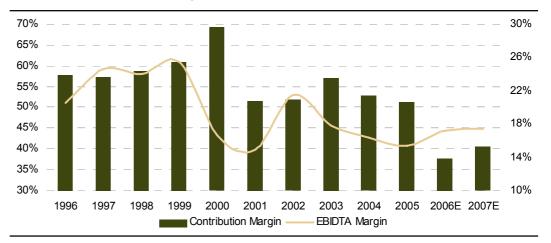
### Revenue Analysis-

After showing a consistent strong growth in topline for the period between 1992 and 2000, though on a falling rate with growth rate dipping down in negative in 2001 and 2002, sales growth has picked up again. Sales growth has averaged around 7.5% for the past three years and has been supported by a sales growth averaging at 2.7%. With a sales realization growth of almost 30% plus for the first half sales turnover has already shown a YoY growth of 18.5%. This is on the back of almost 4% increase in quantity terms. We expect topline to show a CAGR growth of 16.5% YoY over the next two year. Projected sales for the current year is at Rs.18,655 mn (growth of 30%).



### Margin Analysis -

The Margin analysis of Castrol shows a strong impact of the base oil prices, with change in contribution margin having a deep impact on both operating as well as EBIDTA margins. It's the strong ability of the company to pass on the cost increase in the end product and is clearly seen from the contribution margin maintained above the 50% levels.



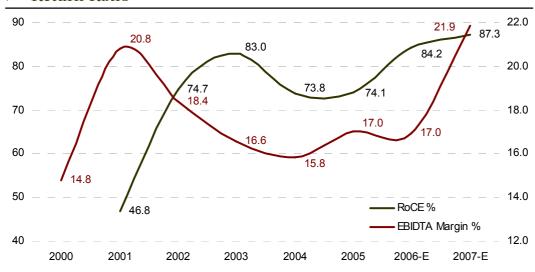
Other than this, the overall operational efficiency of the management has helped Castrol manage its earnings at the EBIDTA level. As seen from the above chart with the contribution margin dropping down by almost 6% both the operating and EBIDTA margin has dropped by just 2.8% and 2.4% respectively.

With a sharp increase of 50% in the raw material (both base oil as well as additive) price in the current year we expect the contribution margin to take a major hit in the current year but we

expect EBIDTA margin to remain stable at 17% on an annualized basis. EBIDTA Margin for the first half is at 13.3% for the current year as against 15.5% for the previous year.

With the prices of base oil expected to cool-off in the coming year and the strong brand value for Castrol's product range allowing it to retain recent price increase, we expect both contribution as well as EBIDTA margin to get a substantial push. Also, with PSU majors looking for lube business as supporting business to recover some amount of under recovery in their fuel business would give less competition (by price cuts).

### Return Ratio -



As seen from the chart above, it is drop in the EBIDTA margin and thus NOPAT for the company which has been the main drain on RoCE. With the base oil prices expected to cool in the coming year and EBIDTA margin expected to rise back to 22 % for FY07, we expect a strong recovery in RoCE. Average capital employed shows a steady ascending trend as there is no requirement for heavy capital expenditure as the process is more of a blending nature.

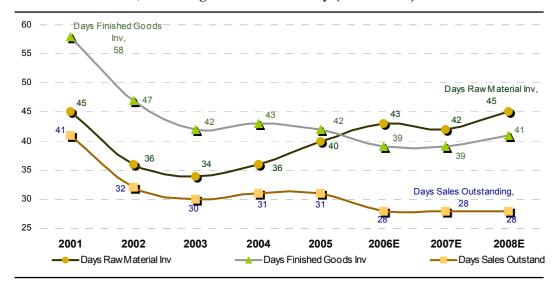
### Inventory Ratio -

The manufacturing process being less process driven and more technology-led at the product designing level with the major part of the process being blending different grades of base oil (four grades available based on their viscosity and paraffin content) with different additives the fixed asset component is very small in the total balance sheet size of the company. The business thus becomes more marketing driven and inventory management spells a critical component in the operating and managerial efficiency of the company.

A look at the inventory holding policy of the company and the debtors' recovery policy we could clearly witness the operational efficiency of the management. The debtors' policy (as seen from the sales outstanding in days) has witnessed a consistent improvement with growing business. The ratio has been improved from 41 days in 2001 to 31 days in 2005 effectively saving almost Rs.457mn in working capital requirement at present cost. The prudent management policy in this regards as validated from the management discussion and their clear focus to generate a bulk of incremental business from direct end users in the coming years, we expect the ratio coming down to 28 days for the coming year.

Page 12 October 2006

### Chart-Raw material, finished goods & sales in day (in '000 Nos)



Other than this the company enjoys almost debt free status with the debt-equity ratio fat 0.02. Considering the sharp rise in raw material cost and thus the cost of inventory we have considered a small working capital requirement of Rs.25cr for the current year. The strong free cash flows and very little capital expenditure requirement on an annual basis, the management over the years has shown sound dividend payment policy. We expect the payout ratio in the range of 60% plus for the coming year.

Page 13 October 2006

## **Valuation**

Given the dominant positioning of Castrol in the domestic lubricant industry and the strong ability to withstand margin pressure from abnormal rise in cost in the current year the company is a best bet in the industry. Its concentrated focus on the lubricant business unlike its other major competitors (the 3 PSU majors) would always provide advantage to efficiently direct its financial and management resources. The strong technological support from the parent company in terms of launching new improved variety of lubricants would make it a preferred choice for OEM as well as end users.

The recent cost pressure expected to cool off from the coming year 2007 onwards and looking in the past experience of Castrol maintaining end prices for its lubricant could provide bumper profits for the company. The company has a proven track record of returning cash back to the shareholders and we expect the trend to continue in the future given the low recurring capital requirement in the business. Maintaining the payout ratio at 60% levels the investment in the stock provides attractive dividend yield of 4.4%.

### Our DCF estimate Assumes -

### > WACC at 11.2% based on the following parameters;

WACC CALCULATION	
Risk-free rate (%)	7.74
Cost of debt (%)	11.00
Equity Beta	0.5920
Tax rate (%)	33.70
Target Gearing	0.98
Market risk premium (%)	6.00
WACC (%)	11.21

### Sales realization, raw material price and margins:

	2005	2006	2007	2008
Sales realization (per Liter)	63.07	81.36	91.12	95.68
Base oil price (per MT)	25650.92	42580.54	45986.98	48286.33
Additives price (per MT)	72328.03	86793.64	89831.41	92975.51
Gr. contribution (per Liter)	32.30	30.66	36.92	39.08
EBIDTA Margin (%)	16.0	17.2	17.4	22.1

## Exchange rate of Rs.45.72 per USD Thus our DCF value for Castrol works out to Rs.287 per share.

Page 14 October 2006

## LUBRICANT

#### **Earnings Statement**

FY04	FY05	FY06E	FY07E	FY08E
15,232	16,684	21,743	24,693	26,342
12.0	9.5	30.3	13.6	6.7
2,181	2,380	3,087	3,506	3,741
13,051	14,304	18,655	21,186	22,602
7,770	8,480	11,045	12,718	12,567
648	665	798	878	922
1,186	1,224	1,493	1,642	1,675
1,230	1,508	1,810	1,991	2,091
207	281	301	331	398
11,042	12,158	15,447	17,561	17,652
2,010	2,146	3,208	3,626	4,950
(2)	7	50	13	37
221	180	7	7	7
29	30	37	40	15
249	189	168	176	185
1,953	2,106	3,010	3,417	4,757
678	638	1,026	1,164	1,606
	15,232 12.0 2,181 13,051 7,770 648 1,186 1,230 207 11,042 2,010 (2) 221 29 249	15,232 16,684 12.0 9.5 2,181 2,380 13,051 14,304 7,770 8,480 648 665 1,186 1,224 1,230 1,508 207 281 11,042 12,158 2,010 2,146 (2) 7 221 180 29 30 249 189	15,232         16,684         21,743           12.0         9.5         30.3           2,181         2,380         3,087           13,051         14,304         18,655           7,770         8,480         11,045           648         665         798           1,186         1,224         1,493           1,230         1,508         1,810           207         281         301           11,042         12,158         15,447           2,010         2,146         3,208           (2)         7         50           221         180         7           29         30         37           249         189         168	15,232         16,684         21,743         24,693           12.0         9.5         30.3         13.6           2,181         2,380         3,087         3,506           13,051         14,304         18,655         21,186           7,770         8,480         11,045         12,718           648         665         798         878           1,186         1,224         1,493         1,642           1,230         1,508         1,810         1,991           207         281         301         331           11,042         12,158         15,447         17,561           2,010         2,146         3,208         3,626           (2)         7         50         13           221         180         7         7           29         30         37         40           249         189         168         176

#### Balance sheet

Y/E Dec (Rs. Mn)	FY04	FY05	FY06E	FY07E	FY08E
Shareholders' fund	3,601	3,901	4,516	5,214	5,647
Share capital	1,236	1,236	1,236	1,236	1,236
Reserves & surplus	2,364	2,664	3,279	3,978	4,411
Loan funds	37	28	278	228	128
Defered tax liability	174	119	64	75	87
Total sources of fund	3,812	4,047	4,858	5,517	5,862
Gr. block	2,498	2,487	2,587	2,703	2,839
(less) Acc. depreciation	1,009	1,131	1,300	1,475	1,660
Net block	1,451	1,325	1,287	1,228	1,179
Capital work in progress	47	58	61	64	67
Investments	1,289	1,081	1,135	1,192	1,252
Current assets	3,558	4,421	5,168	6,129	5,827
Loans & advances	0	0	0	0	0
Cash & bank	297	399	979	1,195	1,836
Current liabilities	1,970	2,398	3,016	3,513	3,453
Provisions	860	839	758	779	845
Net working capital	1,025	1,582	2,374	3,033	3,365
Total appl. of fund	3,812	4,047	4,858	5,517	5,863

#### **Cash Flow Statement**

Y/E Dec (Rs. Mn)	FY04	FY05	FY06E	FY07E	FY08E
EBITDA	2,230	2,326	3,215	3,633	4,957
Changes in Working Cap	142	(456)	(211)	(443)	309
Other Income	-	-	-	-	1
Interest / Taxes paid	(716)	(712)	(1,063)	(1,204)	(1,622)
CF from Operations	1,656	1,159	1,942	1,986	3,645
Net capital expenditure	(36)	(1)	(102)	(119)	(138)
Net investments	(441)	208	(54)	(57)	(60)
CF from Investments	(477)	207	(156)	(176)	(198)
Dividends paid	(1,155)	(1,168)	(1,369)	(1,555)	(2,717)
Equity issued	0	-	-	-	-
Inc./Dec. in debt	(14)	(65)	195	(39)	(88)
Non-recurring items	9	(30)	(31)	(0)	1
CF from fin. activities	(1,160)	(1,264)	(1,205)	(1,594)	(2,804)
Inc/(dec) in net cash					
Opening net cash	278	297	399	979	1,195
Inc/(dec) in net cash	19	102	581	216	643
Closing net cash	297	399	979	1,195	1,838
Gross cash flow	1,656	1,159	1,942	1,986	3,645
Free cash flow	1,620	1,157	1,839	1,866	3,507

### Key Ratios

FY04	FY05	FY06E	FY07E	FY08E
16.6	15.8	17.0	17.0	21.9
8.2	8.7	9.1	9.1	12.0
(7.2)	15.2	35.2	13.6	39.8
73.8	74.1	84.2	87.3	105.7
35.4	37.6	43.9	43.2	55.8
126.9	81.0	104.1	93.7	161.3
1.5	0.1	6.1	6.8	7.5
(0.1)	(0.1)	(0.2)	(0.2)	(0.3)
77.7	77.3	86.7	90.9	322.0
10.3	11.9	16.0	18.2	25.5
21.2	18.4	13.6	12.0	8.6
7.5	6.9	6.0	5.2	4.8
3.8	3.8	4.4	5.0	8.7
59.8	42.7	67.9	68.9	129.5
12.3	11.7	8.3	7.3	5.2
2.1	1.9	1.4	1.2	1.1
	16.6 8.2 (7.2) 73.8 35.4 126.9 1.5 (0.1) 77.7 10.3 21.2 7.5 3.8 59.8 12.3	16.6 15.8 8.2 8.7 (7.2) 15.2 73.8 74.1 35.4 37.6  126.9 81.0 1.5 0.1 (0.1) (0.1) 77.7 77.3  10.3 11.9 21.2 18.4 7.5 6.9 3.8 3.8 59.8 42.7 12.3 11.7	16.6 15.8 17.0 8.2 8.7 9.1 (7.2) 15.2 35.2 73.8 74.1 84.2 35.4 37.6 43.9  126.9 81.0 104.1 1.5 0.1 6.1 (0.1) (0.1) (0.2) 77.7 77.3 86.7  10.3 11.9 16.0 21.2 18.4 13.6 7.5 6.9 6.0 3.8 3.8 4.4 59.8 42.7 67.9 12.3 11.7 8.3	16.6 15.8 17.0 17.0 8.2 8.7 9.1 9.1 (7.2) 15.2 35.2 13.6 73.8 74.1 84.2 87.3 35.4 37.6 43.9 43.2  126.9 81.0 104.1 93.7 1.5 0.1 6.1 6.8 (0.1) (0.1) (0.2) (0.2) 77.7 77.3 86.7 90.9  10.3 11.9 16.0 18.2 21.2 18.4 13.6 12.0 7.5 6.9 6.0 5.2 3.8 3.8 4.4 5.0 59.8 42.7 67.9 68.9 12.3 11.7 8.3 7.3

Page 15 October 2006

Recommendation Guide				
		Relative to the market		
Buy		>15%		
Outperformer		5 to 15%		
Market Performer		-5 to 5%		
Underperformer		< 5 to 15%		
Sell		< -15%		

	Telephone Numbers	Email
Director - Research		
Tarun Sisodia	91-22-6637 7060	tarunsisodia@rathi.com
Sales & Dealing		
Girish Bhutra (Head - Sales & Dealing)	91-22-6637 7014	girishbhutra@rathi.com
Vishal Laddha	91-22-6637 7096	vishalladdha@rathi.com
Srinivas Reddy	91-22-6637 7023	srinivasreddy@rathi.com
Venkat Ramesh Babu	91-22-6637 7089	rameshbabu@rathi.com
Shaharukh Gandhi	91-22-6637 7047	shaharukhgandhi@rathi.com
Kaushik Shah	91-22-6637 7066	kaushikshah@rathi.com
Payal Jain	91-22-6637 7068	payaljain@rathi.com
Maulik Narielwala	91-22-6637 7093	mauliknarielwala@rathi.com

Anand Rathi Securities Limited Member, The Stock Exchange, Mumbai Navaratan Capital & Securities Private Limited Member, National Stock Exchange of India

J. K. Somani Building, British Hotel Lane, Bombay Samachar Marg, Fort, Mumbai 400 023. Tel: +91 22 6637 7000. Fax: +91 22 6637 7070

This report has been issued by Anand Rathi SecuritiesLimited (ARSL), which is regulated by SEBI. The information herein was obtained from various sources; we do not guarantee its accuracy or completeness. Neither the information nor any opinion expressed constitutes an offer, or an invitation to make an offer, to buy or sell any securities or any options, futures or other derivatives related to such securities ("related investments"). ARSL and its affiliates may trade for their own accounts as market maker / jobber and/or arbitrageur in any securities of this issuer(s) or in related investments, and may be on the opposite side of public orders. ARSL, its affiliates, directors, officers, and employees may have a long or short position in any securities of this issuer(s) or in related investments. ARSL or its affiliates may from time to time perform investment banking or other solicit investment banking or other business from, any entity mentioned in this report. This research report is prepared for private circulation. It does not have regard to the specific investment objectives, financial situation and the particular needs of any specific person who may receive this report. Investors should seek financial advice regarding the appropriateness of investing in any securities or investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Investors should note that income from such securities, if any, may fluctuate and that each security's price or value may rise or fall. Past performance is not necessarily a guide to future performance. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related investment mentioned in this report.

Page 16 October 2006