

The background of the cover is a photograph of an industrial refinery at night. Two tall, dark distillation columns are the central focus, illuminated from within and by external lights. The sky is a deep, dark purple. In the foreground, a complex network of pipes, walkways, and smaller vessels is visible, also lit up. The overall atmosphere is industrial and dramatic.

**SANTOS LTD**  
A.C.N. 007 550 923

**1991**

**ANNUAL REPORT**

**TO SHAREHOLDERS**



The Annual General Meeting of Santos Ltd  
will be held in the Hyatt Regency Ballroom  
Hyatt Regency Adelaide, North Terrace  
Adelaide, South Australia  
on Tuesday, 19 May 1992 at 11.00 a.m.

*Cover:*

*Gas liquids recovery  
plant, Moomba,  
Cooper/Tromanga  
Basins, Australia.  
Gas liquids  
produced in the  
Cooper/Tromanga  
Basins are separated  
from gas by the  
liquids recovery  
plant at the  
Moomba processing  
facilities. The signing  
of the contracts  
during 1991 for the  
supply of gas from  
South-west  
Queensland means  
that from 1994  
Santos will be able,  
for the first time, to  
supplement its  
existing South  
Australian gas  
liquids production  
with production  
from liquids rich gas  
fields in South-west  
Queensland.*

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Santos achieved historically good operating results in 1991 with sales revenue and after tax cash flow being the second highest on record. Operating profit before tax and abnormal expenses was the third highest on record. The 1991 financial performance has only been surpassed in years of significantly higher oil prices.

However, the net profit result was adversely affected by a substantial abnormal expense in the form of a write-off of unsuccessful exploration expenditure, principally associated with the company's Timor Sea interests. The possibility of this write-off was foreshadowed in last year's Annual Report.



S D M Wallis  
CHAIRMAN

Notwithstanding this write-off, Santos remains committed to maintaining a substantial programme of oil and gas exploration and development for the purpose of enhancing the value of the company over the medium to longer term.

Given this continuing commitment, I thought it would be appropriate to recapitulate the approach on which Santos' exploration and development programmes are based. The approach involves:

- development of new markets for the company's substantial reserves of uncommitted gas;
- the conduct of exploration programmes for oil in a portfolio of areas selected on the basis of establishing a prudent



balance between the cost of exploration and the probability of success; and

- the acquisition of producing oil properties where either:
  - the acquisition cost represents a substantial discount to the cash flow expected to be generated from production; or
  - there is assessed to be good potential for the discovery of additional reserves.

This approach recognises, firstly, that the company has already discovered large reserves of gas and that those reserves have a long life and, secondly, that there is a need to find oil reserves to replace those being produced in the Cooper Basin.

Consistent with this approach, the Timor Sea acquisition and subsequent exploration and development programme was Santos' first major initiative to diversify its oil reserves outside the Cooper Basin. This initiative was based on well developed technical information which indicated the area to be highly prospective. Exploration results have failed to meet the original expectations, although the Timor Sea is still considered to be prospective and an active exploration programme will be continued.

In response to the disappointing results in the Timor Sea, Santos' oil exploration and development programme is being re-orientated as follows:

- greater emphasis in oil exploration is being placed on areas such as the USA, the North Sea, the Timor Gap and Colombia, relative to onshore Australia and the Timor Sea;
- exploration opportunities in South East Asia are being pursued. However, such opportunities tend to be limited because of relatively onerous fiscal arrangements and the limited number of follow-up targets in individual permits;
- opportunities to acquire production in the USA, the North Sea and Australia are being monitored and evaluated. The USA is seen as particularly promising in this regard as acquisition opportunities frequently include the opportunity to take over operatorship. In these cases, Santos should be able to create value by reducing operating costs through application of its extensive Cooper Basin experience and by virtue of the fact that it is already operating production in the USA;
- working associations are being formed with major oil companies in order to benefit from these companies' experience in pursuing overseas exploration and production opportunities; and
- the company's technical capabilities in the area of exploration and development are being

strengthened by the recruitment of additional senior exploration staff and by the use of advisers experienced in the overseas areas in which the company is exploring.

Petroleum exploration is a high risk activity and the lead time from the initiation of an exploration programme in a new area to the time when the existence or not of commercial reserves has been definitively determined is frequently long. Consequently, to maximise the prospects of success, an exploration programme must be capable of being sustained over a number of years.

Santos' ability to sustain its exploration programme remains unimpaired despite the write-offs made in 1991. The company presently has a large cash flow from its significant oil and gas reserves in the Cooper Basin and the Timor Sea. There is confidence that the existing level of petroleum production which underpins this cash flow can be broadly maintained for at least the next ten years with only very modest continuing exploration success in the Cooper Basin. This ongoing cash flow will be sufficient to fund continuation of the exploration and development activities outlined above while at the same time paying significant dividends to shareholders and continuing to reduce debt levels.

The Directors remain confident that the company's strategy for exploration and development is soundly based and will deliver substantial benefits to shareholders over the medium to longer term.



S D M Wallis  
CHAIRMAN



## FINANCIAL

In 1991, Santos recorded an operating profit before income tax, abnormal items and minorities of \$223.5 million. This is a result which has only been surpassed twice in the company's history: in the years 1990 and 1985 which were the only two years in which oil prices exceeded A\$40 a barrel at some point. The average Australian Dollar oil price received by Santos in 1990 was \$30.71 a barrel compared with \$28.00 a barrel in 1991.

Operating profit after income tax but before abnormal items was \$116.7 million, compared with \$142.8 million in 1990 which included \$11.9 million profit after tax from the sale of United Kingdom assets. Additionally, the 1990 result included net foreign exchange losses of only \$1.3 million

compared with \$11.4 million in 1991. Earnings per share before abnormal items were 24.8 cents compared with 32.6 cents in 1990.

The writing down of some of the company's oil and gas investments, principally in the Timor Sea and United States of America, resulted in an abnormal loss after income tax of \$224.9 million. After taking into account this abnormal item, Santos incurred a loss after tax and minorities of \$110.9 million compared with a profit of \$156.0 million in 1990.

The write-down will have no impact on Santos' dividend policy or cash flow. Reflecting this, and Santos' strong operating result, Directors have declared a final dividend of 10 cents per share, fully franked. This brings total dividends for the year to 19 cents per share, fully franked, unchanged from 1990. Santos' total dividend payout for 1991 will amount to \$88.5 million, the highest in the company's history, compared with \$85.5 million in 1990.

The 1990 Annual Report advised the carrying value of Timor Sea investments would be reviewed in light of the results of the 1991 exploration programme. As discussed in the Exploration, Reserves and Development section following, Timor Sea exploration results in 1991 were disappointing

with all wells being plugged and abandoned without success. The Directors extended the review of oil and gas assets from the Timor Sea to include all of Santos' oil and gas assets with the aim of ensuring the asset carrying values on the company's balance sheet are conservative.

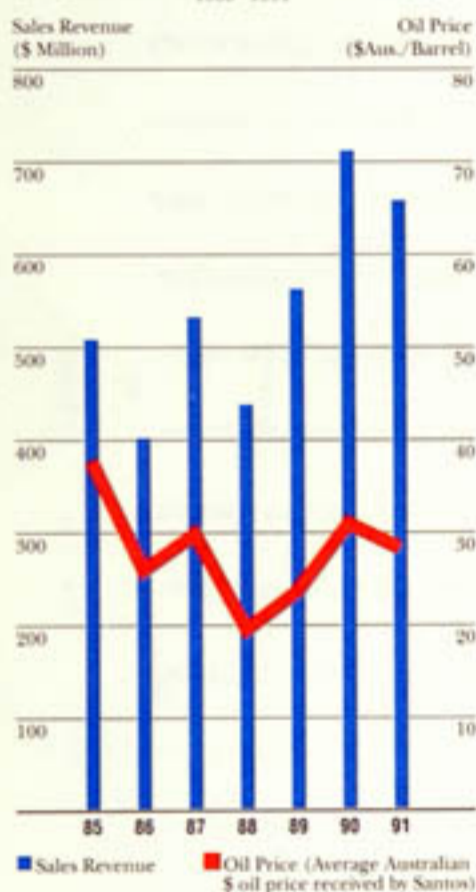
The majority of the write-down relates to a \$234 million reduction of the book value of Santos' investment in the Timor Sea. Of this total, \$80 million is for the write-off of purchase price for producing licences AC/P2 and AC/P4 in Santos' acquisition of Peko Oil and \$154 million is for unsuccessful exploration expenditure in a number of Timor Sea permits to be relinquished in 1992 and 1993. The latter item includes \$38 million of exploration expenditure incurred by Peko Oil prior to Santos' acquisition. The write-down of Santos' Timor Sea investments amounts to \$176 million after tax. A write-down of \$9 million after tax was made in respect of other Australian oil and gas assets.

The abnormal item also includes a \$40 million write-down after tax of gas assets in certain areas of the USA.

As stated above, the write-downs will not affect Santos' underlying cash flow which is expected to remain strong. The effect of the write-down will be to reduce future depletion charges and write-downs of oil and gas assets compared to those that would have otherwise applied in the Timor Sea and USA.

SANTOS' SALES REVENUE AND AVERAGE OIL PRICE

1985 - 1991





Santos' sales during the year were \$655.9 million, 7.6% lower than the record 1990 sales revenue of \$709.5 million. The decline is due to the higher crude oil prices which prevailed in 1990 following Iraq's invasion of Kuwait and lower sales volume in 1991. The total volume of petroleum products sold by Santos during 1991 was 34.0 million barrels of oil equivalent, a 5.6% decline on the 36.0 million barrels of oil equivalent sold in the previous year. The principal reasons for the decline in sales volume are lower gas sales, the impact of a strike in the Cooper Basin and the shutting-in of production from the Jabiru oil field from April to September. These developments are discussed in a later section of the report titled 'Production'.

Gas liquid prices in 1991 exceeded those of the previous year. Santos received an average Australian dollar price of \$30.28 a barrel for naphtha in 1991 compared with the \$30.08 a barrel received for condensate in 1990. This compares with approximately \$26.00 a barrel which Santos would have received if it had marketed condensate instead of naphtha in 1991. Santos replaced the sale of Cooper Basin condensate with full range naphtha from January 1991. The naphtha is produced through processing Cooper Basin condensate, together with smaller quantities of the lighter fractions of Cooper Basin crude oil. The average price received for LPG in 1991 was \$209.98 a tonne compared with \$200.17 a tonne in 1990.

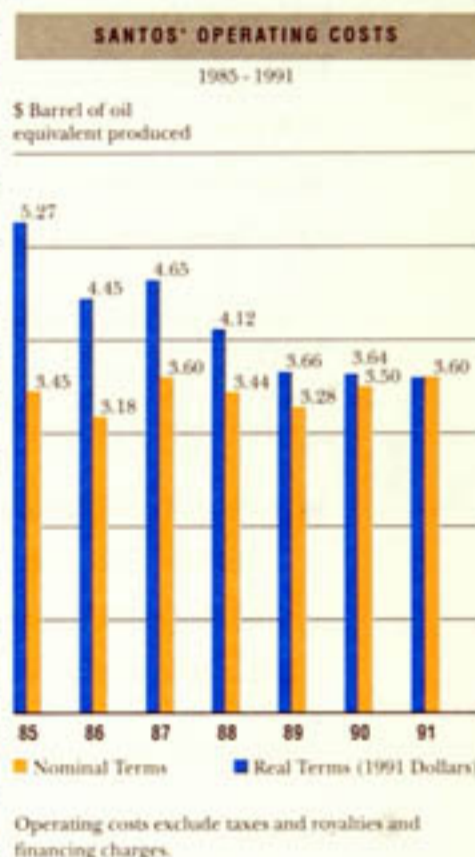
Santos' average gas price was \$2.04 a gigajoule, 6.3% higher than the 1990 average of \$1.92 a gigajoule. The increase in gas prices arises mainly from the agreed annual adjustment to the price of Cooper Basin gas by 95% of the change in the Consumer Price Index for the previous calendar year. The Cooper Basin gas price was also increased by the Producers passing on that part of the increased royalty taken by the South Australian Government

which the gas supply contracts allow to be recovered from customers. The new royalty provisions had the effect of increasing royalties due from Cooper Basin gas and liquids production by 50%. Santos' share of the increase applying to 1991 production was \$11 million, of which approximately \$3 million was recovered through increased gas prices. The change to royalty provisions was the reason for a \$6.5 million, or 13.2%, increase in royalties and resource rent tax payments compared with 1990.

Santos incurred a net foreign exchange loss of \$11.4 million in 1991, made up of \$12.1 million in unrealised losses and a realised gain of \$0.7 million. This compares to a net foreign exchange loss of \$1.3 million in 1990.

Interest expense in 1991 was \$85.8 million, 35.8% below the corresponding figure of \$133.6 million for the previous year, reflecting the lower interest rates that prevailed during the year and a full year's benefit of the debt reduction programme undertaken in late 1990.

One of the company's achievements in recent years has been sustained and permanent reductions in operating costs. Total operating costs arising from Santos' oil and gas business were 2.4% lower than in 1990, a 6.1% decline in real terms. The 1991 operating costs per barrel of oil equivalent were slightly higher than in 1990 due to the lower level of production. However, after adjusting for inflation, the 1991 operating costs per barrel of oil equivalent are 1.1% lower than those of 1990, and 31.7% lower than those of 1985, the first year of full liquids production from the Cooper/





Eromanga Basins. The foundation on which these reductions have been made are the achievements in cost control in Santos' operation of its core business in the Cooper/Eromanga Basins. In 1991 nominal Cooper/Eromanga operating costs were \$3.17 a barrel of oil equivalent produced, 6.2% lower than in the previous year despite lower production levels in 1991. In real terms, Cooper/Eromanga operating costs in 1991 were 9.7% lower than the previous year and 39.7% lower than those of 1985.

Santos continues to generate strong cash flow. In 1991, the company generated funds from operations of \$430.0 million before tax, 6.2% lower than the 1990 record of \$458.2 million. These figures do not include proceeds from the sale of assets which were \$1.3 million and \$53.0 million in 1991 and 1990 respectively. In addition, \$73.9 million was re-invested by shareholders making use of the company's dividend reinvestment plan in 1991. These funds were more than sufficient for Santos' requirements for exploration and development costs, with the surplus after meeting these commitments being used for the following:

- three dividend payments amounting to a total of \$128.5 million. Three dividends were paid in 1991, due to the deferral of the 1990 interim dividend from 1990 to 1991 in order that shareholders could receive the benefit of a fully franked dividend;
- payments in respect of review and adjustment of participation factors in the Cooper Basin Unit Joint Venture. Santos made net cash payments during the year to other Cooper Basin Producers of \$17.4 million, an adjustment required by an order of the Full Court of the Supreme Court of South Australia. This matter is discussed further below;
- payment of \$91.8 million of income tax.

At the end of 1991 the company had cash reserves of \$187.6 million. The offers made for the outstanding shares in Santos' subsidiaries Vamgas Limited and Latec Investments Ltd are being funded from cash reserves.

Santos invested \$121.0 million in field developments in 1991, compared with \$138.1 million in the previous year. The 1991 figure includes \$47.2 million for the company's share of development of the Skua oil field in the Timor Sea which came on-stream in December.

**SANTOS' NET DEBT/EQUITY AND INTEREST COVER 1985-1991**

	1985	1986	1987	1988	1989	1990	1991
NET DEBT (\$MILLION)	717	594	865	919	1116	772	755
GEARING							
Net debt/shareholder's equity (%)	153.9	99.4	100.5	83.1	99.3	55.9	62.1
INTEREST COVER							
Earnings before interest & tax/interest expense	3.0	2.8	3.3	2.4	1.9	2.9	3.6

Santos' net debt at year end was \$755 million compared with \$772 million year end 1990. It is planned to use Santos' strong cash flow to achieve reductions in gross debt in 1992. Santos Finance Ltd's two commercial paper programmes continue to provide a diversified source of short term debt and benefit Santos through reduced funding costs. Outstandings for the domestic \$300 million



promissory note and the US\$200 million Euro-commercial Paper programmes averaged the equivalent of \$320 million during 1991. The reduction in funding costs resulting from these programmes in 1991 amounted to nearly \$1 million.

As operator of the Cooper Basin Unit Joint Venture, Santos is required to periodically conduct review and adjustment of the participation factors used in the Unit. In June, an order by the Full Court of the Supreme Court of South Australia required Santos to recalculate the participation factors to apply in the Unit from 1 January 1987. The order was made following a successful appeal by Crusader Resources NL against an earlier decision concerning the validity of an adjustment to the factors. Pursuant to the decision, Santos made net cash payments to other Cooper Basin Producers, including Crusader, as an adjustment of capital, operating costs and revenues. These payments totalled \$17.4 million. Once the recalculation is completed another cash adjustment will be made to reflect the new participation factors. Santos expects the recalculated factors will not result in any material difference to the Santos Group from those factors previously determined. To the extent this occurs, the payments of \$17.4 million already made by Santos will be reversed.

In addition, Santos has charged to profit \$3.5 million in respect of legal expenses and interest arising from the invalidated determination. Until the recalculation is completed, Santos will continue to report financial, sales and production information based on the 1 January 1987 participation factors previously determined. Santos is also accruing under Other Revenue an expected benefit from the Review and Adjustment to apply from 1 January 1989.

Santos regards the expedition of outstanding matters relating to the review and adjustment of Cooper Basin Unit participation factors a priority. It is expected that the subsequent calculation of factors to apply from 1 January 1989 to 1 January 1991 will result in an increased participation factor for Santos.

The offers to acquire the outstanding shares in Vamgas Ltd and Latec Investments Ltd will cost Santos \$64 million when completed. Vamgas' interests are concentrated in the Cooper/Eromanga Basins where Vamgas has an average 8% interest in oil and gas exploration and production. Latec has an average group interest of 21% and 25% respectively in the producing Mereenie oil and gas field and Palm Valley gas field in the Amadeus Basin.

The acquisitions will give Santos full access to the significant cash flows of these interests and consolidate the company's interests in the Amadeus and Cooper/Eromanga Basins. Subsequent to year end, Santos announced it had satisfied the requirements for compulsory acquisition in respect of the offer for shares in Vamgas Ltd. The offer period in respect of outstanding Latec shares has been extended. Santos has received, in effect, acceptances for in excess of 96.6% of the shares and stock units subject to the offer.

Santos' long term credit rating was maintained at A- by S & P Australian Ratings, formerly Australian Ratings. This was achieved notwithstanding the revision of all ratings assigned by S & P Australian Ratings to an international rating scale consistent with the rating standards and criteria of its parent company, Standard and Poor's.



**PRODUCTION**

**SANTOS' PETROLEUM PRODUCTION BY REGION AND PRODUCT**

		CRUDE OIL (millions of barrels)		CONDENSATE (millions of barrels)		LPG (thousands of tonnes)		GAS (petajoules and billions of cubic feet)				TOTAL (millions of barrels of oil equivalent)	
		1991	1990	1991	1990	1991	1990	1991		1990		1991	1990
								Pj	bcf	Pj	bcf		
COOPER/	SA	4.8	4.7	2.2	2.4	259.8	282.9	96.3	88.0	101.6	93.5	25.6	26.9
EROMANGA	Qld	2.8	2.9	-	-	-	-	-	-	-	-	2.8	2.9
TIMOR SEA		2.3	3.1	-	-	-	-	-	-	-	-	2.3	3.1
CARNARVON BASIN		0.6	0.5	-	-	-	-	-	-	-	-	0.6	0.5
USA		0.7	0.4	-	-	-	-	8.1	7.0	8.3	7.8	2.1	1.8
OTHER		0.1	0.1	-	-	-	-	4.0	3.4	3.9	3.4	0.8	0.8
<b>TOTAL</b>		<b>11.3</b>	<b>11.7</b>	<b>2.2</b>	<b>2.4</b>	<b>259.8</b>	<b>282.9</b>	<b>108.4</b>	<b>98.4</b>	<b>113.8</b>	<b>104.7</b>	<b>34.2</b>	<b>36.0</b>

Santos' total 1991 production of oil, gas and gas liquids was 34.2 million barrels of oil equivalent, 5.0% lower than the previous year's total of 36.0 million barrels of oil equivalent.

In the Cooper/Eromanga Basins, production declined by 1.4 million barrels of oil equivalent due largely to a 5.2% reduction in gas production. This decline reflects lower levels of demand for gas in both of the Cooper Basin's gas markets. In South Australia, the Electricity Trust reduced its consumption of gas by 9.6% compared with 1990 by importing electricity from interstate utilities via the interconnected power grid with Victoria and New South Wales. In New South Wales, the Australian Gas Light Company purchased 4.2% less gas than in 1990 because of the effect of a lower level of economic activity and a milder winter.

Total crude oil production from the Cooper/Eromanga Basins was broadly maintained at the level of the previous year. Santos' share of production from South Australia increased by 84 000 barrels, despite the adverse impact of an industrial dispute in June which resulted in Santos losing crude oil production of approximately 160 000 barrels. In the Queensland section of the Cooper/Eromanga Basins, Santos' share of crude oil production was 118 000 barrels lower than in 1990 due to natural depletion of producing reservoirs.

Production of gas liquids from the Cooper/Eromanga Basins was affected adversely by the industrial disputation and the lower level of gas production mentioned previously. The overall impact of these two factors was to reduce total natural gas liquids production by 0.4 million barrels of oil equivalent, or 9.3% below that of 1990. Condensate production during the year was 7.7% or 186 000 barrels lower than in 1990. LPG production in 1991 was 259 800 tonnes, 8.2% below the record level of 1990.

Crude oil production from the Timor Sea was approximately 800 000 barrels lower than in 1990. Most of this reduction is accounted for by the shutting-in of the Jabiru field for nearly five months to enable maintenance of the floating production-and-storage vessel. Jabiru produced an average of approximately 45 000 barrels of oil per day over the seven months it was in operation. Production from the Challis field averaged approximately 33 000 barrels of oil per day in 1991 compared with 32 000 barrels of oil per day in 1990. Santos holds a 10.3% interest in the Jabiru and Challis fields.

Production from a third field in the Timor Sea, Skua, commenced in December at 15 000 barrels of oil per day. Santos has a 30.6% interest in Skua. Subsequent to year end, Skua recorded peak daily production rates the equivalent of 28 000 barrels of oil per day. The field had an initial production



ceiling of a monthly average of 15 000 barrels of oil per day imposed upon it by the Federal Government. Following an application by the AC/L4 Joint Venture, the Federal Government increased the production ceiling to a monthly average of 25 000 barrels of oil per day in March 1992.

Production from the Talisman field in the Carnarvon Basin, off the coast of Western Australia, continued to exceed expectations. In 1991, Talisman contributed 602 000 barrels of crude oil production to the company's production, 110 000 barrels more than in 1990. When Talisman commenced production in 1989, recoverable reserves were estimated at 2.7 million barrels of oil. By the end of 1991 the field had produced 6.7 million barrels of oil and was still producing at 8 000 barrels of oil per day. Santos has a 27.37% interest in Talisman. The productive life of the field has now been extended to mid-year 1992.

Santos' other Australian production interests are in the Amadeus Basin of the Northern Territory and the Surat Basin of Queensland. Santos' share of Amadeus Basin production in 1991 was 108 400 barrels of crude oil and condensate and 3.5 petajoules of gas compared with 114 000 barrels of crude oil and condensate



and 3.3 petajoules of gas in 1990. The reduced oil production is due to natural depletion of the Mereenie reservoir although the decline in production rates has been partially arrested by a series of fracture stimulations undertaken since July 1991. The result of these stimulations was to increase daily production from Mereenie by 520 barrels of oil per day to 1 850 barrels of oil per day, a rate last achieved in 1988. The company has a 21.3% interest in Mereenie. Production of gas rose as a result of increased demand by the Northern Territory Power and Water Authority. Santos' share of production from the Surat Basin was 2 800 barrels of oil and condensate and 0.4 petajoules of gas.

Santos' US subsidiary, Weeks Exploration Company, increased its total production by 16.7% in 1991 through the contribution of a full year's production from the offshore State Tract 60S field in the Gulf of Mexico, which commenced production in the third quarter of 1990. Weeks' total oil production from the United States increased by 282 000 barrels, offsetting declines in the volume of gas and condensate produced from the Gulf Coast programme.

The outlook for production in 1992 is discussed in the section titled 'Outlook' following.

#### MARKETING

Santos' marketing of liquids products is focused on building a competitive domestic and international customer base and on adding value to products where opportunities exist. Such an opportunity appeared in 1990 when it became clear that full range naphtha was selling at a significant premium to condensate in Asian markets. After making the necessary conversion to the Port Bonython liquids separation plant, the first sale of naphtha was made in February 1991. Santos earned revenue of \$75.2 million from the sale of naphtha during the year, \$10.8 million or 16.8% higher than what would have been earned if the product had been sold as condensate during 1991. Santos' share of the cost of

*Oil well and beam pumps (top left), Cooper/Eromanga Basins, Australia. Oil production from the South Australian section of the Cooper/Eromanga Basins increased in 1991.*



alterations to the Port Bonython facility to produce naphtha was \$0.6 million. The volume of naphtha sold was boosted by the processing of the lighter fractions of crude oil, which was selling at a discount to naphtha, for inclusion in naphtha sales. The company's share of crude oil production processed for sale as naphtha in 1991 amounted to 226 000 barrels.

Another initiative undertaken during the year to improve returns was the completion of plant at Moomba to produce distillate. Santos' share of the distillate manufactured by the plant is 50 000 barrels per year. Although the volume is relatively small, the prices being received are approximately 50% more than the prices which would otherwise be realised if the feedstock was sold as crude oil.

For the first time in its history, the company is marketing Australian crude oil produced outside the Cooper/Eromanga Basins. Santos has elected to take responsibility for marketing its share of production from the Skua oil field. This will assist the company's profile in the international oil market and enable further development of the company's customer base.

The deregulation of Australia's liquid hydrocarbon markets was completed in 1991 with the removal of price and supply controls on domestically marketed LPG.

During the year, contracts were concluded, and shipments commenced, for the supply of Cooper Basin LPG to a new customer, Mitsui Oil and Gas Co Ltd in Japan. The contracts, which require the Cooper Basin Producers to supply 90 000 tonnes of butane and 90 000 tonnes of propane over two years, replaced a contract with Idemitsu Kosan for the same quantities which expired in 1991.

Santos continues to vigorously pursue opportunities to market uncommitted gas reserves in which it holds interests. The most significant of these reserves are located onshore in the Queensland section of the Cooper Basin, and in the Northern Territory in the Amadeus Basin and the offshore Bonaparte Basin. An important step in the development of Santos' uncommitted gas reserves was taken in 1991 with the signing in July of contracts for the supply of 30 petajoules of gas per year over 10 years from the Queensland section of the Cooper Basin to the Pipelines Authority of South Australia. Gas sales from South-west Queensland to South Australia will commence in 1994, replacing part of the market currently supplied by the Cooper Basin Producers in South Australia.

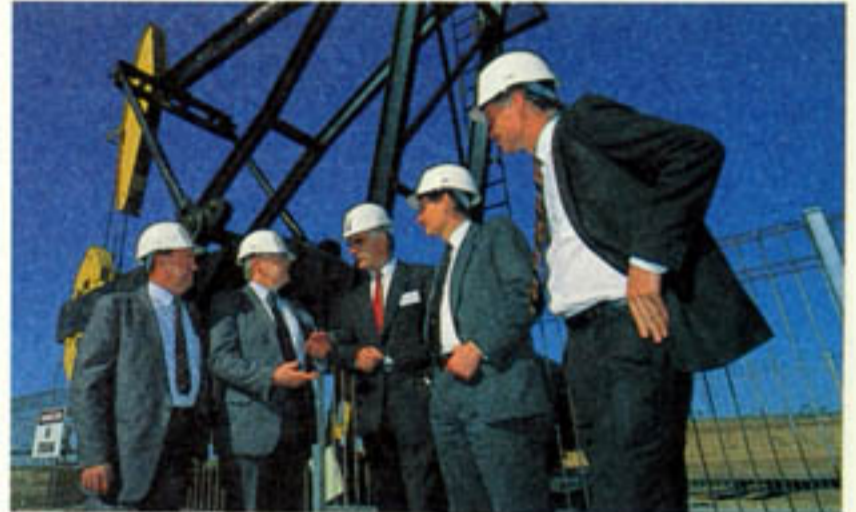
Santos' 57.2% interest in the Queensland project compares with the company's average 56.3% interest in gas produced from South Australia. Accordingly, any increased reliance on gas from the Queensland section of the Cooper Basin for satisfying South Australian gas demand merely represents substitution of Queensland gas for South Australian gas but with the benefits to Santos arising from the higher liquids content in the Queensland gas stream. Many of the Queensland gas fields are liquids rich and these will be brought into production first. The liquids will be stripped out at Moomba and delivered along the liquids pipeline to Port Bonython for separation and sale as LPG and naphtha. Consequently, Santos expects the commencement of gas sales from Queensland will enable production of more gas liquids than would have been the case had gas production been confined to the South Australian section of the Cooper Basin.

The South-west Queensland gas contract requires construction of field facilities, a centralised processing plant and associated pipeline from that plant to Moomba. Construction is proceeding requiring an estimated investment by the joint venture of \$180 million over the contract period. Once established, the new plant will provide a springboard for marketing of Queensland Cooper Basin gas to customers within that State. The 300 petajoules contracted to South Australia represent less than



30% of the region's proved and probable gas reserves and less than 10% of the area's potential reserves. The marketing of these reserves is still in its infancy and there are several opportunities being pursued for further sales of this gas.

Santos' other significant, uncommitted gas reserves are in the Mereenie and Palm Valley fields in the Amadeus Basin and the offshore Tern and Petrel fields in the Bonaparte Basin. A series of discussions were held with the Northern Territory Government and potential customers on the marketing of reserves from both areas during 1991. The main opportunities are for the sale of Amadeus Basin gas to the Nabalco alumina refinery at Gove and to supply Adelaide. This could be achieved through using Bonaparte Basin gas to replace the Amadeus Basin gas supply to Darwin, thereby freeing up Amadeus Basin gas to supply South Australia. By year end it became clear Nabalco would not be in a position to consider converting its fuel to gas for several years. Therefore, Santos is continuing discussions on the marketing of Amadeus Basin gas to South Australia and investigating market options for the Petrel and Tern fields.



Gas marketing is a long term process requiring long lead times and contracts over many years. It is therefore very important that the business climate for gas marketing be both certain and predictable. The Federal Government's National Gas Strategy is aimed at achieving such an outcome. The Strategy has three elements which are worthy of support: the effective removal of LNG export controls, a 'light-handed' approach to regulation and reform of State utilities. The one reservation Santos has relates to problems for the industry imposed by Australia's federal system. The Federal Government has argued that the various States have been able to use their powers under this system to impede the orderly development of the gas industry.

Santos is not convinced that this is, or has been, a problem in practice for the industry. Even if it has been, Santos questions the necessity to have a strategy imposed by Federal and State Ministers to deal with it. It is the company's hope the strategy will not be used as a vehicle for further regulation of the gas industry by successive Federal Governments.

The Federal Opposition's 'Fightback' package of policies released in November included proposals to remove all existing duties and excise applied to petroleum products, including fuel oil, and to apply the Goods and Services Tax to both petroleum products and gas. The net effect is to improve the price competitiveness of fuel oil against natural gas. Studies by Santos indicate that, although existing gas markets are unlikely to be threatened if the policy were implemented, marketing of gas to new markets could suffer.

*Cooper/Eromanga Basins, South-west Queensland. Contracts for supply of gas to South Australia from South-west Queensland were signed in July 1991. John McArdle, Executive General Manager, Commercial, (second from left) explained development plans for the region's gas to the Premier and Resource Ministers of South Australia and Queensland. With Mr McArdle are (from left) the Hon Ken Vaughan, Minister for Resource Industries, Queensland, the Hon John Klunder, Minister for Mines and Energy, South Australia, the Hon John Bannon, Premier of South Australia and the Hon Wayne Goss, Premier of Queensland.*



Santos' total year end reserves were 622.9 million barrels of oil equivalent (MMBOE), 3.6% lower than the previous year's total of 646.4 MMBOE. Over half of the change is accounted for by the failure of oil exploration to locate sufficient reserves to replace the year's production and by revisions to oil reserve estimates. The balance is due to revisions to gas and gas liquids reserves in the Cooper Basin. The effect of these revisions to gas and gas liquids reserves estimates was to more than offset the contribution by the year's gas exploration which discovered sufficient reserves to replace those depleted by 1991 production with a surplus of 10 MMBOE.

Over the last two years Santos' oil exploration has, generally, been unsuccessful but as industry experience has repeatedly demonstrated, valid assessment of exploration requires a longer term view in the context of the risk inherent in petroleum exploration. Santos is confident that, in the medium term, its oil exploration programme will result in significant additions to oil reserves. As the discussion following notes, the company took a number of initiatives in 1991 designed to realise this objective.

Gas and gas liquids exploration results over the medium term have been good, locating reserves of 156 million barrels of oil equivalent over the last four years compared with production of 94 million barrels of oil equivalent. Although the effect of revisions arising from field performance studies has been to reduce the impact of these additions, the success of gas and gas liquids exploration over the last four years has meant Santos' gas and gas liquids reserves have, in broad terms, been maintained.

Maps and details of Santos' licence interests are on pages 18, 19 and 20.

Oil exploration by Santos in Australia during the year was concentrated on the Cooper/Eromanga Basins and Timor Sea. After more than thirty years of drilling, the Cooper/Eromanga Basins are now mature petroleum provinces and discoveries of new oil reserves are becoming smaller and less frequent. In 1991 Santos drilled 19 oil exploration wells in the Cooper/Eromanga, of which ten were successful in locating additional reserves. Santos' share of these additions amounted to 1.6 million barrels of oil, or 21%, of its production from the region.

New discoveries were made at Echuburra, Patroclus, Genoa and Wallawany North in Queensland and Keleary in South Australia. Successful appraisals were made at Gidgealpa, Jena, Pondrinne, Malgoona and Narcoonowie.

#### SANTOS' RESERVES

PROVED AND PROBABLE RESERVES AS AT 31 DECEMBER BY REGION AND PRODUCT												
	CRUDE OIL		CONDENSATE		LPG		GAS		ETHANE		TOTAL	
	(millions of barrels)	(millions of barrels)	(millions of barrels)	(millions of barrels)	(thousands of tonnes)	(thousands of tonnes)	(billions of cubic feet)	(billions of cubic feet)	(billions of cubic feet)	(billions of cubic feet)	(millions of barrels of oil equivalent)	(millions of barrels of oil equivalent)
	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990	1991	1990
COOPER/EROMANGA	33.6	35.8	39.0	40.5	4895	5073	2165	2211	170	171	558.8	572.6
TIMOR SEA	9.7	19.5	-	-	-	-	-	-	-	-	9.7	19.5
AMADEUS	0.6	0.5	0.2	0.2	-	-	228	220	-	-	42.1	40.4
OTHER AUSTRALIAN	0.1	0.8	-	-	-	-	2	2	-	-	0.4	1.2
USA	4.3	4.5	-	-	-	-	42	45	-	-	11.9	12.7
UK	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>48.3</b>	<b>60.9</b>	<b>39.2</b>	<b>40.7</b>	<b>4895</b>	<b>5073</b>	<b>2437</b>	<b>2478</b>	<b>170</b>	<b>171</b>	<b>622.9</b>	<b>646.4</b>



Santos assumed the responsibilities of operatorship for exploration activities in the Queensland section of the Cooper/Eromanga Basins effective from 1 January 1992. Santos is now operator for all exploration, development and production activities in both the Queensland and South Australian sectors of the Cooper/Eromanga Basins.

Over the last five years, Santos has striven to control exploration costs in its Cooper/Eromanga permits. As a result of further improvements, the 1991 seismic acquisition cost per kilometre was 4.6% lower than in 1990. Cooper/Eromanga drilling costs per foot were only 0.6% higher in 1991 than the preceding year but marginally lower in real terms. In real terms, the 1991 results represent a 39.2% reduction in seismic acquisition cost per kilometre and a 23.5% reduction in drilling cost per foot since 1986.

As demonstrated by the writedown of Santos' investment in the Timor Sea, drilling in the region proved disappointing. Santos participated in nine exploration wells in the region during the year. All of the wells were plugged and abandoned, although three recovered hydrocarbons in some form. The



Jabiru 12 well was successful in confirming an extension of the field's border and both the Swan 3 well and sidetrack and Maret 1 recovered gas and condensate.

The 1991 year end crude oil reserves figure includes adjustments arising from the remapping of the Skua field and revisions to reserve estimates for the Challis field.

Gas exploration in 1991 was more successful with the discovery in South Australia of gross reserves of 210 billion cubic feet (bcf) of sales gas, of which Santos' share is 128 bcf. As a result, the Cooper Basin Producers were able to establish the ten year forward cover of reserves necessary to satisfy the South Australian gas supply contract. The success of the gas exploration, together with the signing of contracts for sales from South-west Queensland, means Santos has secured all of its South Australian gas market for ten years and thereafter subject to the maintenance of the ten year reserve cover. Thirty-three gas wells were drilled in the Cooper/Eromanga Basins by Santos during the year of which 18 were successful in locating new gas reserves, including four new field discoveries.

Santos also participated in gas exploration in the Amadeus and Surat Basins and offshore New South Wales during 1991. In the Amadeus Basin the Dingo 4 appraisal well proved disappointing and was plugged and abandoned after year end. In the Surat Basin, two unsuccessful gas wells were drilled. Santos participated in seismic acquisition in the Sydney Basin permit NSW/P10, located offshore New South Wales between Sydney and Newcastle. The permit's proximity to the company's largest gas market warrants investigation of the potential for gas discoveries. The geology of the permit is being re-evaluated in light of the seismic results.

Santos' international exploration had mixed results in 1991. The first four wells of a six well programme were spudded in the Malaysian offshore permit PM 14. While the first three wells were unsuccessful, the fourth, Rhu 1, flowed oil at cumulative rates of up to 6 700 barrels of oil per day from separate zones subsequent to year end. The discovery is the first in the Malaysian Penyu Basin and

*Gas exploration, Cooper/Eromanga Basins, South Australia. Santos' 1991 gas exploration programme achieved its target and established the reserves cover necessary to satisfy the South Australian gas contract.*



PM14 covers virtually the entire basin. Additional seismic data acquisition and further delineation drilling are planned in order to establish the commerciality of the area.

In the United States of America, Santos participated in four oil and two gas exploration wells through its wholly-owned subsidiary, Weeks Exploration Company. All but one, the # 3 Remmer's gas discovery, were plugged and abandoned.

In Papua New Guinea, Ketu 1, the second and final well to be drilled by BP Petroleum Development under a farm-in agreement for Santos' permit PPL81, encountered gas and condensate and was abandoned without testing as there is presently no market for gas in Papua New Guinea.

In the United Kingdom, two wells were spudded on the same structure in the North Sea block 23/27. Santos has a 3.75% interest in this block and both wells were successful, flowing oil and gas. The highest flow rates were recorded from the 23/27-9 well which was tested subsequent to year-end with cumulative flow rates from different zones of up to 13 144 barrels of oil per day and 10.3 million cubic feet of gas per day. Consequently the operator advised that the structure had been named the Pierce field and the evaluation of development options had commenced.

Santos' priority in exploration is to add oil reserves to assure the company's growth in the medium to long term. Accordingly, the company participated in a number of international and Australian exploratory studies during the year to identify exploration plays where the company has the potential to add significant oil reserves on a cost effective basis. As a result of these studies, Santos acquired acreage in Cambodia, the North Sea, the Timor Gap Zone of Co-operation Area A and, subsequent to year end, Colombia.

The Timor Gap Zone of Co-operation region differs from the Timor Sea region currently being explored by Santos for a number of reasons. The most significant is that, unlike the Timor Sea, the geology of the Timor Gap does not inhibit the acquisition of clear, reliable seismic information. The high level of interest shown by international oil companies in bidding for Timor Gap Zone of Co-operation acreage indicates the prospectivity attributed to the region by the industry. Santos' interests in the two Timor Gap permits, ZOCA 91-10 and ZOCA 91-11, are 25% and 15% respectively. Santos is committed to participating in nine wells in these permits over the next three years.

In the North Sea, Santos has a 15% interest in the joint venture which successfully bid for the 22/22C block. The block is approximately 10 kilometres south of the Montrose/Arbroath oil fields and 10 kilometres east of the Gannet 'B' field.

In Cambodia, Santos has a 25% interest in the joint venture which was awarded the offshore Block IV in the Gulf of Thailand. Under the terms of the award, Santos and its joint venturers in Block IV have committed to the acquisition of 1 700 kilometres of seismic over two years with an option to drill a well in the third year. Block IV covers 5 200 square kilometres in water depths ranging up to 70 metres. The basin's geological features include a substantial basin known as the Cambodian Trough which is considered prospective for oil and gas but has only been lightly explored.

In Colombia, Santos will earn a 50% interest in each of three blocks in the Llanos Basin by financing 550 kilometres of seismic and the drilling of at least two, and possibly, three wells. The blocks cover approximately 303 500 hectares and are known as the Algarrobo, Cano Guirripo and Cano Caranal Association contract areas. The former two contract areas are surrounded by a number of commercial oil fields ranging from 5 million to 20 million barrels of recoverable oil and



exploration success rates in the area have been good. The Cano Caranal Block has the potential to contain significant reserves.

Santos' 1991 year-end reserve figures do not include the discoveries which are presently registered as non-commercial such as Elevala and Ketu in Papua New Guinea, the Petrel and Tern gas fields in the Bonaparte Basin, the Oliver, Puffin, Swan and Talbot fields in the Timor Sea, the Sole gas discovery in Bass Strait and additions to the Palm Valley and Dingo gas fields in the Amadeus Basin. Santos' share of these fields is estimated at some 300 MMBOE including 20 MMBOE of crude oil and condensate.

#### OUTLOOK

The volume of petroleum products sold by Santos in 1992 is expected to be approximately 34 MMBOE, in line with that of 1991. Some variation in individual product shares is expected with the impact of anticipated lower crude oil production being offset by a slight increase in sales of gas.

Sales of crude oil in 1992 are expected to be lower than the previous year because of the impact of field depletion on production rates in the Cooper/Eromanga Basins. This decline will be largely offset by a rise in Santos' share of production from the Timor Sea as 1992 will be the first full year of production from the Skua field. Santos' share of oil production from the Timor Sea is forecast to average 9 000 barrels per day compared with 6 400 barrels in 1991.

Sales of gas are expected to increase slightly in 1992 because of increased demand in both of the major markets for Cooper/Eromanga gas. Production of gas and gas liquids is expected to be comparable to that achieved in 1991.

The production outlook beyond 1992 is strong as Santos has sufficient reserves of oil, gas and gas liquids to maintain production at the rate of at least 30 MMBOE each year into the next century. However, crude oil production will decline if reserves are not replaced. The replacement of depleted oil reserves is one of Santos' major business priorities and the company is committed to achieving this, both through successful exploration and acquisition of reserves.

The 1992 exploration programme reflects this priority but with a reduced emphasis on the Timor Sea and increased involvement in international oil exploration. A programme of three to five exploration wells is planned for the Timor Sea in 1992.

In the Cooper/Eromanga Basins, Santos plans to drill 14 oil wells. Additionally the first comprehensive three dimensional (3-D) seismic survey will be undertaken. This survey will test the suitability of 3-D seismic for the region and, if successful as expected, enhance prospect identification with consequent benefits for drilling results.

Santos will participate in up to 12 exploration wells outside Australia in 1992.

The first of the remaining two commitment wells in the Malaysian offshore permit PM 14 will be spudded in the final quarter of 1992. Additionally, Santos will continue exploration in the areas of interest the company already holds in the United States of America and the United Kingdom. Six oil exploration wells and one gas exploration well are scheduled for the USA in 1992. Two oil exploration wells are planned to be drilled in Santos' North Sea acreage during the year.

As detailed in the exploration section preceding, Santos has acquired interests in oil exploration acreage in the North Sea, Cambodia, the Timor Gap Zone of Co-operation and Colombia. The 1992



exploration programme will include seismic acquisition in all of these new permits, the drilling of the first commitment well in Santos' Timor Gap acreage and possibly one well in the Colombian acreage.

Santos will continue the process of re-weighting its exploration portfolio in 1992 to assemble a portfolio which is balanced and diversified in both maturity and geographic location. The existing portfolio is weighted heavily towards mature petroleum provinces which typically deliver economic but small discoveries. The re-weighting of Santos' acreage portfolio will give greater emphasis to exploration in frontier and emerging petroleum provinces.

The new risks introduced into Santos' exploration activity by this strategy will be taken on from a position of financial strength. Santos has a strong balance sheet and cash flow.

Further development of the company's USA and UK activities through farm-in and participation in bidding groups will be undertaken in 1992.

The foundation for further expansion of Santos' US operations was laid in 1991 with the consolidation of the company's US businesses into a single enterprise of reasonable size from which further expansion can be launched. Santos intends to monitor closely opportunities in Northern America, and also in the UK, for economical acquisition of reserves already producing.

The diversification of the company's portfolio through entry into new joint ventures, and by way of acquisitions of exploration acreage and reserves, demands Santos be able to quickly identify opportunities and participate fully in the international oil and gas exploration market. To this end, the company will develop its existing Houston and United Kingdom offices further in 1992. Houston and London are the two focuses of commercial activity in international oil exploration. The development of Santos' offices in these locations, which includes the relocation of Australian staff to the UK, will better equip the company to participate in international oil exploration. Subsequent to year end the name of Santos' UK subsidiary Peko Exploration (UK) Ltd was changed to Santos Europe Limited. The change, which was made in view of the further development of the company's UK offices and increased involvement in the North Sea, will increase Santos' profile in international oil exploration.

The 1992 gas exploration programme will include the drilling of up to 15 wells in South Australia with the objective of maintaining a ten year forward cover of reserves for that State.

The major development activity in 1992 will be establishing infrastructure required for the commencement of gas sales from South-west Queensland at the beginning of 1994. Santos' share of the capital expenditure budgeted for this project over the next two years is estimated at \$66 million. Approximately 80% of this will be incurred in 1993 when most of the on-site work, including the construction of a 180 kilometre pipeline linking the South-west Queensland gas facilities with the Moomba processing facility, will be completed.

The addition of reserves, re-weighting of exploration portfolio, reduction of debt and development of UK and US businesses discussed above are four of six elements in Santos' business strategy. The remaining elements are:

- marketing Santos' uncommitted gas reserves in Queensland and the Northern Territory. These reserves have the potential for providing significant growth for Santos in the medium to long term. During 1992, Santos will intensify its efforts to develop and secure markets for these. In particular,



Santos will endeavour to make progress in negotiations with the South Australian Government for supply of Santos' uncommitted gas from Mereenie and Palm Valley. Additionally, evaluation of all possible options for the Petrel and Tern gas fields, including an export-based LNG project, will be undertaken. Queensland gas marketing will focus on potential markets for uncommitted gas reserves in South-west Queensland, including a gas-fired power station proposed as an alternative to the Tully-Millstream hydro-electric power station proposal.

- maximisation of production from the Cooper/Eromanga Basins and minimisation of operating costs in the region. The company is vigorously evaluating improved oil recovery techniques and applying advanced technology to add recoverable reserves and production. Santos believes significant additions to recovery and production will be made as a result. The company's share of Cooper/Eromanga oil reserves currently considered unrecoverable is estimated at 200 million barrels. Development work to improve recovery from several fields is scheduled for the region in 1992, together with a three dimensional seismic survey with the objective of providing better definition of development well prospects.



*Skua Venture, the floating production and storage vessel for the Skua oil field, Timor Sea, Australia. Skua commenced producing oil in December 1991. Production from the field is forecast to bring a 41% increase to Santos' share of Timor Sea oil production in 1992.*

## CORPORATE

### PEOPLE

Santos employed 1 500 people as at 31 December 1991.

The continual training of its workforce is a pre-requisite for the development of the company's skill inventory. Santos provided a total of nearly 900 internal and external course places during the year, ranging from half-day workshops to six-week residential programmes. This commitment significantly exceeded the threshold expenditure requirements of the Australian Government's Training Guarantee Levy.

The company continued to implement measures to improve productivity further during the year. The objective underlying these initiatives is to create a working environment where employees are able to attain the highest degree of productivity while carrying out their duties in a safe and competent manner.

Santos regards its responsibility to provide a safe and healthy work environment as fundamental to human resource management. During 1991 the company undertook a number of initiatives designed to achieve further improvements in the company's safety record. Foremost amongst these was the development of a safety management plan for the four years from 1992 to 1995. The plan will enable the implementation of a co-ordinated, long term approach to maintaining high standards in occupational health and safety throughout Santos' operations.



SOUTH AUSTRALIA		TASMANIA		MALAYSIA			
	Santos Equity %		Santos Equity %		Santos Equity %		
PEL's 5 & 6		TP/15	5.21	PM14			
1 Clifton	60.00			Contributing interest	20.00		
2 Haddon	61.25			Participating interest	15.00		
3 Koonchera	53.75	<b>NORTHERN TERRITORY</b>					
4 Patchawarra Central	42.50	RL 1	65.00	<b>UNITED KINGDOM</b>			
5 Patchawarra East	34.82	AC/P2	30.75	P114 (22/27a)	3.75		
6 Merrimelia-Innamincka	80.00	AC/P3	15.00	P114 (23/27)	3.75		
7 Patchawarra South West	45.00	AC/P4	11.50	P747 (22/22c)	15.00		
8 Lake Hope	50.00	AC/P5	20.00	<b>CAMBODIA</b>			
9 Murta	59.00	AC/P6	38.00	Exploration Block No. IV	25.00		
10 Moomba	60.00	AC/P10	31.82	<b>COLOMBIA</b>			
11 Nappacoongee-Murteree	42.00	AC/P11	20.00	Algarrobo, Cano Guirripo,	50.00		
12 Toolachee	60.00	AC/P12	25.00	Cano Caranal Association			
13 Tinga Tingana	59.00	NT/P4	100.00	Contract Areas			
		NT/P28	47.49	<b>SANTOS IS ALSO PARTICIPATING IN SIX PRODUCTION LICENCES AT LEVELS OF INTEREST DIFFERENT FROM THOSE HELD BY THE COMPANY IN THE SURROUNDING EXPLORATION PERMITS. THE DETAILS ARE AS FOLLOWS:</b>			
<b>QUEENSLAND</b>		OP 175	25.54	<b>Northern Territory</b>			
ATP 259P		<b>TIMOR GAP ZONE OF CO-OPERATION</b>					
14 50/40/10	50.00	ZOCA 91-10	25.00	Santos	Exploration		
15 Naccowlah	48.00	ZOCA 91-11	15.00	Equity %	Permit		
16 Total 66	70.00	<b>PAPUA NEW GUINEA</b>					
17 Wareena	59.20	PPL 81	45.00	Area			
18 Innamincka	65.00	<b>UNITED STATES OF AMERICA</b>					
19 Aquitaine "A"	52.50	Weeks Exploration Co.	Net	Working			
20 Aquitaine "B"	55.00		Acres	Interest			
ATP 488P		Southern Louisiana					
21 Alkina	60.00	Tertiary	1012	32.16	AC/L1 (Jabiru)	10.31	AC/P4
22 Aquitaine "C"	47.80	Mississippi Smackover	4470	35.65	AC/L2 (Challis)	10.31	AC/P4
23 Galway	51.87	East Texas Cretaceous	9256	32.07	AC/L3 (Cassini)	10.31	AC/P4
24 Morney	55.25	East Texas Smackover	1552	39.55	AC/L4 (Skua)	30.59	AC/P2
25 Yamma Yamma	62.20	South Texas Wilcox	2427	43.88	OL 3 (Palm Valley)	27.75	OP175
ATP 332P	12.50	Trio/Vicksburg	365	19.00	OL 4 & 5 (Mereenie)	21.25	OP175
<b>WESTERN AUSTRALIA</b>		Miocene	3669	36.95			
WA-18-P	70.00	Paleozoic	6632	50.00			
WA-191-P	27.37	Anadarko Basin	103	10.8			
WA-1-P	22.56	Lobo Trend	4408	97.0			
EP-166	18.72	Arkoma Basin -					
WA-8-L	27.37	Oklahoma	15203	32.3			
WA-222-P	47.49	Arkoma Basin -					
<b>VICTORIA</b>		Arkansas	9659	35.0			
VIC/P22	25.00	Average		38.70			
<b>NEW SOUTH WALES</b>		Total	58756				
NSW/P10	50.00						



All of Santos' locations were able to report improved safety records during the year with the total number of lost time injuries being half that of 1990. Santos has actively promoted health and safety activities within contracting organisations in the Cooper/Eromanga Basins and this has resulted in a 49% reduction in the number of lost time injuries reported by contractors compared with 1990. A contributing factor to these improvements was the safety programmes and training conducted by Santos to address specific safety issues that account for a large share of reported injuries, such as the eye protection campaign which preceded a 43% reduction in reported eye injuries. Formal policy documents were prepared and released on a number of health and safety issues during the year including manual handling, hearing conservation and rehabilitation, which was released subsequent to year end.

Last year was the third year in which Santos has been responsible for its own Workers' Compensation arrangements. Several safety audits were conducted in Santos' locations during the year by both internal and external assessors with all audits confirming Santos' compliance with its legislative obligations. The net savings to Santos from self-insurance over the three years is estimated to be approximately \$4 million.

#### ENVIRONMENT

Santos is committed to conducting its operations in an environmentally responsible manner through adherence to standards consistent with developments in technology, industry codes of practice and the relevant statutory requirements. In practice, the standard of Santos' environmental management and practices consistently exceed legislative obligations. Through a process of monitoring and field trials of innovative new techniques, the company remains the acknowledged leader in environmental management of onshore oil and gas exploration and production activities in Australia. Monitoring activity includes scrutiny and comparison of operational areas with locations where no operations take place. An example of the field trials included to enhance further Santos' understanding of the Cooper Basin environment are the 'dummy' drilling pads employed in a variety of landscapes to provide information on revegetation potential.

Santos reviewed and updated its Environmental Codes of Practice during the year. These codes were distributed to all field-based employees and contractors and form the basis of the ongoing programme of environmental education and information provided by the company to all involved in its field operations. Environmental audits carried out during the year confirmed practices have continued to comply with legislative requirements and Santos' own standards. These audits are a long-standing feature of the company's environmental management programme, having been instituted and undertaken on a regular basis since 1983.



**MAJOR SANTOS LICENCE AREAS**

**TIMOR SEA - AUSTRALIA**



**CAMBODIA**



**CARNARVON BASIN - AUSTRALIA**



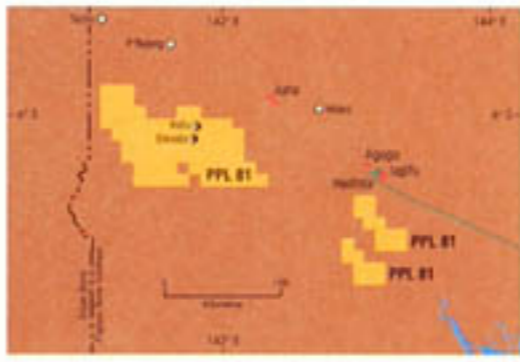
**PENYU BASIN - MALAYSIA**



**UNITED STATES OF AMERICA**



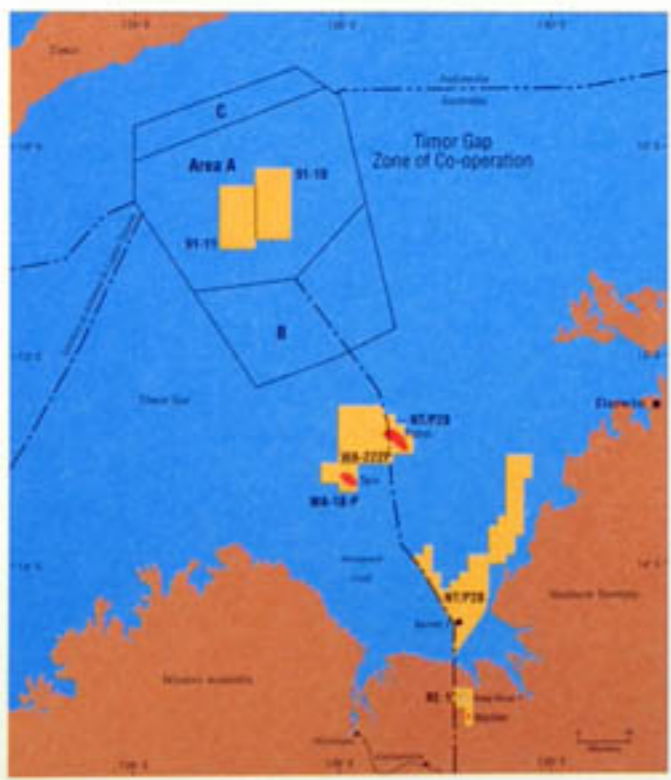
**PAPUA NEW GUINEA**



**NORTH SEA - UNITED KINGDOM**



**TIMOR GAP AND BONAPARTE BASIN - AUSTRALIA**



**COOPER / EROMANGA BASINS - AUSTRALIA**



**COLOMBIA**



**AMADEUS BASIN - AUSTRALIA**



- Oil well
  - Oil & gas show
  - Oil field
  - Oil and gas well
  - Gas well
  - Gas well with condensate
  - Gas field
  - Oil pipeline
  - Gas pipeline
  - Santos acreage
  - Condensate with gas show
- Details of Santos interests in these areas are contained in the table set out on page 18.



DIRECTORS



*S D M Wallis*



*W F Scammell*



*N R Adler*



*E A Burton*



*N R Clark*

STANLEY DAVID MARTIN WALLIS B Com, FCPA, ACIS, ACIM, FAIM, 52, was appointed a Director on 8 February 1988 and Chairman on 9 May 1989. He is also Chairman of Santos Finance Ltd. Mr Wallis is Managing Director of Amcor Ltd and his other Directorships include Australian Foundation Investment Company Ltd, the Principal Board of the AMP Society and Spicers Paper Ltd.

WILLIAM FAULDING SCAMMELL CBE, 72, was appointed a Director on 4 October 1983 and Deputy Chairman on 1 April 1984. Mr Scammell is an industrial chemist and Director of F H Faulding and Co. Ltd. Other Directorships include Penrice Ltd and the Principal Board of the AMP Society. He is also Chairman of the AMP Society (SA & NT) Board of Advice.

NORMAN ROSS ADLER B Com, MBA, 47, was appointed Managing Director on 7 November 1984. He is also Chairman of other Santos Ltd subsidiary companies including Latec Investments Ltd Group. His other Directorships are with the Australian Institute of Petroleum Ltd, QCT Resources Ltd Group and Commonwealth Bank of Australia. In addition, he is a member of the Corporations and Securities Panel and the Business Council of Australia.

EDMUND ARTHUR BURTON LLB, 71, was appointed a Director on 3 August 1982. Mr Burton is a lawyer and holds Directorships in National Deposit Insurance Corporation Ltd and Arab Australia Ltd.

NEIL REX CLARK AO, B Com, FAIB, FCPA, 62, was appointed a Director on 2 October 1990 and is a member of the Audit Committee of the Board. Mr Clark was formerly Managing Director of the National Australia Bank Ltd. He is Chairman of the State Bank of South Australia, Foster's Brewing Group Ltd and the Sun Alliance Insurance Group Australia. His other Directorships include Boral Ltd, Mayne Nickless Ltd and the Graduate School of Management Ltd. Mr Clark is also a member of the IBM Asia Pacific Ltd Advisory Board.

STEPHEN GERLACH LLB, 46, was appointed a Director on 5 September 1989 and is a member of the Audit Committee of the Board. Mr Gerlach is a solicitor and a senior partner in the Adelaide legal firm, Finlaysons. He holds Directorships in Independent Holdings Ltd, G & R Wills & Co. Ltd and is Deputy Chairman of the AMP Society (SA & NT) Board of Advice.

JAMES JOSEPH KENNEDY CBE, FCA, 57, was appointed a Director on 2 February 1988. Mr Kennedy is a Chartered Accountant. His other Directorships include Australian Stock Exchange Ltd, Pacific Dunlop Ltd and the Commonwealth Bank of Australia and he is Chairman of the Queensland Investment Corporation. He is also Chairman of the Royal Children's Hospital Foundation (Qld), Non-Executive Chairman on the Queensland Board of Advice of Sedgwick James Ltd and a member of the K Mart (USA) Australian Advisory Board.

RICHARD CHAPMAN HOPE MASON OBE, 67, was appointed a Director on 2 September 1986. Mr Mason is Chairman of MGICA Ltd, Australian Mortgage Securities Ltd and Elgas Ltd and Deputy Chairman of The Australian Gas Light Company (Group). His other Directorships include Renison Goldfields Consolidated Ltd. He was formerly a Director and Chief General Manager of Ampol Ltd. Mr Mason is the appointee of Sangas Development Ltd, holder of the B Class shares.

KEITH WOODWARD PETERSON FCPA, FCIS, 70, was appointed a Director on 4 October 1983 and is Chairman of the Audit Committee of the Board. Mr Peterson was Managing Director of Queensland Alumina Ltd between 1974 and March 1987. He is a Senator of the University of Queensland and a Director of Uniquist Ltd Group.

ROBERT STRAUSS MBE, CPA, FCA, FCPA, FCIS, 66, was appointed a Director on 4 October 1983. Mr Strauss is a Chartered Accountant and Executive Chairman of Bridge Oil Ltd Group. He is Chairman of John Kaldor Fabricmaker Ltd Group, Deputy Chairman of Aredor-Guinea SA and a Director of Dominion Mining Ltd and Data Beta Ltd (UK). He is also Chairman of the Council of the Australian Simon University.

JOHN ALLAN UHRIG AO, BSC, FAIM, 63, was appointed a Director on 3 December 1991. Mr Uhrig was until 1985 the Managing Director of Simpson Holdings Ltd and is Chairman of CRA Ltd, Amdel Ltd, The Australian Minerals and Energy Environment Foundation and the Investment Board, SBC Dominguez Barry Development Equity Partners. Other Directorships include Westpac Banking Corporation and Television & Telecasters Ltd.



*S Gerlach*



*J J Kennedy*



*R C H Mason*



*K W Peterson*



*Robert Strauss*



*J A Uhrig*



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**TEN YEAR SUMMARY**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>PROFIT AND LOSS* (\$MILLION)</b>										
Sales revenue	65.2	147.0	287.5	506.5	400.4	530.7	436.1	560.6	709.5	655.9
<i>Operating Profit Before Abnormal Items</i>										
Operating profit	40.3	74.3	95.2	232.7	164.4	199.3	122.9	146.6	254.8	223.5
Income tax on operating profit	13.8	25.6	24.1	95.9	82.3	102.9	53.8	61.7	112.0	106.8
Operating profit after tax	26.5	48.7	71.1	136.8	82.1	96.4	69.1	84.9	142.8	116.7
<i>Abnormal Items</i>										
Abnormal items	-	-	-	(46.2)	(27.2)	18.1	(77.3)	55.7	18.5	(284.9)
Income tax benefit/(expense)										
on abnormal items	-	-	-	-	27.3	7.6	16.1	(21.8)	-	60.0
Abnormal items after tax	-	-	-	(46.2)	0.1	25.7	(61.2)	33.9	18.5	(224.9)
<i>Operating profit/(loss) after tax and abnormal items</i>	26.5	48.7	71.1	90.6	82.2	122.1	7.9	118.8	161.3	(108.2)
Outside equity interest in operating profit/(loss)	-	-	-	-	-	5.0	5.7	1.7	5.3	2.7
<i>Profit/(loss) attributable to shareholders</i>	26.5	48.7	71.1	90.6	82.2	117.1	2.2	117.1	156.0	(110.9)
<b>BALANCE SHEET (\$MILLION)</b>										
Shareholders' equity	95.3	127.8	335.9	466.0	597.3	860.3	1,106.8	1,123.8	1,380.2	1,215.1
Total assets	467.5	805.2	1,329.6	1,660.6	1,865.3	2,366.0	2,849.0	2,931.6	2,962.5	2,779.3
Net debt	185.5	403.6	648.7	717.1	593.7	864.7	919.3	1,116.1	772.4	755.0
<b>EXPLORATION</b>										
Wells drilled	39	46	92	82	48	97	120	133	119	80
Expenditure (\$million)	26.3	36.2	75.5	71.7	43.2	55.6	90.9	109.2	109.2	74.0
Reserves (MMBOE)	342	340	388	422	412	552	623	671	646	623
Production (MMBOE)	13.7	15.6	19.4	24.9	25.5	30.6	30.6	35.6	36.0	34.2
<b>CAPITAL EXPENDITURE (\$MILLION)</b>										
Field developments	30.0	9.6	26.1	29.3	14.9	13.6	20.1	54.9	77.2	51.9
Buildings, plant and equipment	187.1	214.7	114.3	61.9	21.9	63.4	40.4	59.7	60.9	69.1
<b>SHARE INFORMATION</b>										
Share issues	-	-	1 for 4 rights	1 for 4 rights	-	1 for 10 rights/ Exploration purchase/ Executive share plan	1 for 10 bonus/ 1 for 4 rights/ Private placement	Executive share plan	1 for 10 rights/ Dividend reinvestment plan/ Executive share plan	Dividend reinvestment plan/ Executive share plan
Number of issued shares ('000)	153,348	153,348	191,994	240,000	240,000	273,786	403,302	404,322	450,418	472,952
Dividends per share	8.0¢	12.0¢	15.0¢	20.0¢	16.0¢	19.0¢	19.0¢	19.0¢	19.0¢	19.0¢
Dividends (\$million)	12.3	18.4	24.8	38.4	38.4	55.7	68.9	76.0	85.5	88.5
<b>RATIOS AND STATISTICS</b>										
Earnings per share†										
- before abnormal items	12.4¢	22.9¢	30.9¢	55.3¢	30.1¢	30.6¢	19.4¢	20.2¢	32.6¢	24.8¢
- after abnormal items	12.4¢	22.9¢	30.9¢	36.6¢	30.1¢	39.2¢	1.2¢	28.5¢	37.0¢	(24.2)¢
Return on total income	38.6%	30.9%	22.7%	23.7%	17.0%	16.4%	14.8%	14.1%	17.6%	16.5%
Return on shareholders' funds	27.8%	38.1%	21.7%	29.4%	13.7%	12.0%	6.4%	8.0%	10.6%	9.7%
Net debt/equity	194.6%	315.8%	193.1%	153.9%	99.4%	100.5%	83.1%	99.3%	55.9%	62.1%
Interest cover (times)	34.6	4.3	2.2	3.0	2.8	3.3	2.4	1.9	2.9	3.6
<b>GENERAL</b>										
Number of shareholders	17,255	17,986	23,052	24,665	26,653	25,267	27,113	26,499	26,251	29,706
Market capitalisation (\$million)	783.1	1,218.8	1,069.6	1,271.5	984.7	1,094.4	1,335.1	1,639.3	1,779.8	1,399.2

† Based on weighted average number of shares on issue adjusted for bonus issues and the bonus component of rights and other share issues, and calculated based on operating profit after tax.

\* Comparative figures have, where applicable, been adjusted to place them on a comparable basis with current year figures.



This report by the Directors of Santos Ltd ("the Company"), prepared in accordance with the Corporations Law, is for the year ended 31 December 1991 and is accompanied by the Financial Statements for the period and by other information, which are to be read as part of the report:

**1 DIRECTORS AND DIRECTORS' SHAREHOLDINGS**

The names of Directors in office at the date of this report and details of shares held in the Company or in any related body corporate as recorded in the Register of Directors' Shareholdings are:

Surname	Other Names	Shareholdings in Santos Ltd
Wallis	Stanley David Martin (Chairman)	3,025
Scammell	William Faulding (Deputy Chairman)	5,198
Adler	Norman Ross (Managing Director)	810,000*
Burton	Edmund Arthur	6,155
Clark	Neil Rex	-
Gerlach	Stephen	3,071
Kennedy	James Joseph	3,071
Mason	Richard Chapman Hope	-
Peterson	Keith Woodward	1,689
Strauss	Robert	6,458
Uhrig	John Allan	-

All shareholdings shown above are held beneficially.

Except where otherwise indicated, all shareholdings are of fully paid ordinary shares of 25 cents each.

\*Includes 610,000 partly paid Executive Share Plan Shares.

No Director holds shares in any related body corporate.

Details of the qualifications, experience, other directorships and special responsibilities of each Director are set out on page 22 of this Annual Report.

**2 PRINCIPAL ACTIVITIES**

The principal activities of the economic entity constituted by the Company and the entities it controlled from time to time during the year ("economic entity") were gas and petroleum exploration, and the production, treatment and marketing of natural gas, crude oil, condensate, naphtha and liquid petroleum gas. No significant change in the nature of these activities has occurred during the year.

**3 CONSOLIDATED RESULT**

The net amount of Consolidated Loss for the year ended 31 December 1991 after providing for income tax and abnormal items was \$110.9 million.

**4 DIVIDENDS**

In respect of the year ended 31 December 1991:-

- (a) the Directors on 30 March 1992 declared a fully franked final dividend of ten cents per fully paid share to be paid on 19 June 1992 to members registered in the books of the Company as at close of business on 29 May 1992. This final dividend amounts to approximately \$47 million; and
- (b) a fully franked interim dividend of \$41.5 million (9 cents per share) was paid to members in November 1991.

A fully franked final dividend of \$45.3 million on the 1990 results (10 cents per share) was paid in July 1991. Indication of this dividend payment was disclosed in the 1990 Annual Report. Also paid in January 1991 was an interim dividend on the 1990 results of 9 cents per share. This interim dividend amounted to \$40.2 million, was fully franked and was disclosed in the 1990 Annual Report.

**5 REVIEW OF OPERATIONS**

A review of the operations and results of those operations of the economic entity during the financial year is contained in the Report to Shareholders on pages 4 to 21 of this Annual Report.

**6 STATE OF AFFAIRS**

No significant change in the state of affairs of the economic entity occurred during the financial year that is not otherwise disclosed in this report, the Report to Shareholders on pages 4 to 21 of this Annual Report or in the Consolidated Accounts on pages 26 to 44 of this Annual Report.

**7 SUBSEQUENT EVENTS**

Other than as stated elsewhere in this Annual Report and by reason of acceptance of takeover offers for shares in Vamgas Ltd, being sufficient to enable the Company to acquire all shares in that company so that it become a wholly owned subsidiary there has not arisen in the interval between the end of the financial year and the date of this report any matter or circumstance that has significantly affected or may significantly affect the operations of the economic entity, the results of those operations, or the state of affairs of the economic entity in subsequent financial years.

**8 FUTURE DEVELOPMENTS**

Certain likely developments in the operations of the economic entity subsequent to the financial year ended 31 December 1991 are referred to on pages 4 to 21 in the Report to Shareholders. In the opinion of the Directors it would prejudice the interests of the Company if further information which may be required by Section 305(11) of the Corporations Law be included in the Report was so included and that information has been excluded in accordance with Section 306 of the Corporations Law.

**9 DIRECTORS' INTERESTS**

- (a) Directors have declared interests in contracts or proposed contracts with the Company by virtue of their association with the companies specified in the statement setting out particulars of the qualifications, experience and special responsibilities of each Director on page 22. Some of these companies have transactions with the Company in the ordinary course of business.
- (b) There are no particulars of Directors' interests declared in contracts which require to be reported under Section 307(c) of the Corporations Law which are not otherwise disclosed in this report.

**10 DIRECTORS' BENEFITS**

Since the end of the previous financial year no Director of the Company has received or become entitled to receive a benefit (other than a benefit included in the aggregate amount of emoluments received or due and receivable by Directors shown in the Consolidated Accounts or the fixed salary of a full time employee of the Company or an entity that the Company controlled or a body corporate that was related to the Company at a relevant time) by reason of a contract made by the Company or a body corporate that was related to the Company with the Director or with a firm of which he is a member or with an entity in which he has a substantial financial interest except that:-

- (1) an agreement was entered into on 17 December, 1991 with Mr J A Uhrig, a non-executive director appointed during the year, in accordance with members' approval at the 1989 Annual General Meeting, providing for a payment of a sum on retirement from office as a Director;
- (2) Mr N R Adler was a participant in the issue on 18 December, 1991 of Plan Shares under the Santos Executive Share Plan; and
- (3) Mr S Gerlach is a member of the legal firm of Finlaysons which was paid fees for legal services during the period 1 January 1991 to the date of this report rendered to the economic entity in the ordinary course of business.

**11 SHARE OPTIONS**

There are no unissued shares under option.

**12 ROUNDING**

The Company is a company of the kind referred to in Class Order dated 15th April 1991 made by the Australian Securities Commission pursuant to sub-section 313(6) of the Corporations Law and accordingly amounts set out in the accounts and reports contained in this Annual Report have been rounded off to the nearest tenth of a million dollars or, where the amount is \$50,000 or less, zero.

For and on behalf of the Board of Santos Ltd and pursuant to a resolution of the Directors.



S D M Wallis  
DIRECTOR  
30 March 1992



N R Adler  
DIRECTOR



PROFIT AND LOSS ACCOUNTS

FOR THE YEAR ENDED 31 DECEMBER 1991

	Note	CONSOLIDATED		SANTOS LTD	
		1991 \$million	1990 \$million	1991 \$million	1990 \$million
Operating revenue	(2)	705.9	812.9	494.3	553.0
Operating profit before abnormal items	(3)	223.5	254.8	185.1	211.3
Abnormal items	(3)	(284.9)	18.5	(220.2)	(2.1)
Operating profit/(loss) before income tax		(61.4)	273.3	(35.1)	209.2
Income tax attributable to:	(4)				
– operating profit before abnormal items		(106.8)	(112.0)	(52.3)	(55.0)
– abnormal items		60.0	–	15.2	–
		(46.8)	(112.0)	(37.1)	(55.0)
Operating profit/(loss) after income tax	(18)	(108.2)	161.3	(72.2)	154.2
Outside equity interests in operating profit/(loss) after income tax		(2.7)	(5.3)	–	–
Operating profit/(loss) after income tax attributable to shareholders of Santos Ltd		(110.9)	156.0	(72.2)	154.2
Retained profits at the beginning of the year		266.3	195.8	211.5	142.8
Total available for appropriation		155.4	351.8	139.3	297.0
Dividends provided for or paid	(5)	(88.5)	(85.5)	(88.5)	(85.5)
Aggregate of amounts transferred from reserves	(17)	(0.2)	–	–	–
Retained profits at the end of the year		66.7	266.3	50.8	211.5

The Profit and Loss Accounts are to be read in conjunction with the notes to and forming part of the financial statements.



## BALANCE SHEETS

AS AT 31 DECEMBER 1991

	Note	CONSOLIDATED		SANTOS LTD	
		1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>CURRENT ASSETS</b>					
Cash	6	75.7	27.4	0.4	4.8
Receivables	7	122.2	122.3	79.9	64.4
Investments	8	118.4	67.7	6.4	-
Inventories	9	39.8	34.2	22.6	22.3
Other	10	-	-	59.2	38.4
<b>TOTAL CURRENT ASSETS</b>		<b>356.1</b>	<b>251.6</b>	<b>168.5</b>	<b>129.9</b>
<b>NON-CURRENT ASSETS</b>					
Receivables	7	27.2	28.1	20.4	21.0
Investments	8	220.5	230.6	1120.1	1269.8
Property, plant and equipment	11	1989.0	2251.9	1004.8	1048.6
Intangibles	12	114.9	121.6	-	-
Other	10	71.6	78.7	-	-
<b>TOTAL NON-CURRENT ASSETS</b>		<b>2423.2</b>	<b>2710.9</b>	<b>2145.3</b>	<b>2339.4</b>
<b>TOTAL ASSETS</b>		<b>2779.3</b>	<b>2962.5</b>	<b>2313.8</b>	<b>2469.3</b>
<b>CURRENT LIABILITIES</b>					
Creditors and borrowings	13	154.2	96.0	61.6	36.6
Provisions	14	147.3	191.3	123.0	139.3
Other	15	-	-	715.5	775.5
<b>TOTAL CURRENT LIABILITIES</b>		<b>301.5</b>	<b>287.3</b>	<b>900.1</b>	<b>951.4</b>
<b>NON-CURRENT LIABILITIES</b>					
Creditors and borrowings	13	881.7	875.8	1.7	2.7
Provisions	14	368.7	409.5	256.5	275.0
Other	15	12.3	9.7	9.8	7.7
<b>TOTAL NON-CURRENT LIABILITIES</b>		<b>1262.7</b>	<b>1295.0</b>	<b>268.0</b>	<b>285.4</b>
<b>TOTAL LIABILITIES</b>		<b>1564.2</b>	<b>1582.3</b>	<b>1168.1</b>	<b>1236.8</b>
<b>NET ASSETS</b>		<b>1215.1</b>	<b>1380.2</b>	<b>1145.7</b>	<b>1232.5</b>
<b>SHAREHOLDERS' EQUITY</b>					
Share capital	16	117.4	111.8	117.4	111.8
Reserves	17	988.1	917.6	977.5	909.2
Retained profits		66.7	266.3	50.8	211.5
Shareholders' equity attributable to shareholders of Santos Ltd		1172.2	1295.7	1145.7	1232.5
Outside equity interests in controlled entities		42.9	84.5	-	-
<b>TOTAL SHAREHOLDERS' EQUITY</b>		<b>1215.1</b>	<b>1380.2</b>	<b>1145.7</b>	<b>1232.5</b>

The Balance Sheets are to be read in conjunction with the notes to and forming part of the financial statements.



**CONSOLIDATED STATEMENT OF SOURCES AND APPLICATIONS OF FUNDS**

FOR THE YEAR ENDED 31 DECEMBER 1991

	Note	1991 \$million	1990 \$million
<b>SOURCES OF FUNDS</b>			
Funds from operations:			
Inflows of funds from operations			
Sales revenue		655.9	709.5
Proceeds from sale of non-current assets		1.3	53.0
Other revenue		48.7	50.4
		705.9	812.9
Less outflows of funds from operations		(274.6)	(301.7)
Funds from operations	(i)	431.3	511.2
Increase in borrowings		239.4	498.8
Decrease in non-current receivables		0.9	-
Decrease in non-current investments		2.6	-
Proceeds from share issues		73.9	183.5
Decrease in working capital	(ii)	-	26.2
Total funds which became available during the year		748.1	1219.7
<b>APPLICATIONS OF FUNDS</b>			
Expenditure on:			
Land and buildings, plant and equipment		69.1	60.9
Exploration		74.0	109.2
Development		51.9	77.2
Repayment of borrowings		177.7	880.3
Dividends paid to – shareholders of Santos Ltd		127.0	48.1
– outside equity shareholders of controlled entities		1.5	3.2
Income tax paid		91.8	22.7
Increase in non-current investments		-	13.9
Increase in non-current receivables		-	2.7
Outside equity interests in controlled entities acquired		41.1	1.5
Increase in working capital	(ii)	114.0	-
Total application of funds during the year		748.1	1219.7



	1991 \$million	1990 \$million
<b>(i) FUNDS FROM OPERATIONS</b>		
Reconciliation of funds from operations with operating profit/(loss) before income tax is as follows:		
Funds from operations	431.3	511.2
Abnormal items	(284.9)	18.5
	146.4	529.7
Less: Depreciation	88.1	83.8
Depletion	93.4	90.0
Amortisation of goodwill	5.0	4.5
Increase in provisions	8.4	7.5
Exploration abandonments	-	15.5
Book value of non-current assets sold	0.8	40.8
Unrealised foreign currency exchange losses	12.1	14.3
Operating profit/(loss) before income tax	(61.4)	273.3
<b>(ii) INCREASE/ (DECREASE) IN WORKING CAPITAL</b>		
Increase/(decrease) in current assets:		
Cash	48.3	(115.1)
Receivables	(0.1)	15.2
Investments	45.1	67.7
Inventories	5.6	2.6
	98.9	(29.6)
Decrease in current liabilities:		
Creditors and borrowings	15.1	3.4
Net increase/(decrease) in working capital	114.0	(26.2)
<b>(iii) DISPOSALS OF CONTROLLED ENTITIES</b>		
Amounts included in this summary have been affected by disposals of controlled entities as follows:		
Current Assets		
Cash	-	(0.2)
Receivables	-	(0.6)
Non-Current Assets		
Land and buildings, plant and equipment	-	(4.5)
Exploration, evaluation and development expenditure	-	(25.3)
Current Liabilities		
Creditors	-	0.6
Net tangible assets disposed of	-	(30.0)
Net proceeds received	-	41.9
Profit on disposal	-	11.9



## 1 STATEMENT OF ACCOUNTING POLICIES

The significant accounting policies which have been adopted in the preparation of these financial statements are:

(a) *Basis of preparation*

The financial statements have been drawn up in accordance with the accounting concepts, standards and disclosure requirements of the Australian accounting bodies, applicable Accounting Standards, the provisions of Schedule 5 to the Corporations Regulations, and the requirements of law. They have been prepared on the basis of historical cost principles and do not take into account changes in the purchasing power of money or, except where specifically stated, current valuations of non-current assets. The accounting policies have been consistently applied.

(b) *Principles of consolidation*

The consolidated accounts comprise the accounts of Santos Ltd, the chief entity, and its controlled entities. A listing of these controlled entities is contained in note 18.

The effects of all transactions between entities incorporated in the consolidated accounts are eliminated in full.

Investments in entities, other than controlled entities, are recorded either at cost or, where the Directors believe there has been a permanent diminution in value, at net realisable value. Dividend income is included in operating revenue when received.

Interests in unincorporated joint ventures are recognised by including in the financial statements under the appropriate headings the economic entity's proportion of the joint venture costs, assets and liabilities. The major interests in unincorporated joint ventures are listed in note 19.

(c) *Goodwill*

On the acquisition of a controlled entity, the identifiable net assets acquired are measured at their fair values. To the extent that there is excess purchase consideration representing goodwill, the goodwill is systematically written off to operating profit over a period not exceeding twenty years.

(d) *Foreign exchange*

Transactions in foreign currencies are translated at the rates of exchange applicable at the date of each transaction. Monetary assets and liabilities held in foreign currencies are translated at the rates of exchange ruling at balance date. To the extent that such balances are hedged the effect of the hedging is taken into account. Gains or losses arising from such translations are taken to the Profit and Loss Accounts as operating profits or losses except where they relate to the assets and liabilities of overseas controlled entities.

Overseas controlled entity accounts are converted into Australian currency as follows:

- (i) For self-sustaining operations, assets and liabilities are translated at the exchange rate existing at balance date and the revenue and expense items at the exchange rates applying at the date they were recognised in the controlled entities' Profit and Loss Accounts. Translation differences arising are included in the foreign currency translation reserve. In the consolidated accounts, gains and losses on certain long-term foreign currency loans are transferred to the foreign currency translation reserve. This transfer recognises that those foreign currency borrowings are matched by the net investment in overseas assets.
- (ii) For integrated operations, monetary assets and liabilities are translated at the exchange rate existing at balance date, non-monetary assets and liabilities at the historical exchange rate and the revenue and expense items at the exchange rates applying at the date they were recognised in the controlled entities' Profit and Loss Accounts. Any profit or loss on the translation of monetary assets and liabilities is brought to account in determining operating profit for the year.

(e) *Property, plant and equipment*

Property, plant and equipment includes buildings, plant and equipment and exploration, evaluation and development expenditure. Profits or losses resulting from the disposal of property, plant and equipment in the normal course of business are brought to account as a component of operating profit.

All exploration, evaluation and development expenditures in respect of each area of interest are accumulated and carried forward if either:

- (i) such expenditure is expected to be recouped through successful development and commercial exploitation of the area of interest; or
- (ii) the exploration activities in the area of interest have not yet reached a stage which permits reasonable assessment of the existence of economically recoverable reserves.

When an area of interest is abandoned or if Directors consider the expenditure to be of reduced or no further value, accumulated exploration expenditure is written down or off in the period in which such a decision is made.

(f) *Leases*

Finance leases, which effectively transfer to the lessee substantially all of the risks and benefits incident to ownership of the leased item, are capitalised at the present value of the minimum lease payments, disclosed as capitalised leases and amortised over the period the lessee is expected to benefit from the use of the leased assets. A corresponding liability is also established and each lease payment is allocated between the principal component and the interest expense.

Operating lease payments, where the lessors effectively retain substantially all the risks and benefits of ownership of the leased items, are included in the determination of the operating profit in equal instalments over the lease term.



(g) *Capitalisation of interest and foreign currency exchange gains and losses*

Preproduction interest, finance charges and foreign currency exchange gains and losses relating to major plant and equipment projects under development and construction up to the date of commencement of commercial operations are capitalised and amortised over the expected useful economic lives of the facilities. Interest paid in respect of completed projects is expensed.

(h) *Amortisation*

Depletion charges are calculated using a unit of production based on heat value method which will write off over the life of the reserves all existing unamortised exploration and development expenditure together with future costs necessary to develop the hydrocarbon reserves in the respective areas of interest.

Depletion is not charged on costs carried forward in respect of areas of interest in the development phase until production commences.

Depreciation is calculated to write off the value of property, plant and equipment over their estimated economic life. The rates are reviewed and reassessed periodically in light of technical and economic developments.

(i) *Provision for restoration*

Provisions are made in the financial statements for the restoration of areas of interest where gas and petroleum production is undertaken.

(j) *Participation factors – Cooper Basin, South Australia*

There are provisions in the South Australian Unit and Downstream Cooper Basin Joint Venture Agreements for a biennial review of participation factors to be made and revenues and expenses adjusted. Revenues and expenditures have been brought to account based on the participation factors estimated by Santos Ltd to be effective on and from 1 January 1987. These factors were the subject of a Supreme Court decision early in 1991, the status of which is discussed in note 26.

In addition, an accrual has been made in the financial statements for the estimated favourable profit impact of the change in participation factors anticipated to arise from the 1 January 1989 Review and Adjustment.

Until the 1 January 1987 and 1 January 1989 Reviews and Adjustments are finalised, Directors have decided not to accrue for the expected favourable impact of the 1 January 1991 Review and Adjustment.

(k) *Inventories*

Inventories are valued at the lower of cost or net realisable value after provision is made for obsolescence. Cost is determined as follows:

- (i) Drilling and maintenance stocks, which include plant spares, maintenance and drilling tools used for ongoing operations, are valued at average cost.
- (ii) Petroleum products, which comprise extracted crude oil, LPG and condensate stored in tanks and pipeline systems, are valued using the absorption cost method.

(l) *Employee benefits*

The legal liability to employees for annual and long service leave and workers' compensation is provided for in the financial statements. No provision is made for sick leave.

(m) *Income tax*

Tax effect accounting is applied whereby the income tax charged in the Profit and Loss Accounts is matched with the accounting profit after allowing for permanent differences. Income tax on timing differences, which arise from items being brought to account in different periods for income tax and accounting purposes, is carried forward in the Balance Sheets as a future income tax benefit or deferred income tax liability. Future income tax benefits in respect of losses incurred are brought to account where realisation of the benefits of such losses is considered to be virtually certain.

(n) *Deferred income*

A provision is made for obligations under sales contracts to deliver natural gas in future periods for which payment has already been received. The full sales value of undelivered gas is provided over a period estimated to match expected deliveries under these obligations.

(o) *Comparatives*

Where applicable, comparatives have been adjusted to place them on a comparable basis with current year figures.



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>2 OPERATING REVENUE</b>				
Sales revenue	655.9	709.5	412.0	427.2
Other revenue				
Overriding royalty	14.2	12.3	17.8	14.9
Dividends received from related parties				
– wholly-owned controlled entities	–	–	37.5	59.6
– partly-owned controlled entities	–	–	6.6	13.6
Dividends received from other than related parties	11.2	13.8	11.2	13.8
Interest received and receivable from related parties				
– wholly-owned controlled entities	–	–	–	1.8
Interest received and receivable from other than related parties	13.6	17.3	0.5	3.2
Proceeds from sale of non-current assets				
– property, plant and equipment	1.1	3.0	0.8	1.2
– investments	0.2	50.0	0.2	8.2
Other income	9.7	7.0	7.7	9.5
	<b>705.9</b>	<b>812.9</b>	<b>494.3</b>	<b>553.0</b>
<b>3 OPERATING PROFIT</b>				
Operating profit before income tax is arrived at after crediting the following items:				
Profit on sale of non-current assets	0.5	12.2	0.5	0.4
Reduction in provision for obsolete stock	–	0.9	–	0.5
Operating profit before income tax is arrived at after charging the following items:				
Interest paid and payable to related parties				
– wholly-owned controlled entities	–	–	90.8	120.0
Interest paid or payable to other than related parties				
– on loans	84.8	132.1	4.6	1.5
– on finance leases	1.0	1.5	0.4	0.7
Depreciation, depletion and amortisation of property, plant and equipment:				
– depreciation	86.6	81.8	55.7	52.3
– depletion	93.4	90.0	30.2	33.0
– amortisation of capitalised leases	1.5	2.0	1.4	1.7
Amortisation of goodwill	5.0	4.5	–	–
Exploration abandonments	–	15.5	–	7.6
Government royalties and resource rent tax	55.8	49.3	28.0	22.8
Increase in provisions:				
– future restoration costs	4.3	2.8	2.9	1.3
– employee benefits	1.5	2.8	1.7	2.8
– deferred income	2.6	2.8	2.1	2.2
Operating lease rentals	4.2	4.3	2.6	2.5
Net foreign currency exchange losses/(gains) (refer below)	11.4	1.3	(0.2)	(0.9)
The amount of net foreign currency exchange losses of \$11.4 million (1990–\$1.3 million) for the year includes an unrealised loss of \$12.1 million (1990–\$14.3 million) arising on the translation of liabilities held in foreign currencies at year end and a realised gain of \$0.7 million (1990–\$13.0 million).				
<i>Abnormal items</i>				
Included in abnormal items are the following:				
Write-down of carrying value of oil and gas investments (refer notes 8, 11 and 18)	(284.9)	–	(220.2)	–
Future income tax benefit of a controlled entity not previously brought to account (no income tax applicable)	–	19.6	–	–
Future income tax benefit not previously recognised brought to account due to change in legislation (no income tax applicable)	–	7.8	–	5.3
Restatement of deferred income tax liability for timing differences not previously recognised (no income tax applicable)	–	(8.9)	–	(7.4)
Abnormal items before income tax	(284.9)	18.5	(220.2)	(2.1)
Income tax effect	60.0	–	15.2	–
Net abnormal items for the year	(224.9)	18.5	(205.0)	(2.1)



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>TAXATION</b>				
<i>Income tax on operating profit/(loss)</i>				
The prima facie income tax on operating profit before abnormal items differs from income tax expense and is calculated as follows:				
Prima facie income tax expense at 39%	87.2	99.4	72.2	82.4
Tax effect of permanent differences which increase/ (decrease) income tax expense:				
Amortisation of non-deductible property, plant and equipment	14.5	14.3	4.6	4.6
Amortisation of goodwill	2.0	1.8	-	-
Rebate on dividend income	(2.7)	(4.3)	(19.9)	(32.9)
Non-assessable receipts	-	(6.3)	-	-
Non-deductible items	2.8	3.0	0.6	0.8
Net effect of permanent differences	16.6	8.5	(14.7)	(27.5)
Income tax expense on current year's operating profit before abnormal items	103.8	107.9	57.5	54.9
Income tax under/ (over) provided in prior years	3.0	4.1	(5.2)	0.1
Income tax expense on operating profit before abnormal items	106.8	112.0	52.3	55.0
Income tax effect on abnormal items	(60.0)	-	(15.2)	-
Income tax expense on operating profit/ (loss) after abnormal items	46.8	112.0	37.1	55.0
<i>Provision for current income tax</i>				
Balance at beginning of the year	92.7	60.7	40.8	12.4
Transfer from income tax expense	86.0	49.5	63.6	8.1
Prior year under/ (over) provision	(1.2)	5.2	(5.1)	(0.1)
(Payment)/ refund of income tax	(91.8)	(22.7)	(40.1)	26.8
Losses of controlled entities refunded/ (utilised)	-	-	2.1	(6.4)
Balance at end of the year	85.7	92.7	61.3	40.8
<i>Provision for deferred income tax</i>				
Balance at beginning of the year	384.8	319.2	259.1	210.0
Transfer from/ (to) income tax expense	(46.1)	59.1	(21.3)	46.8
Prior year under/ (over) provision	1.0	5.4	(0.1)	0.2
Future income tax benefit not previously recognised brought to account due to change in legislation	-	(7.8)	-	(5.3)
Recognition of deferred income tax liability for timing differences not previously brought to account	-	8.9	-	7.4
Balance at end of the year	339.7	384.8	237.7	259.1
The balance in provision for deferred income tax is reduced by the following amounts arising from unrecouped tax losses in some controlled entities				
	0.4	2.0	-	-
<i>Future income tax benefit</i>				
Balance at beginning of the year	78.7	51.9	-	-
Transfer from/ (to) income tax expense	(3.9)	0.7	-	-
Prior year under/ (over) provision	(3.2)	6.5	-	-
Future income tax benefit not previously recognised brought to account	-	19.6	-	-
Balance at end of the year	71.6	78.7	-	-
Included in future income tax benefits are amounts arising from tax losses in some controlled entities				
	3.4	17.6	-	-



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>5 DIVIDENDS PROVIDED FOR OR PAID</b>				
<i>Interim dividend—1991</i>				
The Directors paid a fully franked interim dividend on 15 November 1991 to the registered shareholders in the books at the close of business on 23 October 1991				
9.0 cents on each ordinary share (9.0 cents in 1990 and paid in 1991)	41.5	40.1	41.5	40.1
9.0 cents on each 'B' class share (9.0 cents in 1990 and paid in 1991)	—	0.1	—	0.1
<b>Total interim dividend</b>	<b>41.5</b>	<b>40.2</b>	<b>41.5</b>	<b>40.2</b>
<i>Final dividend—1991</i>				
The Directors declared a fully franked final dividend to be paid on 19 June 1992 to the registered shareholders in the books at the close of business on 29 May 1992				
10.0 cents on each ordinary share (10.0 cents in 1990 and paid in 1991)	47.0	45.2	47.0	45.2
10.0 cents on each 'B' class share (10.0 cents in 1990 and paid in 1991)	—	0.1	—	0.1
<b>Total final dividend</b>	<b>47.0</b>	<b>45.3</b>	<b>47.0</b>	<b>45.3</b>
<b>Total dividend</b>	<b>88.5</b>	<b>85.5</b>	<b>88.5</b>	<b>85.5</b>
<b>6 CASH</b>				
Cash – AUD	65.0	10.8	0.4	4.8
– USD	10.7	16.6	—	—
	<b>75.7</b>	<b>27.4</b>	<b>0.4</b>	<b>4.8</b>
<b>7 RECEIVABLES</b>				
<i>Current</i>				
Trade debtors – AUD	24.1	19.6	18.4	14.1
– USD	44.9	58.2	26.1	32.6
Sundry debtors and prepayments	52.7	44.1	34.9	17.3
Less provision for doubtful debts	(0.4)	(0.4)	(0.1)	(0.1)
Security deposits	0.9	0.8	0.6	0.5
	<b>122.2</b>	<b>122.3</b>	<b>79.9</b>	<b>64.4</b>
<i>Non-current</i>				
Security deposits (refer (a) below)	22.7	23.6	15.9	16.5
Other loans (refer (b) below)	0.5	0.5	0.5	0.5
Other deposits	4.0	4.0	4.0	4.0
	<b>27.2</b>	<b>28.1</b>	<b>20.4</b>	<b>21.0</b>
(a) Security deposits have been lodged with the South Australian authorities on behalf of the Cooper Basin Downstream Joint Venture for the provision of roads and services together with the jetty at Port Bonython. With the completion of these projects, repayments by the State Government of deposits including an interest component have commenced over periods of up to 20 years concluding in 2003.				
(b) Included in other loans is an amount of \$506,000 (1990—\$506,000), being a loan made to an executive director of Santos Ltd in accordance with the provisions of the Loan Scheme approved at the 1990 Annual General Meeting.				
<b>8 INVESTMENTS</b>				
<i>Current</i>				
Short-term deposits – AUD	38.1	—	—	—
– YEN	73.8	67.7	—	—
Listed shares in other entities	6.5	—	6.4	—
	<b>118.4</b>	<b>67.7</b>	<b>6.4</b>	<b>—</b>
<i>Non-current</i>				
Listed shares and notes in other entities	206.9	220.4	206.9	220.2
Deposits – CHF	13.6	10.2	—	—
	<b>220.5</b>	<b>230.6</b>	<b>206.9</b>	<b>220.2</b>
Investments in controlled entities (refer note 18)	—	—	913.2	1049.6
	<b>220.5</b>	<b>230.6</b>	<b>1120.1</b>	<b>1269.8</b>



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>8 INVESTMENTS (CONTINUED)</b>				
Total market value of current and non-current investments in listed shares and notes	197.5	188.5	197.5	188.5
The Directors have reviewed the carrying value of current and non-current investments and where they believe there has been a permanent diminution in their value the investments have been written down to net realisable value. Investments in listed shares and notes were written down by \$7.3 million (\$7.1 million - Santos Ltd) and this write-down has been treated as a component of the abnormal item relating to the write-down of the carrying value of oil and gas investments.				
<b>9 INVENTORIES</b>				
Petroleum products	16.3	12.8	9.0	8.5
Drilling and maintenance stocks	24.8	22.7	14.6	14.8
Provision for obsolescence	(1.3)	(1.3)	(1.0)	(1.0)
	39.8	34.2	22.6	22.3
<b>10 OTHER ASSETS</b>				
<i>Current</i>				
Amounts owing by related parties				
– wholly-owned controlled entities	–	–	59.2	37.8
– partly-owned controlled entities	–	–	–	0.6
	–	–	59.2	38.4
<i>Non-current</i>				
Future income tax benefits	71.6	78.7	–	–
<b>11 PROPERTY, PLANT AND EQUIPMENT</b>				
<i>Land and Buildings</i>				
At cost (refer (a) below)	36.4	35.7	22.2	21.7
Less accumulated depreciation	(12.9)	(11.9)	(9.1)	(8.3)
	23.5	23.8	13.1	13.4
<i>Plant and Equipment</i>				
At cost	1431.4	1362.3	981.6	953.9
At independent valuation—1977	35.2	35.2	35.2	35.2
Capitalised leases	16.0	18.9	10.0	10.5
	1482.6	1416.4	1026.8	999.6
Less accumulated depreciation	(631.8)	(546.1)	(452.8)	(397.6)
	850.8	870.3	574.0	602.0
<b>TOTAL LAND AND BUILDINGS, PLANT AND EQUIPMENT</b>	<b>874.3</b>	<b>894.1</b>	<b>587.1</b>	<b>615.4</b>
<b>EXPLORATION, EVALUATION AND DEVELOPMENT EXPENDITURE</b>				
Areas of interest in which production has commenced:				
At cost	1768.0	1664.1	675.9	631.9
Less accumulated depletion	(453.3)	(362.9)	(229.9)	(199.7)
Less write-down of carrying value (refer (b) below)	(274.0)	(7.6)	(41.3)	(7.6)
	1040.7	1293.6	404.7	424.6
Areas of interest in the exploration and/or evaluation stage:				
At cost	77.6	72.1	13.0	8.6
Less write-down of carrying value (refer (b) below)	(3.6)	(7.9)	–	–
	74.0	64.2	13.0	8.6
<b>TOTAL EXPLORATION, EVALUATION AND DEVELOPMENT EXPENDITURE</b>	<b>1114.7</b>	<b>1357.8</b>	<b>417.7</b>	<b>433.2</b>
<b>TOTAL PROPERTY, PLANT AND EQUIPMENT</b>	<b>1989.0</b>	<b>2251.9</b>	<b>1004.8</b>	<b>1048.6</b>

(a) The Directors consider that the current value of the buildings are at least equal to their carrying value.

(b) The Directors reviewed the carrying value of its property, plant and equipment. A write-down of \$277.6 million (\$41.3 million – Santos Ltd) has been made to reduce the carrying values to the estimated recoverable amounts and this write-down has been treated as a component of the abnormal item relating to the write-down of the carrying value of oil and gas investments.



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>12 INTANGIBLES</b>				
Goodwill, at cost	161.9	163.6	-	-
Less accumulated amortisation	(47.0)	(42.0)	-	-
	114.9	121.6	-	-
<b>13 CREDITORS AND BORROWINGS</b>				
<i>Current</i>				
Bank loans - YEN	73.3	-	-	-
Bank overdraft	-	-	0.3	-
Trade creditors	36.4	54.6	19.8	34.9
Sundry creditors and accruals				
- related parties				
- wholly-owned controlled entities	-	-	21.9	-
- other than related parties	43.3	39.5	18.3	0.1
Lease liabilities	1.2	1.9	1.3	1.6
	154.2	96.0	61.6	36.6
<i>Non-current</i>				
Bank loans - AUD	10.0	130.0	-	-
- USD	591.0	458.1	-	-
- YEN	-	67.7	-	-
Promissory notes - AUD	211.8	146.1	-	-
Euro commercial paper - AUD	-	40.5	-	-
- USD	62.5	25.9	-	-
Lease liabilities	6.4	7.5	1.7	2.7
	881.7	875.8	1.7	2.7
All bank loans, promissory notes and Euro commercial paper are unsecured.				
<b>14 PROVISIONS</b>				
<i>Current</i>				
Dividends	47.0	85.5	47.0	85.5
Employee benefits	14.6	13.1	14.7	13.0
Income tax	85.7	92.7	61.3	40.8
	147.3	191.3	123.0	139.3
<i>Non-current</i>				
Deferred income tax	339.7	384.8	237.7	259.1
Future restoration costs	29.0	24.7	18.8	15.9
	368.7	409.5	256.5	275.0
<b>15 OTHER LIABILITIES</b>				
<i>Current</i>				
Amounts owing to related parties				
- wholly-owned controlled entities	-	-	715.5	775.5
<i>Non-current</i>				
Deferred income	12.3	9.7	9.8	7.7



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>16 SHARE CAPITAL</b>				
<i>Authorised capital</i>				
1,999,900,000 (1990-1,999,000,000) unclassified shares of 25¢ each	500.0	499.7	500.0	499.7
100,000 (1990-1,000,000) 'B' class shares of 25¢ each	-	0.3	-	0.3
	500.0	500.0	500.0	500.0
<i>Issued capital</i>				
469,518,179 (1990-446,068,047) ordinary shares of 25¢ each	117.4	111.5	117.4	111.5
100,000 (1990-1,000,000) 'B' class shares of 25¢ each	-	0.3	-	0.3
3,333,500 (1990-3,350,250) ordinary shares of 25¢ each paid to 1¢	-	-	-	-
	117.4	111.8	117.4	111.8

*Increase in issued share capital*

During the year the following ordinary shares (fully paid) were allotted to Santos Ltd shareholders under the Dividend Reinvestment Plan:

Date	Number of Shares	Premium per share
4 January 1991	5,678,566	\$3.63
15 July 1991	8,448,118	\$2.81
15 November 1991	8,306,698	\$2.84

900,000 'B' class shares (fully paid) of 25¢ each were re-classified as ordinary shares (fully paid) in accordance with a special resolution approved by shareholders at the Annual General Meeting on 17 May 1991.

116,750 ordinary shares (paid to 1 cent) issued under the Santos Executive Share Plan were converted to fully paid ordinary shares during the year.

100,000 ordinary shares (paid to 1 cent) were issued on 18 December 1991 under the Santos Executive Share Plan.

<b>17 RESERVES</b>				
Share premium	956.9	888.6	956.9	888.6
Asset revaluation	14.9	14.9	14.9	14.9
Capital	5.9	5.9	5.7	5.7
Foreign currency translation	10.4	8.2	-	-
	988.1	917.6	977.5	909.2
<i>Movement during the year</i>				
<i>Share premium</i>				
Balance at beginning of the year	888.6	716.7	888.6	716.7
Dividend reinvestment plan	68.0	17.4	68.0	17.4
Share issues	0.3	1.1	0.3	1.1
Rights issue	-	153.4	-	153.4
Balance at end of the year	956.9	888.6	956.9	888.6
<i>Asset revaluation</i>				
Balance at beginning of the year	14.9	16.0	14.9	14.9
Adjustment for exchange rate fluctuations	-	0.5	-	-
Net adjustment on disposal of a controlled entity	-	(1.6)	-	-
Balance at end of the year	14.9	14.9	14.9	14.9
<i>Foreign currency translation</i>				
Balance at beginning of the year	8.2	3.4	-	-
Net adjustment on translation of foreign controlled entities	2.0	4.8	-	-
Transfer to retained profits	0.2	-	-	-
Balance at end of the year	10.4	8.2	-	-



Name	Place of Incorporation	Details of Investments				Contribution to Consolidated Profit/(Loss)	
		Beneficial Interest		in Shares		Book Value	
		1991 %	1990 %	1991 \$mill	1990 \$mill	1991 \$mill	1990 \$mill
Santos Ltd (Chief Entity)	SA					(72.2)	154.2
<b>Controlled Entities</b>							
+ Alliance Oil Development Australia N.L.	VIC	100	100	107.7	107.7	2.6	(0.7)
<i>Wholly-owned controlled entities of Alliance Oil Development Australia N.L.</i>							
+ Alliance Minerals Australia N.L.	VIC	100	100	-	-	0.1	0.2
+ Alliance Petroleum Australia N.L.	VIC	100	100	-	-	13.7	9.2
+ Alliance Petroleum International Ltd	VIC	100	100	-	-	(0.4)	(0.4)
* Alliance Petroleum New Zealand Ltd	NZ	100	100	-	-	-	(3.3)
+ Alliance Resources Ltd	VIC	100	100	-	-	(7.0)	(0.6)
+ Boston Long Hedges Finance Pty Ltd	VIC	100	100	-	-	-	-
+ Hellyer Mining and Exploration Pty Ltd	TAS	100	100	-	-	-	-
+ Peko Oil Ltd #	VIC	100	100	246.7	418.5	(53.8)	24.2
<i>Wholly-owned controlled entities of Peko Oil Ltd</i>							
+ Peko Bunyu Pty Ltd	VIC	100	100	-	-	-	(4.5)
* Peko Exploration (UK) Ltd	UK	100	100	-	-	(0.7)	-
* Peko Offshore Ltd	BER	100	100	-	-	0.2	0.3
Peko Petroleum (UK) Ltd	UK	-	-	-	-	-	(0.4)
* Weeks Exploration Company	USA	100	100	-	-	(30.7)	2.4
+ Weeks Java Sea Pty Ltd	VIC	100	100	-	-	-	-
+ Reef Oil N.L.	NSW	100	100	82.7	82.7	3.8	2.9
+ Santos Exploration Pty Ltd	VIC	100	100	3.4	3.4	(0.7)	(1.6)
+ Santos Facilities Ltd	SA	100	100	-	-	-	-
Santos Finance Ltd	NSW	100	100	70.0	70.0	(1.2)	11.5
+ Santos Indonesian Holdings Pty Ltd	SA	100	100	-	-	-	-
* Santos Niugini Exploration Pty Ltd	PNG	100	100	8.5	8.2	(0.1)	(0.1)
+ Santos (N.T.) Pty Ltd	ACT	100	100	14.8	14.8	(6.8)	18.9
* Santos Oil Exploration (Malaysia) Sdn Bhd	MAL	100	100	0.2	0.2	(0.1)	-
+ Santos Petroleum Pty Ltd	NSW	100	100	69.3	69.3	(3.0)	(1.9)
+ Santos Resources Pty Ltd	QLD	100	100	-	-	-	-
* Santos (UK) Ltd	UK	100	100	-	-	-	-
Santos (Zoca 91-10) Pty Ltd	ACT	100	-	-	-	-	-
Santos (Zoca 91-11) Pty Ltd	ACT	100	-	-	-	-	-
Vamgas Ltd	VIC	93	81	190.4	164.9	17.9	23.0
+ Worldwide Assets Ltd	NSW	100	100	95.3	95.3	1.7	(7.3)
<i>Wholly-owned controlled entity of Worldwide Assets Ltd</i>							
+ Western Australian Capital Holdings Ltd	WA	100	100	-	-	-	-
<i>Other controlled entities</i>							
Latec Investments Ltd	NSW	78	61	24.2	14.6	(0.2)	0.4
<i>Wholly-owned controlled entities of Latec Investments Ltd</i>							
* Astrascale Ltd	UK	78	61	-	-	-	-
+ Comserv (No. 37) Pty Ltd	NSW	78	61	-	-	-	-
+ Doce Pty Ltd	QLD	78	61	-	-	0.1	-
+ Flinders Petroleum N.L.	VIC	78	61	-	-	-	-
<i>Wholly-owned controlled entities of Flinders Petroleum N.L.</i>							
+ Canso Resources Ltd	NSW	78	61	-	-	1.4	1.5
+ Farmout Drillers N.L.	NSW	78	61	-	-	0.8	0.9
Consolidation adjustments comprising eliminations of intercompany dividends and investment write-downs and goodwill amortisation							
				913.2	1049.6	(108.2)	161.3



**18 INVESTMENT IN CONTROLLED ENTITIES (CONTINUED)**

## Notes:

# The book value of Santos Ltd's investment in Peko Oil Ltd has been written down in 1991 by \$171.8 million to reflect the write-down of the carrying value of oil and gas investments.

\* Entities audited by overseas KPMG Peat Marwick member firms.

+ Controlled entities referred to in the Directors' Statement which have been granted relief from specified accounting and financial reporting requirements in accordance with a Class Order.

## Place of incorporation

SA – South Australia	UK – United Kingdom	NSW – New South Wales	NZ – New Zealand
ACT – Australian Capital Territory	PNG – Papua New Guinea	VIC – Victoria	BER – Bermuda
QLD – Queensland	USA – United States of America	TAS – Tasmania	MAL – Malaysia
WA – Western Australia			

**(i) Investments eliminated by rounding:**

	1991	1990
	\$	\$
Boston Long Hedges Finance Pty Ltd	12	12
Hellyer Mining and Exploration Pty Ltd	7,799	7,799
Santos Facilities Ltd	5	5
Santos Indonesian Holdings Pty Ltd	1	1
Santos Resources Pty Ltd	2	2
Santos (UK) Ltd	171	171
Santos (Zoca 91-10) Pty Ltd	2	-
Santos (Zoca 91-11) Pty Ltd	2	-

**(ii) Acquisition of controlled entities**

Santos (Zoca 91-10) Pty Ltd and Santos (Zoca 91-11) Pty Ltd were incorporated during the year.



## 18 INTEREST IN JOINT VENTURES

(a) Santos Ltd and its controlled entities have combined interests in the following unincorporated joint ventures:

Joint Venture	Principal Activities	Average Interest %
SA/Queensland Block Operations (incorporating PEL 5 & 6 (SA) and ATP259/ATP488P (Qld))	Oil and gas exploration and production	55
Bonaparte Basin	Oil and gas exploration	57
Cambodia (CB4)	Oil and gas exploration	25
Carnarvon Basin	Oil and gas exploration and production	24
Cooper Basin Unit	Oil and gas production	55
Cooper Basin Downstream	Liquid hydrocarbon transportation and processing	53
Gulf Coast - USA	Oil and gas exploration and production	39
Jackson Moonie Pipeline	Oil transportation	24
Malaysia (PM14)	Oil and gas exploration	15
Mereenie	Oil and gas production	21
Mereenie Pipeline	Oil transportation	23
Palm Valley	Gas production	28
Papua New Guinea (PPL81)	Oil and gas exploration	45
Timor Gap	Oil and gas exploration	20
Timor Sea	Oil and gas production	20
	Oil and gas exploration	23
United Kingdom	Oil and gas exploration	8

(b) Santos Ltd and its controlled entities' share of assets and liabilities of the joint ventures is included in the Balance Sheets under the following classifications:

	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>Non-current assets</b>				
Buildings, plant and equipment	857.0	874.7	581.7	608.3
Exploration, evaluation and development expenditure	1114.7	1357.8	417.6	433.2
Receivables	22.7	23.6	15.9	16.5
<b>Total non-current assets</b>	<b>1994.4</b>	<b>2256.1</b>	<b>1015.2</b>	<b>1058.0</b>
<b>Current assets</b>				
Receivables	27.5	10.3	28.0	7.4
Inventories	23.4	22.7	14.6	14.8
<b>Total current assets</b>	<b>50.9</b>	<b>33.0</b>	<b>42.6</b>	<b>22.2</b>
<b>Total assets</b>	<b>2045.3</b>	<b>2289.1</b>	<b>1057.8</b>	<b>1080.2</b>
<b>Current liabilities</b>				
Creditors and borrowings	32.1	56.4	19.4	34.1
<b>Net investments in joint ventures</b>	<b>2013.2</b>	<b>2232.7</b>	<b>1038.4</b>	<b>1046.1</b>

(c) The amount of contingent liabilities and capital expenditure commitments in respect of unincorporated joint ventures is:

Capital expenditure commitments	3.5	48.6	3.2	5.4
Contingent liabilities	44.7	25.4	22.7	21.8

(d) Disclosure of the profit or loss contribution of unincorporated joint ventures is required by Schedule 5 Clause 34(1)(f) of the Corporations Regulations. Santos Ltd and its controlled entities are involved in more than 80 such joint ventures throughout Australia and overseas, several of which are not accounted for separately. The Directors consider it neither practical nor possible to identify the profit or loss contribution from each individual joint venture.



## 20 RELATED PARTIES

Information pertaining to related party transactions not disclosed elsewhere in the financial statements is as follows:

### Directors

Directors of Santos Ltd and their shareholdings in Santos Ltd are disclosed on pages 22 and 25 of this Annual Report.

The Executive Director, Mr N R Adler, was a participant in the issue of Plan Shares under the Santos Executive Share Plan. Mr N R Adler also has a loan from Santos Ltd. Interest received on this loan totalled \$32,890 (1990-\$13,705).

Agreements exist with the non-executive directors providing for the payment of a sum on retirement from office as a Director in accordance with shareholder approval at the 1989 Annual General Meeting. The amount provided for the year was \$290,208 (1990-\$75,625).

### Other Related Parties

Other related parties comprise Vamgas Ltd and Latec Investments Ltd who are partly-owned controlled entities of Santos Ltd.

Santos Ltd received management fees during the year of \$1,740,000 (1990-\$1,710,000) from Vamgas Ltd and \$1,144,800 (1990-\$1,100,000) from Latec Investments Ltd in accordance with management administration and technical service agreements in place with these controlled entities.

	SANTOS LTD	
	1991 \$million	1990 \$million
<b>Controlled entities</b>		
All amounts owing by or to wholly-owned or partly-owned controlled entities are for loans made on interest free terms for an indefinite period with the exception of:		
Amounts owing to wholly-owned controlled entities	712.0	767.3
These loans were made in the ordinary course of business on normal market terms and conditions.		

	CONSOLIDATED		SANTOS LTD	
	1991 \$000	1990 \$000	1991 \$000	1990 \$000

## 21 DIRECTORS' AND EXECUTIVES' REMUNERATION

### DIRECTORS

Amounts received or due and receivable from Santos Ltd and its controlled entities by the Directors of Santos Ltd and Directors of each of its controlled entities

	1,589	1,693	982	899
--	-------	-------	-----	-----

Number of Directors whose remuneration was within the following bands:

\$000's	No.	No.
0 - 10	1	2
20 - 30	4	6
30 - 40	3	-
40 - 50	1	1
80 - 90	1	1
590 - 600	-	1
640 - 650	1	-

SUPERANNUATION AND RETIREMENT BENEFITS	\$000	\$000	\$000	\$000
Superannuation contributions provided and retirement benefits paid in respect of Directors. The Directors believe that the provision of full particulars would be unreasonable.	180	430	99	348



	CONSOLIDATED		SANTOS LTD	
	1991 \$000	1990 \$000	1991 \$000	1990 \$000
<b>21 DIRECTORS' AND EXECUTIVES' REMUNERATION (CONTINUED)</b>				
<b>EXECUTIVES</b>				
Amounts received from Santos Ltd or its controlled entities by executive officers whose income is \$100,000 or greater	4,493	4,125	4,493	3,540
Number of executive officers whose remuneration was within the following bands:				
\$000's	No.	No.	No.	No.
100-110	8	7	8	7
110-120	3	7	3	6
120-130	5	2	5	-
130-140	2	1	2	1
140-150	1	-	1	-
160-170	1	-	1	-
170-180	-	1	-	1
190-200	-	2	-	2
200-210	2	-	2	-
210-220	1	1	1	1
220-230	-	1	-	-
230-240	1	-	1	-
290-300	-	1	-	1
300-310	1	-	1	-
310-320	1	1	1	1
590-600	-	1	-	1
640-650	1	-	1	-
	1991 \$million	1990 \$million	1991 \$million	1990 \$million

## 22 REMUNERATION OF AUDITORS

Amounts received or due and receivable by the auditors of Santos Ltd for				
- audit services	0.3	0.3	0.2	0.2
- other services	0.5	0.6	0.3	0.4
	0.8	0.9	0.5	0.6
Amounts received or due and receivable by auditors other than the auditors of Santos Ltd for				
- audit services	0.1	0.2	-	-
- other services	0.2	0.2	-	-
	0.3	0.4	-	-

## 23 SEGMENT REPORTING

Santos Ltd and its controlled entities operate predominantly in one industry, namely exploration, development and marketing of hydrocarbons, and in one geographical segment, namely Australia. Revenue is derived from the sale of gas and liquid hydrocarbons.



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>24 COMMITMENTS FOR EXPENDITURE</b>				
<i>(a) Capital commitments</i>				
Contracts for capital expenditure on plant, equipment and buildings for which no amounts have been provided in the accounts:				
Due not later than one year	16.2	49.0	3.2	5.4
<i>(b) Lease commitments</i>				
Finance leases:				
Due not later than one year	1.8	3.0	1.4	2.1
Due later than one year but not later than two years	5.5	2.1	0.8	1.4
Due later than two years but not later than five years	1.7	6.5	1.5	1.5
Due later than five years	-	0.6	-	0.5
Total commitments under finance leases	9.0	12.2	3.7	5.5
Less future finance charges	(1.4)	(2.8)	(0.7)	(1.2)
Finance lease liability	7.6	9.4	3.0	4.3
Operating leases:				
Due not later than one year	4.1	4.2	2.6	2.5
Due later than one year but not later than two years	3.4	4.3	2.4	2.6
Due later than two years but not later than five years	8.6	11.4	6.6	7.3
Due later than five years	4.3	12.0	3.3	6.6
Total commitments under operating leases	20.4	31.9	14.9	19.0
<i>(c) Santos Ltd and its controlled entities have certain obligations to perform minimum exploration work and expend minimum amounts of money on such works in petroleum exploration permits, production and related licence areas. These obligations may be varied from time to time subject to approval and are expected to be fulfilled in the normal course of operations.</i>				

## 25 SUPERANNUATION COMMITMENTS

Santos Ltd and certain of its controlled entities participate in a number of superannuation funds and pension plans in Australia, United Kingdom and United States of America which provide benefits either on a defined benefit or cash accumulation basis for employees or their dependants on retirement, resignation, total or permanent disablement or death. The employers and employee members both make contributions as specified in the rules of the respective funds.

The assets of all funds were sufficient to satisfy all benefits which would have been vested in the event of termination of the fund, or in the event of voluntary or compulsory termination of the employment of each employee. The following is a review of the significant employee benefit plans:

Name of fund	Santos Retirement Plan	Santos Staff/Executive Superannuation Fund
Type of benefit	Cash accumulation benefit	Defined benefits and cash accumulation
Basis of contributions	Percentage of member's wage contributed by member and employer.	Percentage of member's salary contributed by member and employer. The employer's percentage reflects the amount recommended by the Actuary to provide the defined benefit.
Employer's legal obligation to contribute	Enforceable subject to right to cease contributions on not less than one month's notice to the Trustees	Enforceable subject to right to cease contributions on written notice to the Trustees. The actuarial review concluded that the Fund has a surplus of assets over liabilities and recommended that Santos Ltd reduce employer's contributions up until the results of the next actuarial review are known. This independent advice has been accepted and defined benefit contributions have been suspended accordingly.
Last actuarial assessment	Not applicable	1 January 1991



	CONSOLIDATED		SANTOS LTD	
	1991 \$million	1990 \$million	1991 \$million	1990 \$million
<b>26 CONTINGENT LIABILITIES</b>				
Contingent liabilities arising in respect of other persons:				
(i) Performance guarantees	7.6	6.6	7.4	6.5
(ii) Employee service agreements	0.9	0.9	0.9	0.9
(iii) Claims have been lodged including the following:				
(a) claims for loss and damage arising out of alleged breach and repudiation of contract and in tort	18.7	0.4	0.4	0.4
(b) claims for loss of contract	18.4	18.4	14.9	14.9
	45.6	26.3	23.6	22.7

Legal advice in relation to the claims lodged above indicates that on the basis of available information, litigation involving major claims is unlikely to be successful and that settlement of minor claims is unlikely to exceed \$600,000 on a consolidated basis.

In June 1991, the Full Bench of the Supreme Court of South Australia allowed an appeal by a party to the South Australian Unit and Downstream Cooper Basin Joint Ventures against an earlier decision of Justice Bollen in the Supreme Court of South Australia, concerning the validity of an adjustment to the participation factors in the Cooper Basin Joint Venture, as at 1 January 1987. The effect of the order is that those participation factors are to be redetermined. The Directors believe that the 1 January 1987 participation factors when redetermined will not vary significantly from those factors as previously calculated.

### **27 ECONOMIC DEPENDENCY**

There are in existence long-term contracts for the sale of gas, but otherwise the Directors believe there is no economic dependency.

### **28 POST BALANCE DATE EVENTS**

In November 1991, Santos Ltd announced unconditional takeover offers for the shares in its partly-owned controlled entities, Vamgas Ltd and Latec Investments Ltd, which it did not already own. On 14 February 1992, Santos Ltd moved to compulsorily acquire the remaining shares in Vamgas Ltd.



STATEMENT BY DIRECTORS

1. In the opinion of the Directors of Santos Ltd:
  - (a) the financial statements set out on pages 26 to 44 are drawn up so as to give a true and fair view of the results for the year ended 31 December 1991, and the state of affairs as at 31 December 1991, of the company and the economic entity;
  - (b) the consolidated accounts have been made out in accordance with Divisions 4A and 4B of Part 3.6 of the Corporations Law; and
  - (c) at the date of this statement, there are reasonable grounds to believe that the company will be able to pay its debts as and when they fall due.
2. The financial statements have been made out in accordance with Statements of Accounting Concepts and applicable Accounting Standards.
3. There are reasonable grounds to believe that the company will be able to meet any obligations or liabilities to which it is or may become subject by virtue of the Deed of indemnity between the company and certain controlled entities pursuant to a Class Order. Refer to Note 18 for further details.

Signed in accordance with a resolution of the Directors:



DIRECTOR



DIRECTOR

Adelaide  
30 March 1992

INDEPENDENT AUDIT REPORT TO THE MEMBERS OF SANTOS LTD

SCOPE

We have audited the financial statements of Santos Ltd for the year ended 31 December 1991. The financial statements are set out on pages 26 to 45 and consist of the accounts of the company and the consolidated accounts of the economic entity, being the company and its controlled entities. The company's directors are responsible for the preparation and presentation of the financial statements and the information they contain. We have conducted an independent audit of these financial statements in order to express an opinion on them to the members of the company.

Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial statements are presented fairly in accordance with Australian accounting concepts and standards and statutory requirements so as to present a view which is consistent with our understanding of the company's and the economic entity's financial position and the results of their operations.

The names of the controlled entities audited by overseas KPMG Peat Marwick member firms are set out in note 18.

The audit opinion expressed in this report has been formed on the above basis.

AUDIT OPINION

In our opinion, the financial statements of Santos Ltd are properly drawn up:

- (a) so as to give a true and fair view of:
  - (i) the state of affairs as at 31 December 1991 and the results for the year ended on that date of the company and the economic entity; and
  - (ii) the other matters required by Divisions 4, 4A and 4B of Part 3.6 of the Corporations Law to be dealt with in the financial statements;
- (b) in accordance with the provisions of the Corporations Law; and
- (c) in accordance with Statements of Accounting Concepts and applicable Accounting Standards.



KPMG Peat Marwick  
CHARTERED ACCOUNTANTS



C.W. Dunsford  
PARTNER  
Adelaide,  
30 March 1992



Listed on Australian Stock Exchange at 20 March 1992 were 469,609,679 ordinary shares. Unlisted are 100,000 class 'B' shares, 1,667,500 partly paid Plan '0' shares and 1,574,500 partly paid Plan '2' shares. There were 31,755 holders of all classes of issued shares (including 1 B Class shareholder and 76 holders of Plan '0' shares and 74 holders of Plan 2 shares) compared with 26,409 a year earlier.

The listed issued ordinary shares represent 99.98% of the voting power in Santos. The holdings of the twenty largest holders of shares represent 56.5% of the total voting power in Santos (last year 64.9%).

The 20 largest shareholders in Santos as shown in the Company's Register of Members at 20 March 1992 were:

Name	Number of fully paid Shares	% of Voting Capital
National Nominees Limited	51,491,070	11.0
ANZ Nominees Limited	44,336,898	9.4
Pendal Nominees Pty. Limited	27,160,334	5.8
Australian Mutual Provident Society (No. 1 a/c)	24,637,177	5.2
Chase Manhattan Nominees Limited	22,304,397	4.7
Bank of New South Wales Nominees Pty. Ltd.	10,899,864	2.3
Australian Mutual Provident Society (No. 2 a/c)	10,620,232	2.3
State Authorities Superannuation Board - NSW	8,452,737	1.8
CBA Nominees Limited	8,349,162	1.8
State Government Insurance Commission	8,272,374	1.8
Queensland Investment Corporation	7,902,647	1.7
ISMG Nominees Pty. Limited	6,416,060	1.4
MLC Life Limited	6,375,687	1.4
The National Mutual Life Association of Australasia Limited	5,239,108	1.1
Government Insurance Office of New South Wales	4,488,229	1.0
The Colonial Mutual Life Assurance Society Limited	4,033,197	0.9
Pearl Assurance PLC	3,703,917	0.8
Australian Mutual Provident Society (No. 3 a/c)	3,439,980	0.7
The Prudential Assurance Company Ltd.	3,225,984	0.7
Zurich Australian Life Insurance Limited	3,123,901	0.7
	264,472,955	56.5

The following interests are recorded in the Company's Register of Substantial Shareholders at 20 March, 1992.

Name	Address	No. of voting shares held
Australian Mutual Provident Society	1-3 Phillip Street Sydney NSW 2000	41,968,978*
Bankers Trust Australia Ltd.	c/- Level 38 Australia Square Sydney NSW 2000	32,945,545
The Capital Group Inc.	333 South Hope St. Los Angeles California USA	23,240,341

\*The Australian Mutual Provident Society has also notified the Company in accordance with the Securities Amendment Act 1988 (New Zealand) that it is a substantial shareholder by virtue of it having a relevant interest in the abovementioned shares.

#### VOTING RIGHTS

Except as set out in Article 11 detailed below in respect of B Class shares, Articles 83 to 88 of the Company's Memorandum & Articles of Association detail the voting rights of members. The Articles indicate that on a show of hands, every member present in person or by representative or the attorney of a member shall have one vote and upon a poll subject to certain conditions detailed in the Articles every member present in person or by attorney, proxy or representative shall have one vote for every fully paid share held. Pursuant to the Rules of the Santos Executive Share Plan, Plan '2' and Plan '0' shares do not carry any voting rights except on a proposal to vary the rights attached to Plan shares.

Article 11 set out below confers special rights to the holders of B Class shares - "Notwithstanding any other provision of these Articles upon a poll on any resolution to repeal or to amend any of the following provisions, namely, the provisions of Article 2 which define "AGL" and "AGL Subsidiary" and Articles 8, 9, 10, 11, 12, 13, 14, 74 and 98, the B Class shares shall collectively confer on the holders the right to such number of votes as shall be equal to twenty six seventy fourths of the number of votes at a poll conferred by all the other issued shares on the holders thereof and each holding of B Class shares shall confer the right to a rateable proportion of the votes thus collectively conferred."

#### RIGHTS OF APPOINTMENT

(for B Class shareholder)

Article 12 confers the right on AGL and its subsidiaries while they hold the whole of the issued B Class shares to appoint one person as a Director. It also confers the right to remove or replace the person it appoints as a Director. Unless previously terminated by agreement between the Company and AGL, these rights will expire on 31 December, 2006.

#### SUMMARY OF SHARE REGISTERS

See outside back cover.

#### STOCK EXCHANGE LISTINGS

The Company's issued ordinary shares are listed on The Australian Stock Exchange Limited and the Home Exchange is Adelaide. The Company's shares are also listed on the New Zealand Stock Exchange.

American Depository Receipts (ADR) issued by Morgan Guaranty against Santos shares held are sponsored and quoted on NASDAQ (National Association of Securities Dealers Inc) in USA under the symbol STOSY. Each ADR unit represents four ordinary Santos shares.

#### ANALYSIS OF THE LISTED SHARES - RANGE OF SHARES HELD

	Fully Paid Ordinary Shares	% of Holders	% of Shares held
	(Holders)		
1 - 1,000 *	12,832	40.6	1.4
1,001 - 5,000	14,285	45.2	7.2
5,001 - 10,000	2,545	8.1	3.9
10,001 & over	1,943	6.1	87.5
Total No.	31,605	100.0	100.0

\* There were 993 shareholders who held less than 100 shares which at the current market price was deemed to be the minimum marketable parcel.

For Directors' Shareholdings see Directors' Statutory Report.



### BARRELS OF OIL AND BARRELS OF OIL EQUIVALENT

Oil is sold by the barrel, a practice which dates back to the industry's origins in the United States of America when oil was stored in barrels of 42 US gallons. A barrel is equivalent to 159 litres or 35 'imperial' gallons.

Hydrocarbon products including natural gas, LPG and condensate can be measured by volume, energy content or weight. The liquid products of condensate and LPG are usually measured in barrels and tonnes respectively.

Although there are different conventions for measuring hydrocarbon products, it is possible to compare quantities of each by converting these measurement units into a common unit based on their energy content. This common unit is called a barrel of oil equivalent (BOE). A BOE is the amount of energy a barrel of oil generates when burned. The energy content of different hydrocarbons can be compared in terms of how many BOE's a particular quantity of hydrocarbon product contains. The quantity required to generate one BOE varies between hydrocarbon products and the following are the conversion factors Santos uses for each of its products.

Crude Oil:	1 barrel	= 1 BOE
Sales Gas:	1 petajoule	= 171.937 BOE x 10 <sup>9</sup>
	1 billion cubic feet	= 181.40 BOE x 10 <sup>9</sup>
Condensate/Naphtha:		
	1 barrel	= 0.935 BOE
LPG:	1 tonne	= 8.458 BOE
Ethane:	1 billion cubic feet	= 320.865 BOE x 10 <sup>9</sup>

### PETAJOULES AND GIGAJOULES

Joules are a metric measurement of energy and the measurement by which Santos sells its gas. A gigajoule is one billion (1 000 000 000) joules or 1 kilojoule x 10<sup>9</sup>. A petajoule is equal to one million gigajoules or 1 kilojoule x 10<sup>15</sup>. The equivalent imperial measure to joules are British Thermal Units (BTU). One kilojoule = 0.9478 BTU.

### PROVED AND PROBABLE RESERVES

Until oil and gas are actually recovered from the ground, measurement of the quantity that can be ultimately recovered, the reserves, can only be made by estimation. Reserves estimates rely on seismic surveys and the drilling of wells, which may be hundreds of metres apart, to provide information on the oil and gas reservoirs which lie several

kilometres below the earth's surface. As the information provided by these sources is limited, reserve estimates are classified according to the confidence with which the estimate can be made.

Proved reserves are defined by the Australian Stock Exchange as those reserves that, to a high degree of certainty, are recoverable, at commercial rates, under presently anticipated production methods, operating conditions, prices and costs. Probable reserves are defined by the Australian Stock Exchange as those reserves that may be reasonably assumed to exist because of geophysical or geological indications and drilling done in regions which contain proven reserves.

### COOPER BASIN UNIT JOINT VENTURE

The exploration rights to the Cooper Basin region of South Australia were originally held by Santos alone. Other companies gained interests in parts ('blocks') of the region by funding exploration. Each of these blocks was a new, separate joint venture.

Gas sales commenced to Adelaide in 1969 from one block. By the early 1970's a number of additional gas fields capable of supplying gas had been discovered in several other blocks and a sales contract for the supply of gas to New South Wales had been concluded. The South Australian Cooper Basin Unit was created to, in effect, amalgamate the gas reserves of these blocks and provide for their development under a single joint venture ('The Unit').

The interest of the various companies in the Unit are reviewed and adjusted periodically to essentially reflect estimates of reserves in each block.

### SEISMIC SURVEYS AND THREE DIMENSIONAL SEISMIC

Seismic surveys are used to gain an understanding of rock formations beneath the earth's surface.

Oil and gas are believed to be the remains of decomposed plant and animal matter buried hundreds of millions of years ago and trapped beneath the earth's surface. By conducting a seismic survey, oil and gas explorers are able to obtain indications of whether the rock formations would be capable of trapping oil and gas and the depth of the formations.

Three dimensional (3D) seismic is a relatively new technique which enables the compilation of three dimensional images of rock formations compared with the two dimensional image provided by conventional seismic. The greater accuracy of three dimensional seismic and the better image it provides of rock formations allows more accurate targeting of wells.

SHAREHOLDERS' ENQUIRIES Enquiries from shareholders and other interested people should be directed to: The Secretary Santos Ltd 39 Grenfell Street Adelaide South Australia 5000	FINANCIAL CALENDAR 1992	19 June: Payment of final dividend	exploration and development expenditure announced to ASX
	April: First quarter revenue, production and exploration and development expenditure announced to Australian Stock Exchange (ASX)	30 June: Half year end	31 December: Financial Year end
	19 May: Annual General Meeting	July: Second quarter revenue, production and exploration and development expenditure announced to ASX	1993
	29 May: Books close to determine entitlements to final dividend	September: Half year results announced to ASX	January: Final quarter revenue, production and exploration and development expenditure announced to ASX
		October: Third quarter revenue, production and	March: Full Year results announced to ASX



**DIRECTORS**

**S D M WALLIS**  
Chairman

**W F SCAMMELL**  
Deputy Chairman

**N R ADLER**  
Managing Director

**E A BURTON**

**N R CLARK**

**S GERLACH**

**J J KENNEDY**

**R C H MASON \*\***

**K W PETERSON**

**ROBERT STRAUSS**

**J A UHRIG**

\*\*Appointed by Sangas  
Development Ltd. - holder  
of the B Class shares

**SECRETARY**

**M G ROBERTS**

**EMERITUS DIRECTOR**

**JOHN L BONYTHON AO**

**COMPANY  
INFORMATION**

Santos Ltd  
A.C.N. 007 550 923  
Incorporated in Adelaide,  
South Australia on 18  
March 1954.

Quoted on the official lists  
of The Australian Stock  
Exchange Ltd and also the  
New Zealand Stock  
Exchange.

Santos American  
Depository  
Receipts issued by Morgan  
Guaranty in USA are  
sponsored and are quoted  
on the NASDAQ system in  
USA.

**SENIOR MANAGEMENT**

**N R ADLER**  
Managing Director

**J D ARMSTRONG**  
Executive General Manager  
Exploration

**J W McARDLE**  
Executive General Manager  
Commercial

**J B FITZGERALD**  
General Manager  
Corporate Development

**R J WORTLEY**  
General Manager  
Accounting

**R W BRANSON**  
General Manager  
Production

**B J LAWRENCE**  
General Manager  
Marketing

**J L CRADDOCK**  
State Manager  
Queensland

**M G ROBERTS**  
Group General Counsel  
and Company Secretary

**REGISTERED AND  
HEAD OFFICE**

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Design: John Nowland Design  
Typesetting: Santos Ltd  
Repro Film: Replica Pty Ltd  
Printing: Craftsman Press Pty Ltd  
ISSN No 01813-1136