



**MINISTRY OF ENERGY AND ENERGY INDUSTRIES
ANNUAL ADMINISTRATIVE REPORT - 1994/95**





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LIST OF ABBREVIATIONS

ATOC	-	Amoco Trinidad Oil Company
ALNG	-	Atlantic LNG
bbl/d	-	Barrels per day
bopd	-	Barrels of oil per day
CIL	-	Caribbean ISPAT Limited
CMC	-	Caribbean Methanol Company
CNG	-	Compressed Natural Gas
ISCOTT	-	Iron and Steel Company of Trinidad and Tobago
LPG	-	Liquefied Petroleum Gases
MOU	-	Memorandum of Understanding
mt/d	-	Metric tons per day
MOEEI	-	Ministry of Energy and Energy Industries
MMB	-	Millions of Barrels
MMcfd	-	Millions of cubic feet per day
Mm ³ /d	-	Mega cubic metres per day
NGC	-	The National Gas Company
PCOL	-	Premier Consolidated Oilfields Limited
Petrotrin	-	Petroleum Company of Trinidad and Tobago
PPGPL	-	Pheonix Park Gas Processors Limited
PCS	-	Potash Corporation of Saskatchewan
SECC	-	South East Coast Consortium
St/d	-	Short tonnes per day
tpa	-	Tonnes per annum
Tcf	-	Trillion cubic feet
TTMC	-	Trinidad and Tobago Methanol Company

OVERVIEW OF PETROLEUM INDUSTRY 1994/1995

This report summarizes activities and events occurring in the petroleum industry during the two year period, 1994 - 1995. It also provides an update on the administrative activities of the Ministry of Energy and Energy Industries during the referenced period as well as detailed statistics on the operations of the local energy sector.

During this reporting period, two events of historical importance took place. For the first time in the petroleum industry of Trinidad and Tobago an Exploration and Production (Private Petroleum Rights Licence) was granted under the Petroleum Legislation. The successful awardee was Trinidad Exploration and Development Limited, whose application was approved in June 1994 for an area of approximately 2600 acres in the Ward of Cedros. The second significant event was the granting of a licence to the first locally owned private exploration company - Mora Oil Ventures Limited (Krishna Persad & Associates Limited) over Block 44/57 (Mora Field) of Trinidad's east coast. This field was previously owned and operated by Amoco Trinidad Oil Company which declared its intention to cease operations in this field. Mora Ventures successfully applied and was granted permission to continue production operations in the area.

It will be noted that a section entitled, "Projects," has been added to this report in order to facilitate the identification of initiatives in which the Ministry was involved during 1994/1995. For example, the information covers activities pertaining to the Competitive Bidding Order which was published in February 1995, where blocks off the East Coast of Trinidad were offered in the first round of competitive bidding. An amendment to the Bidding Order issued in November 1995 offered eight blocks off the east and south coasts of Trinidad in another phase of this project.

Other activities included an update on the revision and printing of the Kugler Geological Map and also research in the use of methanol as a vehicular fuel.

At the close of this reporting period, a change in Government administration in November, 1995 led to a review of major policy matters of the local petroleum industry.



ENERGY SECTOR ACTIVITIES

Exploration and Production

Geophysical Surveys

During 1994 there was a considerable reduction in the amount of geophysical data acquisition as activity was confined principally to hazard surveys and seismic re-processing. In 1995 however, seismic acquisition activity commenced again, with Amoco Trinidad Oil Company being the only company to conduct such activities. Following is a breakdown of the activities for the period 1994/1995.

Amoco Trinidad Oil Company (Amoco)

Amoco conducted one shallow hazard survey in 1994 in the Gulf of Paria for the proposed LNG Project. Five hazard surveys were conducted in 1995 in the following areas:

- NEQB-4 (formerly NEQB-1A)
- S.E. Darien
- Corallita
- EMZ
- Guayaguayare Bay (for LNG Upstream Project - pipeline route)

One soil boring exercise was conducted in 1994 in the East Mayaro Area. Seismic activity during 1995 was as follows:

- Maracas 3-D seismic survey, which extended eastward from the East Mayaro survey recorded in 1991-1993.
- Galera 3-D seismic survey, along the Darien Ridge, north-east of the Samaan Field. This survey ties in to the South East Darien survey recorded in early 1993.
- Claro Prospect 3-D seismic survey, south of Amoco's SEG lease line and into Venezuelan waters.

These surveys were conducted by PGS Exploration (US) Inc., using the vessel MV Ocean Explorer. Extensive onboard processing systems were provided by PGS Tensor who completed all the navigation processing and some pre-stack analysis onboard the seismic vessel.

Data Re-processing

As part of the agreement for partial divestment of the power generation assets of the Trinidad and Tobago Electricity Commission (T&TEC), Amoco was required to re-process 1000 km of deepwater seismic acquired by the Government of Trinidad and Tobago over Blocks 26 and 27. These data were acquired for the Government by Western Geophysical in 1980/81.

British Gas Trinidad Limited (British Gas)

Hazard surveys were conducted by British Gas over the Marlin #1 and #2, and the North Dolphin drilling locations in 1994 and the Dolphin Pipeline Route (NGC's 30") in 1995.

Enron Gas and Oil Trinidad Limited (Enron).

Enron conducted a number of hazard surveys over the South East Coast Consortium (SECC) Block in order to determine design parameters for the location of various offshore facilities. These were at the following locations:

- South East of the Kiskadee platform 4.8 x 2.5 km.
- N.G.C. 0.98m diameter. pipeline from Cassia to Pelican.
- Kiskadee Platform: to confirm location of platform.
- Kiskadee #1 well head: to determine location.
- Connection of 0.26 m diameter pipeline from the Ibis Field to the NGC's 0.4 m diameter pipeline.
Site of jack-up rig

Trinmar Limited

Trinmar continued the interpretation of the two 3D seismic surveys in the Soldado fields carried out over the past two years. To date, twenty leads have been identified. By year end 1994, all basic structural field mapping in Southwest and West Soldado Fields was completed, with work remaining in Main, North, East and Fortin Offshore Fields completed by the end of 1995. Most of the mapping has been done with the aim of identifying development and stepout drilling opportunities. Exploration will be emphasized after development mapping is completed.

Unocal Trinidad Limited (Unocal)

Unocal conducted four site surveys over their prospect areas - Emerald, Topaz, Jade, and Amber Area: 418.8 sq. km

Exploratory Drilling

The total number of wells spudded in Trinidad and Tobago increased to 97 in 1995. This was 28 more than were spudded in 1994. Total depth drilled was 491,931 feet (150 039m) an increase of 15% over the 1994 footage of 426,194 feet (129 989m). Rig months utilized in achieving this footage were 71.9. Of the 97 wells spudded, 7 were classified as exploration. Exploration footage, 84,302 feet (25 712m), accounted for 17% of total footage, down 24% of the 1994 footage when ten exploration wells were spudded.

Four companies-Trinmar, Trintomar, Premier and Moraven-did no drilling in 1995. Two new companies - British Gas and Unocal- commenced drilling activities in 1994. By July 1995, however, Unocal terminated its operations after unsuccessful exploration attempts in Block 89/3.

Amoco Trinidad Oil Company

Amoco spudded 27 wells in 1995, 8 more than 1994. Of the 27 wells spudded, 22 were classified as development and 5 as exploration.

The total depth drilled increased by 21.4% to 210,210 feet (64 114m) with development footage accounting for 152,593 feet (46 541m) and exploration 57,617 feet (17 573m).

Six rigs were utilized in 1995. These were Gorilla II, Gorilla IV, Well Services Marine #1, Well Services Marine #3 Global Marine Adriatic VI and Pool Santana 451. Rig Months achieved in 1995 were 32.46 as compared to 33.39 in 1994.

The five exploration wells spudded were Corallita I, NEQB-4, El Diablo 1 S.T, SEG-14 and SEG-16. This exploration programme was successful in proving up additional gas reserves. In 1994 the five exploration wells spudded were SEG-13, EM-3, EM-4, SEG-15 and Maraval 1. The Flamboyant #2 well spudded in 1993 was completed in 1994. Of the 22 development wells drilled in 1995, 7 were in the Samaan Field, 7 in the Teak Field, 2 in the Poui Field 5 on the Immortelle Platform and the Banyan I well on the Banyan platform. New oil due to drilling was 5062 bopd, with the Banyan Field contributing 1644 bopd. Of the 14 development wells drilled in 1994, 7 were in the Samaan Field, 3 in the Teak Field, one in the Poui Field and the rest in the Immortelle Field where the first horizontal well in Trinidad was drilled- Immortelle-8. New oil due to drilling was 4147 bopd, and this included 220 bopd after stimulation of these new wells.

British Gas Trinidad Limited

British gas commenced its exploration drilling programme ahead of schedule and began drilling Marlin 1, its first well, in December 1994. Marlin #1 was a deviated well drilled to a depth of 3 619.5m. The well was plugged and abandoned in January 1995.

Dolphin #5 ST-1 (DOL-5, ST-1) a deviated well spudded on January 12, 1995 was to be drilled to a proven total depth of 5 333.7m. drilled depth (dd) 4 571.8m. sub sea(ss) to test the potential of Pleistocene age 'C' through 'J' sand packages. However, due to stuck pipe at 1 711.7m. and after several unsuccessful fishing attempts, the well was sidetracked on January 31, 1995. The well was terminated on April 16, 1995 before the 'H' and 'J' sands were encountered.

Enron Gas and Oil Trinidad Limited

Enron spudded seven wells in 1995 and completed nine. All were development. Total depth drilled was 85,640 feet (26 120m) utilizing 6.1 rig months. In 1994, 111,385 feet (33 972m) of development footage was drilled utilizing 10.0 rig months. The Ibis platform was installed in February 1995. Six wells were drilled in this field.

In 1994, Enron completed phase A of its development of the Kiskadee field by drilling and completing five development wells. One development well was drilled in the Ibis field. In 1995, five more development wells were drilled in the Kiskadee and Ibis Fields and included KB-1, IB-2, IB-3x, IB-4ST and IB-5x respectively.

Exxon Trinidad Limited

Exxon spudded one exploration well, St Croix #1. Footage drilled was 17,587 feet (5 364m) utilizing 5.6 rig months. Exxon's exploration programme on land did not yield commercial production. A total of three wells was drilled by Exxon to 1995. Exxon spudded one exploration well in February 1994, Iguana River and completed drilling one, Rocky Palace#1. Footage drilled was 15,344 feet (4 679m) utilizing 8.0 rig months.

Petrotrin

Petrotrin undertook no exploration drilling during 1994 and 1995. The company's drilling operations were centred around the eight development wells in the Externally Financed Package #1(EFP1) and twenty six wells under the International Development Bank (IDB) sponsored Cruse E secondary recovery project. Total depth drilled in 1995 was 159,396 feet (48 616m), as compared to 85,248 feet (26 001m) in 1994, 87% more than that achieved in 1994. The above includes drilling by Lease Operators Limited and water wells for supply of water for the Cruse 'E' project. There was no farmout drilling in 1995.

The company was involved in several studies, the major one being the Lagoven/Petrotrin Block 1, Gulf of Paria project which focused on the prospectivity of the Miocene to Recent in the Gulf. The study was completed in 1994 and was presented to the Ministry in 1995. Detailed geological evaluations were also done in Penal/Barrackpore to identify wells for EFP2 and the Pelican, East Mandingo and Pt. Ligoure areas which are earmarked for farmout.

Premier Consolidated Oilfields Limited (PCOL)

PCOL did no drilling in 1995. In 1994 two wells were spudded and footage drilled was 4950 feet (1 510m) utilizing .5 rig months.

Unocal Trinidad Limited

Unocal commenced its exploration programme in July 1994 with the drilling of Emerald 2 and Topaz 1 in Block 89/3. In 1995 this programme continued with the drilling of Amber #1. Depth drilled was 8,138 feet in 83 rig days. Unocal's Exploration programme in Block 89/3 was not as successful as anticipated and the company terminated operations after the abandonment of well Amber #1 on July 07, 1995.

Development Activities

Krishna Persad & Associates Limited

On December 30, 1995 an Exploration and Production (Public Petroleum Rights) Licence was granted to Mora Oil Ventures Limited (Krishna Persad & Associates Limited) over Block 44/57 (Mora Field) off Trinidad's east coast. The licence is of six years duration with an option to renew. This block comprises approximately 2036.9 ha. (5033 acres). Commercial discovery was previously declared by the former licensee, Amoco, and Moraven continues to produce oil and gas from this field.

Mobil Trinidad Limited

By agreement dated July 26, 1995, the licensee, Mobil-70%/Trintopec-30%/(now Petrotrin), was released from its obligations under the Exploration and Production Licence for Block S-11 that had been signed on September 29, 1989.

Northern Basin Consortium

By deed dated January 11, 1995 an Exploration and Production (Public Petroleum Rights) Licence was granted to the Northern Basin Consortium to explore for hydrocarbons in an area comprising approximately 113,924 ha. in the Northern Basin onshore.

In November 1995, Anderman/Smith Caroni, Inc. and Krishna Persad and Associates Ltd., as Licensees, made an assignment of an undivided 24.9% participating interest in the Northern Basin Licence to Conwest Exploration (International) Ltd. As a result, the participating interests are constituted as follows:

Shell Exploration and Production Company Trinidad Ltd.	-	32.5%
Conwest Exploration (International) Ltd. (operator)	-	24.9%
Petroleum Company of Trinidad & Tobago Ltd.	-	25%
Anderman/Smith Caroni, Inc.	-	16.6%
Krishna Persad and Associates Ltd	-	1%

The work of planning, permitting and mobilizing prior to shooting of the seismic survey had commenced since April, 1995.

Petrotrin- Farmouts/Joint Ventures and Lease Operatorships

As part of its structured effort to generate exploration and development activity and increase production from its licensed area, Petrotrin undertook to extend its farmout programme on land (nine blocks on offer) and to institute similar programmes for some of its marine acreage (eight blocks on offer). To this end, seventeen blocks were offered for farmout and joint ventures by way of competitive bidding in 1993. By 1994, Farmout blocks had been granted to:

Block	Awardee
Tabaquite Central	Coastline International Inc.
South Quarry/Morne Diablo	Micla
South Erin	Anderman/Smith
East Brighton Marine Area (Joint Venture)	PCOL/ Neal & Massy/ Petrotrin
Boodoosingh	Hydrocarb Trinidad Limited

As at October, 1995, three blocks were active, producing 336 bopd. Six additional blocks were awarded and production and/or exploration activity from these blocks was expected to commence during the first quarter of 1996. The Lease Operatorship programmes, which involve the re-activation of idle wells in order to increase oil production, were also pursued vigorously during 1994 - 1995. Fourteen blocks are currently active producing 1,772 bopd by October, 1995. In these blocks, 1,114 wells have been leased, of which 270 are active. Six additional blocks have been awarded and production facilities are under construction. Production from these new blocks is expected to commence during the first quarter of 1996.

Trinidad Exploration and Development Ltd (TED)

Exploration and production (private petroleum rights) licence

Both the State and private individuals may claim ownership of the oil in the substratum, since the Trinidad and Tobago Petroleum Act Chap. (62:01) allows for both public and private petroleum rights on land. TED in June, 1993 applied for an Exploration and Production (Private Petroleum Rights) Licence over approximately 2,600 acres located in the Ward of Cedros.

This application was approved in June, 1994 subject to successful negotiation of the licence. In the absence of any precedent for a private Petroleum Rights Licence, since it is the first time that a licence over solely private rights is being granted under the Petroleum Legislation, the following guidelines are to be applied:

- a minimum of 500 acres
- Minister's approval of a minimum work programme
- Petroleum operations in the licensed area must conform to accepted industry standards
- Licensee's work programme to be monitored and supervised by the Minister
- Royalty payments not applicable
- Statutory payment of Treasury deposit
- In all other respects the Private Petroleum Rights Licence shall conform to the requirements of the Petroleum Legislation.

Crude Oil

The average crude oil production for Trinidad and Tobago during 1994 was 130,932 bopd, which in 1995 decreased by 0.4% to 130,414 bopd. All Companies showed decreases except Enron and Moraven. Moraven started production on January 01, 1995. Factors having a positive impact on production levels were:

- the coming on stream of the Immortelle field in January 1994.
- the introduction of the new technology in 1995 as horizontal wells were drilled in the Immortelle field
- the completion of a second well in the Flamboyant field.
- development of the new fields, Banyan and Ibis in 1995.
- Enron's increased gas sales to NGC and its corresponding condensate production. Production went from 3,276 bopd in 1994 to 6,470 bopd in 1995, almost doubling production;
- Petrotrin's continued success of its Lease Operatorship and Farmout programme;
- response from Trinmar's Waterflood.
- the start of production by Moraven in January 1995.

Factors having a negative impact on crude oil production were:

- a 45% drop in Cassia's condensate production due to further cutbacks in gas production in this field;
- an 11% drop in Poui's production and a 17% drop in Teak's production due both to natural decline and small additions of new oil due to drilling;
- a 7.8% drop in Petrotrin's production;
- a 17% drop in Trintomar's production due to wells producing with high water cuts and corresponding decreases in gas and condensate production;
- rupture on the NGC 16 inch gas pipeline near the Pelican Platform in February caused the shutting in of Kiskadee platform for nineteen days. Also in March, two days of downtime due to ruptured NGC onshore gas pipeline affected condensate production.
- industrial action at Trinmar, Petrotrin and PCOL for about two months.
- shutdown of PCOL's steamflood.

Amoco Trinidad Oil Company

Crude oil production at Amoco averaged 59,052 bopd in 1995, 0.2% below the 1994 average of 59,194 bopd and 1% above the projected average of 58,500 bopd. Production increases in 1995 were seen in the Samaan and the Immortelle Fields, which had come on stream in January 1994. The Poui, Teak, Flamboyant and Cassia Fields showed decreases. The Banyan Field came on stream in March 1995 and averaged 1,644 bopd for 1995.

New oil production from drilling was 5,062 bopd, compared with 3,927 bopd in 1994. This was the highest rate achieved over the last three years. This success was attributed to new technology in terms of horizontal wells and the Banyan Field development. Workover activity on old wells contributed a further 3,408 bopd to the total company production, an increase of 26% when compared with 1994's workover oil of 2,710 bopd.

Teak Field production decreased by 17.4% from 25,320 bopd in 1994 to 20,839 bopd in 1995. This was primarily due to generally steep declines in the field and a contribution of only 80 bopd of new oil due to drilling. All platforms showed decreases (except Teak 'D') with Teak 'A' the largest contributor with an almost 30% decline.

Poui Field production decreased by 11% to 14,366 bopd in 1995 from 16,033 bopd in 1994. This was due to a small contribution of 90 bopd from drilling activity when only two wells were drilled of which one was successful. Production from the Poui 'A' platform fell by 19% to 5,872 bopd and production from the Poui 'B' platform fell by 3.3% to 8,464 bopd.

Samaan Field production increased by 5% from 13,068 in 1994 to 13,734 bopd in 1995. This was due mainly to a new oil contribution of 683 bopd in 1995 because of its drilling activity. Samaan platforms B and C showed increases, while in 'A' there was a 16% decline.

Cassia Field condensate production fell by 45% to 668 bopd in 1995. This was the result of cutbacks in gas production from Cassia with the development of Immortelle. Increased production by Enron further reduced Amoco's total supply to the NGC, thereby affecting condensate production.

Flamboyant Field condensate production averaged 2,027 bopd in 1995, 5.7% less than the 2,155 bopd figure in 1994. Gas production averaged 132.9 MMcfd from two wells.

Immortelle Field production averaged 5,804 bopd compared to 1,383 bopd in 1994, when production from this field began. Horizontal drilling proved successful in Immortelle Field and was the major contributor to new oil production by Amoco for 1995. Gas production from Immortelle averaged 103.4 MMcfd for 1995.

Banyan Field is Amoco's newest field. Its single well was completed in March 1995. Condensate production averaged 1,644 bopd and gas production 59.6 MMcfd. This platform is shared with Enron.

Moraven

Moraven is a new oil company which has farmed in the Mora Field from Amoco effective December 31, 1994. Moraven now operates the Mora Field. Average crude oil production from Mora Field was 504 bopd in 1995. In 1994 Mora Field averaged 40 bopd. Production peaked in May 1995 at an average rate of 925 bopd and declined to 160 bopd by December 1995 owing to technical well problems.

Petrotrin

Crude oil production in Petrotrin averaged 28,884 bopd in 1995, 7.4% less than the 1994 average of 31,239 bopd. New oil due to drilling averaged 216 bopd compared to 530 bopd in 1994. New oil due to workovers averaged 314 bopd compared with 417 bopd in 1994. These figures are exclusive of oil produced by lease operators and farmouts.

Enhanced Oil Recovery (EOR) (steam, carbon dioxide and waterflooding) averaged 9,121 bopd in 1995. This compares with 10,513 bopd in 1994. Thermal production averaged 8,040 bopd. The non-thermal EOR production (carbon dioxide and waterflood) averaged 2,179 bopd in 1995, with carbon dioxide averaging 489 bopd and waterflood 1,690 bopd. EOR represents 31.6% of Petrotrin's production and steam represents 88.1% of EOR.

Lease Operators and Farm out

Petrotrin's Lease Operators production averaged 1,755 bopd in 1995 as compared to 1,630 bopd in 1994, an increase of 7.7%. Farm outs averaged 287 bopd in 1995 as compared to 264 bopd in 1994 an increase of 8.7%. Petrotrin's total production, including lease operators and farm out companies, was 30,855 bopd. This compares with 33,133 bopd in 1994, a decline of 6.9%.

PCOL

PCOL production for 1995 averaged 659 bopd, a 6.9% drop from the 1994 average of 708 bopd. There was no new oil from drilling or recompletions. Production from the company's thermal scheme averaged

76 bopd in 1995 compared to 106 bopd in 1994. This scheme is no longer on injection because of surface breakouts. Injection was stopped in May 1995. This company has no plans to recommence injection into this scheme.

Trinmar Limited

Crude oil production in Trinmar averaged 31,735 bopd during 1995, a 4.5% decrease from 1994's average of 33,202 bopd and 9.5% below the projected average of 35,050 bopd. The major contributors to Trinmar's shortfall in production were the industrial action from August 7 to October 7, lack of drilling activity and poor results of workovers. Eleven recompletions were done and new oil contribution was only 299 bopd, compared to nineteen wells in 1994 with a new oil contribution of 2,032 bopd.

Secondary oil from the waterflood project averaged 1,865 bopd in 1995, an increase of 53% over 1994's average of 1,217 bopd.

North Soldado is Trinmar's largest producing field and produced 41% of Trinmar's oil in 1995. Production decreased by 6% to 13,136 bopd. Production peaked at 15,138 bopd in April and dipped to a low of 11,165 in September due to the industrial problems. Gas lift problems in the cooler months of the year greatly continued to affect this field's production as 86% of its wells are on gas lift.

East Soldado produced 17% of Trinmar's oil in 1995 and averaged 5,384 bopd, 15% less than in 1994. Measurement adjustments and allocation were responsible for some of this decrease. A new metering system - Bigtex meter - had been installed in 1994. Also, hydraulic pumps problems continued to plague East Field. A pilot study is being done to convert the hydraulic pumps to Progressive Cavity Pumps (PCP). In June, production peaked to 5,945 bopd and in September dipped to 4,707 bopd due to the industrial problems.

Main Soldado produced 20% of Trinmar's oil in 1995 at an average rate of 6,302 bopd, 4% more than in 1994. The higher rate was achieved because of waterflood oil production. Production peaked at 7,260 bopd in February and dipped to 5,614 bopd in September owing to the industrial problems. Other factors causing lower production were reduced gas injection and high tank shut-ins due to oil-to-shore pump downtime in May.

Southwest Soldado produced 20% of Trinmar's oil in 1995. The average rate was 6,269 bopd, 5% more than in 1994. This increase was due to the ongoing recompletion programme and also gas lift optimization and related workovers. Production peaked at 6,987 bopd in July but was interrupted by the industrial action when it dropped to 5,820 bopd in September.

Minor Fields comprise Fortin Offshore (FOS), Point Ligoure and West Soldado. These three fields combined produced 2% of Trinmar's oil. Production in 1995 was 644 bopd, 21% less than in 1994.

Trintomar

Trintomar produced gas at an average rate of 10.8 MMcfd an increase of 24% from 1994 production

average of 8.7 MMcfd and condensate at an average rate of 1,156 bopd, 17% less than in 1994. Production was influenced by workover activity and increased water cut with accompanying decreases in gas and condensate production.

Secondary and Enhanced Oil Recovery Operations

Secondary and enhanced oil recovery contributed 14% of the country's total oil production in 1995. There were 28 active projects which produced a total of 18,494 bopd. This represented a decrease in the production figures for 1994 which were 20,997 bopd or 16% of the country's total oil production. The lull which had crept into this sector's activity was broken by the implementation of the large-scale Trinmar IDB funded 8011 waterflood project during 1994 and the Heavy Oil projects on land during 1995.

Amoco Trinidad Oil Company

Although Amoco continued with its programme of implementation of small scale waterfloods and now has four projects in the Teak field, the level of water injection is not commensurate with the requirements of the reservoirs. Further, because of problems associated with conveying solids-free water to reservoirs in the Poui field, the Poui waterflood project had to be abandoned in April 1995. As such, secondary oil production continued to fall at the company, and averaged 6537 bopd during 1995 as compared with 7870 bopd during 1994. The increase in 1994 was associated with the good performance of the MMIOU sand after sixteen months of continuous injection.

Petrotrin

Waterflood

Significant gains in production were realised from waterflood operations. Secondary oil production increased by 526 bopd and averaged 1567 bopd for 1995, primarily as a result of the performances of the Catshill N sand waterflood and the two offshore waterflood projects at Galeota. The Catshill N sand waterflood which has been in existence for over a decade is now being pressured up and wells are responding favourably.

Steamflood

Crude oil generated by this method decreased by 10.8% during 1995, concomitant with the 19.5% reduction in steam injection volumes in the now mature steam injection projects at Fyzabad, Guapo, Apex Quarry and Palo Seco. Continuous steam injection has not yet commenced in the IDB-funded Point Fortin Cruse E and Forest Reserve Phase 1 East Expansion projects.

Carbon Dioxide

Secondary oil production from immiscible carbon dioxide flooding increased by 30% over the previous year's figure to 537 bopd, reflecting the increasing response to carbon dioxide injection seen over the last five years. Just over 2 MMcfd of carbon dioxide was injected during 1995.

PCOL

Owing to uncontrollable surface break-outs of steam, the company had to reduce steam injection and ultimately abandon the Fyzabad steamflood project in 1995.

Trinmar Limited

There were positive indications in the performance of the Trinmar IDB-funded 8,011 waterflood project. Substantial volumes of water were injected, averaging 29,000 bopd during 1995. As a result, production response prior to reservoir fill up has been favourable, with oil production increasing from 1,550 bopd in 1994 to 2,011 in 1995. Towards year's end, the difficulties associated with maintaining uniform injection profiles and controlling high water cuts from producing wells were being successfully addressed.

Natural Gas

Natural gas production for Trinidad and Tobago averaged 21.3 mega cubic metres per day (Mm³d) (750.8 MMcfd) for 1995, an increase of 7.5% on the 1994 average which was Amoco, the country's largest gas producer and supplier of natural gas to the National Gas Company (NGC), accounted for 73.9% of the total gas production.

Amoco Trinidad Oil Company

For 1995, Amoco's daily gas production averaged 15.71 Mm³d (555 MMcfd) which represented a 1.0% decrease on the 1994 figure. Of the gas produced, 9.91 Mm³d (350 MMcfd) of natural gas was sold to the NGC salesline. It should be noted that the 1994 sales figure was 11.03 Mm³d (389 MMcfd). In addition to the company's gas well production, sales gas and gas for gas lifting was sourced from its Samaan and Poui compression facilities.

Enron Gas and Oil Trinidad

Enron Gas and Oil Trinidad began operations in Trinidad in late 1993, to develop the gas and condensate reserve in the Kiskadee, Ibis and Oilbird fields in the South East Coast Consortium (SECC) licensed area. In its second full year of operations in the development of the first field, Kiskadee, the company's average daily gas production was 3.58 Mm³d (126.5 MMcfd), all of which was sold to the NGC saleslines, while its condensate production averaged 3,289 bopd. Gas production peaked in May at 2.89 Mm³d (150 MMcfd) with 4,187 bopd. However, from the third quarter of 1995, the company was restricted in its gas production by the NGC, as a result of a surplus in gas supply to the transmission system.

Trintomar Limited

For the entire year, Trintomar produced a total of 111.8 million cubic metres (3.97 bcf) of gas with 0.42 million barrels (MMbbl) of condensate. The average daily gas produced was 0.26 Mm³d (10.8 MMcfd) with 1410 barrels condensate per day (bcpd), which represented a 24% increase on the 1994's gas production figure of 0.25 Mm³d (8.7 MMcfd). At year-end, only two wells were on production.

Trinmar Limited

Trinmar, another marine based producer, accounted for 5.1% of total gas production at an average daily rate of 1.08 Mm³d (38 MMcfd). This represented a 5.6% decrease when compared with the previous year. Gas produced was mainly associated gas which was hinged on the company's oil production which showed a decrease in 1995, as a result of industrial action during the third quarter of the year.

Land production - Petrotrin

Natural gas production from the land fields of the state-owned company, Petrotrin (formerly Trintoc and Trintopec) represented 2.7% of total production. The former Trintoc fields achieved a production rate of 0.42 Mm³d (14.73 MMcfd), while the former Trintopec fields produced at 0.15 Mm³d (5.2 MMcfd).

Conservation

The National Gas Company (NGC) compressor platforms in the Teak and Poui fields compressed a total of 1.17 billion cubic metres (41.22 bcf) of gas at an average daily rate of 3.20 Mm³d (112.9 MMcfd). Of this, approximately 1.07 billion cubic metres (38.81 bcf) was delivered into the sales line at an average daily rate of 3.01 Mm³d (106.3 MMcfd), while the remainder 0.19 Mm³d (6.62 MMcfd) was utilised as fuel on the platforms.

On the Teak compressor platform, 0.64 billion cubic metres (22.51 bcf) of gas was compressed at an average daily rate of 1.75 Mm³d (61.7 MMcfd), in comparison 1.77 Mm³d (62.5 MMcfd) was compressed in 1994.

On the Poui compression platform, a total of 0.53 billion cubic metres (18.71 bcf) of gas was compressed at an average daily rate of 1.45 Mm³d (51.8 MMcfd). In comparison, 1.34 Mm³d (47.4 MMcfd) was compressed in 1994. The increase was attributed to better compressor efficiency.

Utilisation

Gas utilisation for 1995 was 85.0% of total production. Overall utilisation averaged 24.47 Mm³d (864.7 MMcfd), which included quantities of re-compressed gas used for gas lift and sales. This overall utilisation showed an increase of 1.5% when compared to 1994. The oil companies' usage during 1995 accounted for 35.5% of total consumption. Power generation, the petrochemical based industries, and small industrial users accounted for the remainder which was used both as fuel and as chemical feedstock. Trinidad and Tobago Electricity Commission (T&TEC) utilised natural gas at a rate of 4.21 Mm³d (148.6 MMcfd), which was a 6.6% increase on the average rate for 1994. T&TEC continued to be the most significant single consumer of natural gas taking up 25% of the gas sold by the NGC.

The manufacturers of fertilisers (Arcadian, Tringen I, Tringen II, Hydro-Agri, and Arcadian Urea) accounted for 41.0% of the total volume of gas sold by NGC. The fertiliser manufacturers consumed gas at an average daily rate of 6.89 Mm³d (243.2 MMcfd), which was an increase of 2.1% on the previous year.

The daily average consumption for Arcadian was 3.05 Mm³d (107.7 MMcfd). The Hydro-Agri's Braun plant used 0.91 Mm³d (32.2 MMcfd), Tringen I plant consumption was 1.41 Mm³d (49.7 MMcfd), while the Tringen II used 1.22 Mm³d (43.1 MMcfd) and the Arcadian Urea plant accounted for 0.30 Mm³d (10.5 MMcfd).

The Trinidad and Tobago Methanol Company (TTMC I) plant consumed gas at a rate of 1.22 Mm³d (43.2 MMcfd), a decrease of 8% when compared with the average rate for 1994. The other methanol producer, Caribbean Methanol Company which began operations in October, 1993, consumed gas at a daily average rate of 1.35 Mm³d (47.5 MMcfd) in 1995.

Ispat utilised 1.06 Mm³d (37.6 MMcfd) of natural gas. This represented a 5.4% increase on the previous year. Nucor consumed gas at a rate of 0.12 Mm³d (4.06 MMcfd).

Gas production from Petrotrin's producing fields was supplemented by purchases from the NGC to provide the fuel necessary for Petrotrin's refineries. Natural gas consumption in the refineries averaged 1.26 Mm³d (44.5 MMcfd) which was a 2.6% decrease when compared with the figure for 1994.

Phoenix Park Gas Processors Company utilised gas at an average of 0.47 Mm³d (16.6 MMcfd) during 1995, of this 0.08 Mm³d (3.0 MMcfd) was used as fuel, while the remainder was converted to natural gas liquids.

Trinidad Cement Limited (TCL) and other small users consumed gas at a combined daily average consumption of 0.61 Mm³d (21.5 MMcfd).

Refining Industry

The crude throughput of the Pointe-a-Pierre refinery during 1995 was 97 711 bpcd representing a decrease of 4.89% over the previous year's figures. A total of 9.65 million barrels of crude oil was imported and processed, of which, 3.86 million barrels were refined under processing agreements, the remaining 5.79 million barrels were purchased crude. This was a decrease from 1994 as shown in Table VI where 11.1 million barrels of crude oil were imported and processed, of which 9.0 million barrels were refined under processing agreements, the remaining 2.1 million barrels were purchased crude.

Imported crudes comprised Venezuela's Lago Cinco, Columbia's Cano Limon, Suriname's Saramacca and Nigeria Qua Iboe. Total indigenous crude processed amounted to 27.0 million barrels.

Table 1
Crude oil imports (bbl)

	1994	1995
Lago Cinco	6,586,410	2,724,922
Saramacca	971,128	1,136,811
Cano Limon	2,095,323	5,289,853
Qua Iboe	0	501,029
Total	11,051,520	9,652,615

Table II
Average daily refinery throughput (bpcd)

Year	Point Fortin	Pointe-a-Pierre	Total
1991	29,390	84,034	113,424
1992	30,401	85,232	115,633
1993	22,082	82,333	104,415
1994	5,315	97,424	102,739
1995	0	97,711	97,711

Table III
Refinery output (bbl)

Product	1994	1995
LPG	610,075	760,521
Mogas	6,921,596	7,803,614
Aviation Gas	44,999	34,534
White Spirit	767,834	2,367
Kero/Avjet	4,275,512	3,662,871
Gas Oil	6,739,066	7,491,681
Fuel Oil	17,109,892	14,636,937
Lube Oil	530,683	12,653
Bitumen	151,166	141,622
Petrochemicals	(6,238)	65
Other products*	1,608,133	228,890
Gas/Loss	1,400,475	98,957
Total	40,153,193	35,866,712

*Finished/Unfinished products

Domestic Petroleum Product Consumption

Table IV
Domestic Petroleum Product Consumption
(Million Litres)

Product	Quantity	
	1994	1995
Lpg	596.6	595.9
Motor Gas	388.1	364.0
Av. Gas	0.8	0.5
Kero/Jet	86.2	97.1
Gas/Diesesl Oil	238.3	246.0
Fuel Oil	6.2	6.8
Asphaltic Products	0.2	5.6
CNG	4.5	7.0
Total	1331.4	1322.9

Petrochemical Industry

Nitrogenous fertilizers, methanol, LPG and condensate Methanol

Total methanol production decreased by 5.534% from 1,019,522 tonnes in 1994 to 963,101.6 in 1995. This was due to lower production, caused by increases in downtime mainly for maintenance reasons, at both the Caribbean Methanol Company plant and Trinidad and Tobago Methanol Company plants.

Trinidad and Tobago Methanol Company's production declined by 8.067% (39,312 tonnes). The longest shutdown was a turnaround in June. Caribbean Methanol Company's production also declined by 3.2% (17,108 tonnes). The longest shutdown was a turnaround in October/November. Total exports declined by 7.9% from 1,021,321 tonnes in 1994 to 940,530 tonnes in 1995.

Mechanical work on the 1650 mt/d TTMC II methanol plant was completed.

Ammonia

Total ammonia production increased by 2.25% from 2,010,911 tonnes in 1994 to 2,056,193 tonnes in 1995. This was brought about by increases from Arcadian and Hydro-Agri plants.

Arcadian's production increased by 8.96% to 1,003,186 tonnes in 1995. The commissioning of the 750 st/d "03" ammonia plant, being currently re-assembled, is scheduled for mid-April 1996.

The Hydro-Agri plant onstream time and production rate increased in 1995, resulting in an increase in production of 19.4%.

The Tringen I and Tringen II plants on-stream time and production rate declined in 1995, resulting in a production decrease of 15.07% and 3.2% respectively. Most downtime was for maintenance reasons.

Total ammonia exports increased by 7.2% due to increases from Arcadian and Tringen II.

Urea

Urea production in 1995 was 573,629 tonnes which was 15.35% higher than 1994's production. Exports increased by 12.57% to 513,381 tonnes.

LPG and condensate (PPGPL)

PPGPL production increased in 1995 by 7.7% due to an increase in the volume of natural gas processed and percentage of liquids extracted from the inlet gas. Some modification was done in September/October as part of its 750 MMcfd capacity upgrade.

Table V
Production and Export of Petrochemicals 1995
(tonnes)

Company	Product	Production		Export	
		1994	1995	1994	1995
Hydro-Agri	Ammonia	202 592	241 961	244 177	186 227
Tringen 1	"	404 438	343 491	389 309	350 444
Tringen 11	"	483 196	467 555	476 362	483 411
Arcadian	"	920 685	103 186	601 852	793 433
Sub total	"	2 010 911	2 056 193 0	1 711 700	1 813 515
TTMC	Methanol	487 309	447 997 2	499 530	402 628
CMC	"	532 213	515 104 4	521 791	537 904
Sub total	"	1 019 522	963 101 6	1 021 321	940 532
Arcadian	Urea	497 296	573 629	456 058	513 381
PPGPL	Propane	1,436 196	1 658 668	1460 587	1479 800
	Butane	975 056	1 111 763	957 706	1 067 844
	Natural gasoline	1 065 847	976 951	357 550	1 040 582

Accidents

In 1994 there were 217 reportable lost-time accidents (R.L.T.A.) in the oil industry, while in 1995, 168 accidents were recorded. Petrotrin's Pointe-a-Pierre and Point Fortin refineries or manufacturing sector operations reported 64 in 1994 and 48 in 1995, while their other operations reported 62 and 68 respectively.

Trinmar accounted for 58 and 31, Amoco 28 and 13, and British Gas two with no report in 1995.

Fatalities

In 1994 there were two fatalities, which occurred at Petrotrin and Trinmar. In 1995 there were three fatalities and these occurred at Hydro-Agri; on board the semi-submersible drilling rig - Ocean Baroness; and during the repair to the 1611 pipeline there was a diving fatality.

Pollution incidents

The Ministry of Energy and Energy Industries in 1994 responded to 211 incidents of pollution reported by the oil companies. Approximately 3,437 bbl of crude oil escaped into the environment and 3,187 bbl were recovered. (See Table V I). Trintoc Petrotrin with 179 reported incidents experienced the greatest number of spills. The majority of these oil spills were due to trunkline, pump and pipeline leaks. The company recovered 3,039 bbl (53.63%) of the estimated 5,761 bbl of crude oil that escaped during the year.

Trinmar reported 19 oil spill incidents offshore in which approximately 408 bbl oil were spilled while only 65 bbl were recovered. This resulted in a net loss of 342 bbl.

Amoco reported six oil spills the least number of oil spill incidents offshore. An estimated quantity of 230 bbl oil was spilled while only 10 bbl oil was recovered.

PCOL also reported a small number of pollution incidents - seven. Of the 229 spilled from these incidents 74 bbl were recovered resulting in a net loss of 155 bbl.

In 1995, 199 pollution incidents were reported by the various oil companies. Approximately 2,919 bbl of crude oil escaped into the environment while an estimated 3,792 bbl were recovered.

Table VII shows the oil pollution statistics for 1995. Petrotrin reported 173 incidents which resulted in approximately 6,320 bbl of oil being spilled and 3,595 bbls being recovered.

Amoco reported only one pollution incident in which 50 bbl oil was spilled offshore and none recovered. PCOL reported three oil spill incidents with 82 bbl oil being spilled and 81 bbl recovered.

Two incidents occurred at the Hydro-Agri site, Savonetta in August and November respectively. The first, an ammonia release at the Tringen II pier resulted in the death of an ammonia tanker crew member. The second was a rupture of a process air line in the Hydro-Agri plant during start-up. All findings and

recommendations from subsequent investigations were discussed fully with company officials. The Ministry informed the companies of its intention to develop a safety auditing programme for refining and petrochemical plants, an idea welcomed and supported at all meetings.

Approximately eight grab samples were taken monthly in 1995 from the drains of the PPGPL, Arcadian, Hydro-Agri, Tringen, TTMC and CMC plants. A total of 494 tests were performed on the samples and 116 results exceeded the limits. Companies were informed of the results in November and their comments on the results are being discussed with them. The aim is to get a commitment from these companies to reduce the level of pollutants in these waters.

Table VI
Oil Pollution Statistics 1994

Company	No. of Incidents Reported	Est. Quantity Spilled	Est. Quantity Recovered	Est. Net Loss	%Recovered
Trintoc	110	4,038	1,714	2,323	42.46
Trintopec	11	209	162	47	77.42
Trinmar	19	408	65	342	16.10
Amoco	6	230	10	220	4.35
PCOL	7	229	74	155	32.31
Petrotrin	58	1,513	1,162	350	76.84
TOTAL	211	6,627	3,187	3,437	48.12

Table VII
Oil Pollution Statistics 1995

Company	No. of Incidents Reported	Est. Quantity Spilled	Est. Quantity Recovered	Est. Net Loss	%Recovered
Petrotrin	173	6,320	3,595	2725	56.88
Trinmar	21	245	107	138	43.67
Trinmar	1	14	9	5	64.29
Amoco	1	50	0	50	0.00
PCOL	3	82	81	1	98.78
TOTAL	199	6,711	3,792	2,919	56.50

Table VIII
Comparison of Pollution Statistics

Description	1994	1995	%Change
Spill Incidents	211	199	
Oil Spilled (bbl)	6,628	6,711	1.25
Oil Recovered	3,189	3,791	18.9
Oil Lost	3,438	2,919	-15.11

Summary Table IX
Report of Crude Oil Spilled
by volume (bbl)

Period	BBL Spilt	BBL Recovered	Net Loss	% Recovered
1989	2,452	1,948	504	79.40
1990	10,855	8,889	1,966	81.90
1991	5,345	2,860	2,485	53.50
1992	8,115	5,079	3,036	70.10
1993	10,111	2,678	7,432	26.50
1994	6,628	3,189	3,438	48.12
1995	6,711	3,792	2,919	56.50

Laboratory Analyses

The Ministry was actively involved in conducting analytical studies on different aspects of the energy industries. CARIRI's Petroleum Testing Laboratory honoured its TT\$ 500,000 contract with the Ministry of Energy and Energy Industries in 1994 and 1995 by performing analyses on 2,020 and 1,304 samples respectively. See Table X for the tests performed.

The Laboratory also cooperated with the Ministry in its monthly sampling and effluent quality studies at Petrotrin.

Table X
Laboratory analyses

Description	Total No. Samples Tested		Fee TT\$	
	1994	1995	1994	1995
Gasoline Analysis Excluding Lead	480	218	38,400.00	94,400.00
Gasoline Analysis Including Lead	36	27	48,780.00	33,165.00
Gasoline Analysis Low Lead Only	—	29	—	17,400.00
Oil and Grease Analysis	60	172	13,500.00	38,700.00
Pointe-a-Pierre Effluent Sampling	575	392	101,855.00	91,895.00
Point Fortin Effluent Sampling	420	214	78,000.00	68,245.00
Point Lisas Effluent Sampling	414	226	105,500.00	109,827.00
Salinity on Water Sample	2	—	360.00	—
pH on Water Sample	2	—	150.00	—
Crude Oils for Dry API Gravity	18	—	2,880.00	—
Analysis of Crude Oil	—	18	—	1,920.00
RLE 1 Analysis	13	8	65,000.00	40,000.00
TOTAL	2020	1304	454,425.00	495,552.00

Projects

Competitive Bidding

The Geology Department and the Energy Planning Division played an integral role in preparing for a new round of Competitive Bidding which involved several blocks in the east coast marine acreage. (The staging of this activity was consistent with Government's desire to promote exploration of the country's hydrocarbon resources and thereby increase current crude oil and natural gas reserves and production. The Division was occupied for all of 1995 with the Competitive Bid Round). The pre-bidding preparation involved the evaluation of areas to be offered for lease, the promotion of the blocks to international oil companies and the preparation of bid packages for sale to prospective companies. To allow for smooth administration, a decision was taken to divide the bidding process into three phases.

Under the Petroleum Regulations (Competitive Bidding) Order 1995, published February 24, 1995, five blocks off the east coast of Trinidad were offered in the first phase-Blocks 2(a), 2(c) Modified U(a) and U(b) and Block 5(a). In this phase two bids were received, one for Block 2 (c) by BHP Americas Inc. and the other for Modified U(b) by Enron Gas and Oil Corp. Both companies were offered the opportunity to negotiate with the State for the award of a Production Sharing Contract.

By an amendment to Competitive Bidding Order 1995 dated November 28, 1995, bids were invited for eight blocks off the east and south coasts of Trinidad. These were Blocks 2(ab), Blocks 4(a) and (b), Block 5(a) and (b), Blocks S-11(a) and (b) and Block Modified U(b). By the closing date of January 5, 1996, four bids had been received. Block 2(ab)-BHP/Talisman consortium, S-11(b) Elf Aquitaine, Block 5(b)- Amoco/Repsol and a single bid amalgamating Blocks 4(a), 4(b) and 5(b) by Conoco Exploration and Production B.V.

Some of the activities of this project included the setting of criteria for evaluation of the bids; the conduct of negotiations with the companies for the award of Production Sharing Contracts; and review and finalization the terms of a Model Production Sharing Contract. The Division also undertook an examination of the profiles of prospective bidders and assisted in the preparation of summaries of key features of our fiscal system for inclusion in data packages for sale to prospective companies. Based on their analyses and interpretation of the production and economic potential of the areas, companies bid for the rights to explore for and produce petroleum in the respective blocks. As of the end of 1995, negotiations for the award of the Production Sharing Contracts for the first phase were not yet completed, but it was expected that by the first quarter of 1996 at least two contracts would have been signed.

Revision and printing of the geological map of Trinidad

Efforts are being made to update the geological map of Trinidad and Tobago which had been compiled by Mr. Hans H. Kugler in 1959. In 1980, the author sent 100 prints to this Ministry with the proviso that no reprints should be made until the map was revised. Over the period, maps and cross-sections have been sold to research organizations, oil companies, educational institutions and

other relevant agencies and individuals who continue to request these coloured copies. Sales were discontinued as only 12 copies remained.

Because of the extensive geological and geophysical data acquired over the intervening 37 years, and the publication of numerous studies which provide new information, the Ministry is of the view that the revision and printing of Kugler's geological map is essential. Also to be updated and extended is the Lexique Stratigraphique of the Cenozoic and Mesozoic of Trinidad by Kugler.

The Ministry informed the industry of the project, and requested that data be made available for incorporation into the map. In this connection, a co-ordinating committee, comprising representatives from Petrotrin and the Ministry of Energy, was set up to collect the data. Amoco offered its assistance by retaining the services of a consultant geologist whose responsibilities include collating and editing the available new geological interpretations. The company contracted Geologist Data Services Inc. of Denver (GDS) to digitize the updated map.

Energy Sector Loan Contracts

During 1994 and 1995 the Energy Planning Division coordinated the annual consultations between the Government, the executing agency (Petrotrin) and the lenders - the Inter-American Development Bank (IDB) and the Caribbean Development Bank (CDB). These consultations were conducted in November 1994 and December 1995 in respect of loans for the Refinery Upgrade, Heavy Oil and the Trinmar Waterflood projects. With respect to these projects the consultations were required under the Energy Sector Loan contracts with the lending agencies. In addition, the Division monitored and prepared quarterly status reports for the IDB funded projects (Secondary Oil Recovery and Refinery Upgrading).

Methanol as a vehicular fuel

During the years under review the Energy Planning Division conducted research in the use of methanol as a vehicular fuel and was instrumental in the establishment of a committee involving relevant parties to develop a pilot fuel methanol (M85) project in Trinidad and Tobago. The main objective of the pilot project is to determine the viability of methanol as a vehicular fuel in Trinidad and Tobago. This involves the acquisition and analyses of relevant performance data on the drivability, safety, fuel consumption, exhaust emissions, acceleration and speed characteristics, etc. of M85 vehicles as they relate to local conditions.

The project committee comprises Caribbean Methanol Company Limited (CMC), Trinidad and Tobago Methanol Company (TTMC), National Petroleum Marketing Company (NPMC), UWI Engineering Institute and the National Gas Company (NGC). The UWI Engineering Institute accepted the responsibility of preparing a proposal for the pilot project.

The Division was in close liaison with the UWI Engineering Institute and participated in a number of meetings aimed at facilitating the development of the project proposal. A number of issues relating to

funding, vehicle acquisition and location of dispensing facilities were addressed and some decisions taken. The UWI Engineering Institute presented committee members with its final proposal in November 1995.

Unleaded Gasolene

Unleaded gasolene (RON 95) was introduced on the domestic petroleum product market in May 1995. The Division was responsible for setting the price of this new product which was accepted by Cabinet. Unleaded gasolene was being sold at 13 stations operated by the National Petroleum Marketing Company (NPMC) in 1995.

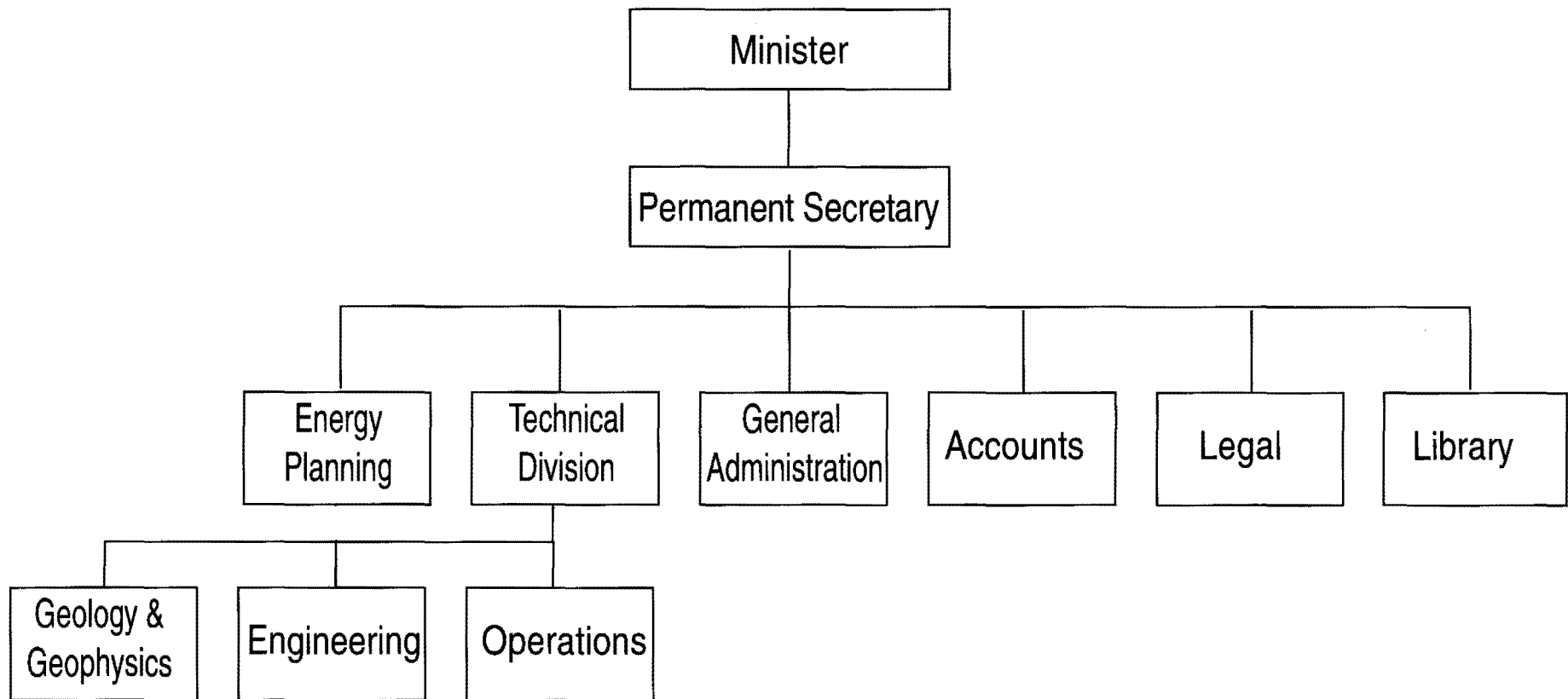
Petrochemical Licence

The Division commenced a project in 1995 to determine an appropriate fee structure for Petrochemical Licences. The assistance of OLADE was being obtained in this matter both in terms of funding and in the provision of consultancy services. As a result, the Division has been sending to that Organisation data on operational aspects of petrochemical companies in the country which must be taken into consideration in the exercise.



ADMINISTRATIVE ACTIVITIES

MAIN ORGANIZATION DIVISIONS



Divisional Reports

General Administration

General Administration is responsible for the administrative and managerial support services of the Ministry of Energy and Energy Industries - this comprises the Head Office at Riverside Plaza and The Development Section at the JAPS Building, San Fernando. The functional areas of the General Administrative Division are:-

Personnel Management

Registry

Office Management

Records Management

Training

Processing of Work Permits

Retail Marketing Licences for the Petrol Filling Stations

Internal Auditing

Personnel management

The Personnel Division processes all aspects of personnel matters to the staff of 200 members. Of these 181 persons are monthly paid officers and 19 are daily- rated employees.

During the 1994/1995 period, various changes took place relative to staff appointments, promotions, transfers and separations.

Appointments

- 1 Planning Officer 1
- 1 Library Assistant 1
- 3 Clerk 1
- 1 Geologist Assistant
- 1 Clerk/Typist 1
- 1 Petroleum Engineer I/II
- 1 Geologist

Promotions

- 1 Accounting Assistant
- 2 Senior Chemical Engineer
- 1 Chemical Engineer I/II
- 1 Record Manager
- 1 Draughtsman II
- 1 Systems Analyst
- 1 Geologist I/II
- 1 Administrative Assistant

Transfers

- 1 State Counsel II

Resignation

- 1 Telephone Operator/Receptionist

Retirements

- 1 Clerk I
- 1 Clerk IV
- 1 Clerk/Typist
- 1 Messenger

Registry

The staff of the Registry operate as a closely knit highly efficient work team, the degree of their effectiveness is dependent on the assistance of the other Divisions in accessing files as and when demanded. The period under review saw the continuing effort of the Registry staff to provide its services to the users of the Registry. Registration of correspondence showed a total of 11,512 for the period January 2, 1994 to December 31, 1995.

Frequent staff changes occurred during the period due to officers proceeding on vacation, sick leave and Special Compensatory Time-Off (SCT). As a result, much emphasis had to be placed on training the National Training Board apprentices to function in the Registry.

There was very little activity on the upgrading of Registry records since officers were not exposed to training in the use of the computers. It is anticipated that this situation will be addressed on fulfillment of the Ministry's vision to have staff computer literate by December 1996.

Office management

The Office Manager continues to process requests for office supplies, stationery and equipment as required by Ministry personnel. The system which obtained in earlier years where the Government Printery distributed stationery to the Ministry has been discontinued. Funds are now being provided in the Annual Estimates to enable the Ministry to purchase its office supplies and equipment.

Records management

The Records Management activities included the preparation of a draft desk manual for the post of Administrative Officer V.

Secondary Storage was also undertaken - the majority of files under the old classification system were stored in 42 boxes (24 x 15 3/4 x 9 1/2) in partial preparation for secondary storage. Twenty one of these boxes were placed in the basement warehouse, the remaining boxes are stored in the Registry Section, until adequate secondary storage is made available for securing.

Training

Training programmes over the period 1994/1995 comprised attendance at Conferences, Workshops, Courses and Seminars. The relevant details were as follows:-

<u>Training: local/overseas</u>	<u>1994</u>	<u>1995</u>
Number of participants in Local Training	8	72
Number of participants in Overseas Training	25	28

Work permits

For the years 1994/1995, altogether 489 and 542 work permits respectively were considered by the Ministry of Energy and Energy Industries and recommendations made to the Ministry of National Security.

Retail marketing licence

The Retail Marketing Licences for 1994/1995 saw retention of the number of active service stations with a marginal decrease in the collection of licence fees.

Compressed Natural Gas (CNG) was introduced in 1995 with 13 pumps for which the total licence fees was \$13,000.00.

Year	active service stations	licence fee collected	compressed natural gas	licence fee collected
1994	193	\$70,650.00	-	-
1995	193	\$70,500.00	13	\$13,000.00

Internal audit

During the year 1994, four quarterly audit examinations were carried out on the accounts of the Ministry and the relevant reports were submitted to the Permanent Secretary. For 1995, three quarterly audit examination were made on the Ministry's accounts and reports submitted to the Permanent Secretary.

The Auditing Assistant singlehandedly executes the Audit Function. From September to December 1995 he acted in the post of Administrative Assistant. As a consequence, there was no fourth quarter audit check on the accounts.

Accounts

Review of Revenue and Expenses

Revenue collected for 1994 and 1995 were as follows:

1994	-	\$417,791,691
1995	-	\$563,187,920

Royalty revenue for 1994 amounted to \$379,390,816 and 1995 \$528,679,738. Royalty is paid at 12.5% of the net storage value on crude oil and condensate from marine production and 10% on land production.

Royalty on gas is paid at 1.5 cts per thousand cubic feet gas sold. Other areas of significant revenue are:

	1994	1995
	\$	\$
Fees for Competitive Bidding		7,420,433
Oil Impost	10,761,257	20,053,371
Surplus Income from Petroleum Products	27,214,441	4,560,857

Oil Impost

Oil impost revenue is received from oil producing companies to meet the expenses of the Ministry for the prior calendar year. Revenue receipts for 1995 includes arrears of payments for 1994.

Surplus Income

Surplus income is generated when the wholesale price set by the Petroleum Pricing Order exceeds the reference price of petroleum products. Market prices of these products (which directly influence the reference prices) were relatively high in 1995. This accounts for the significant difference in the level of surplus.

Expenditure

For 1994 the Ministry was allocated \$14M and for 1995 \$16M. Actual expenses amounted to \$12.3M and \$14.3M respectively. Expenditure on personnel salaries account for over 65% of the total expenses of the Ministry. Expenditure on Goods and Services accounts for about 25%.

The Ministry's development programme over the two years has been restricted to projects approved by the Ministry of Finance. Spending in this programme has been mainly for the establishment of the Geological Core Repository.

		Table XI Indirect Expenses					
		1994			1995		
	PO S	San Fdo	Total	PO S	San Fdo	Total	
Uniforms	3,542	885	4,427	6,022	1,698	7,720	
Electricity	0	56,000	56,000	0	54,835	54,835	
Telephones	224,212	74,7372	98,949	225,114	75,200	300,314	
Rent Accommodation	23,785	255,300	279,085	23,805	255,300	279,105	
Equipment	311,100	65,000	376,100	917,983	38,000	955,983	
Office Stationery	49,870	24,935	74,805	76,998	38,000	114,998	
Books & Periodicals	127,347	15,000	142,347	141,458	12,000	153,458	
Materials & Supplies	17,379	34,758	52,1372	5,000	50,028	75,028	
Upkeep of Vehicles	29,470	7,367	36,837	32,575	8,143	40,718	
Repairs to Vehicles	2,800	700	3,500	6,334	1,583	7,917	
Repairs & Maintenance (Building & Equipment)	166,569	29,395	195,964	401,871	70,918	472,789	
Consultancy & Contracted Services	571,000	127,556	98,551	644,028	133,847	777,875	
Training	5,756	4,155	9,911	43,381	16,230	59,611	
Expenses	294,512	73,628	368,140	146,120	36,530	182,650	
Contribution to International bodies	168,970	56,322	225,292	171,965	57,322	229,287	
Total	1,996,312	825,733	2,822,045	2,862,654	849,634	3,712,288	

Table XII
Direct Expenses - 1994

	Administration	Accounts	E.P.D	Engineering	Geology/ Geophysics	Legal	Library	Operations	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Salaries/Allowances	1,830,649	524,278	806,273	798,878	1,358,732	124,504	194,631	2,614,454	8,252,399
Wages/Gratuity	0	0	0	0	459,190	0	0	0	459,190
Overtime	0	0	0	0	8,257	0	0	0	8,257
Travelling	46,300	4,715	42,510	42,085	85,930	9,012	5,296	368,465	604,313
Severance Pay	0	0	0	0	81,348	0	0	0	81,348
Total	1,876,949	528,993	848,783	840,963	1,993,457	133,516	199,927	2,982,919	9,405,507

Direct Expenses - 1995

	Administration	Accounts	E.P.D	Engineering	Geology/ Geophysics	Legal	Library	Operations	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$
Salaries/Allowances	1,572,227	544,844	593,275	804,448	1,223,139	119,246	211,972	2,720,415	7,789,566
Wages/Gratuity	0	0	0	0	435,984	0	0	0	435,984
Overtime	0	0	0	0	8,436	0	0	0	8,436
Travelling	68,500	6,960	63,909	62,508	126,870	13,300	8,615	541,570	892,232
Total	1,640,727	551,804	657,184	866,956	1,794,42	132,546	220,587	3,261,985	9,126,218

Review of Subsidy/Surplus

Subsidy is derived where the reference price of Petroleum products is greater than the wholesale prices set by the Ministry of Energy and Energy Industries via the Petroleum Pricing Orders.

Total Subsidy for 1994 declined by 60% over 1993 and rose by more than 1000% of the 1994 figure in 1995.

Prices of petroleum products fluctuated significantly during 1994, rose in the first half of 1995 and then declined for the remainder of the year, except for December when it rose again significantly.

The level of product prices and the overall subsidy is reflected also in the surplus amount. This rose to 19M in 1994 when petroleum prices were low compared to the preceding year, but dropped substantially when prices rose and remained relatively high in 1995.

Table X111
Subsidy/Surplus 1978 - 1995

Year	Total Subsidy \$	Subsidy Per Barrel (cents)	Surplus \$
1978	93,635,718	111.42	—
1979	178,295,170	227.36	—
1980	286,628,408	368.84	—
1981	327,286,923	469.48	—
1982	345,694,250	533.15	—
1983	155,616,925	265.83	—
1984	31,807,120	52.00	23,655,533
1985	36,187,980	56.09	23,550,359
1986	49,357,585	80.52	60,450,410
1987	32,153,575	56.85	17,584,503
1988	23,034,063	42.11	29,332,503
1989	83,617,664	153.43	778,365
1990	203,852,832	375.50	531,394
1991	149,947,487	287.20	531,611
1992	91,667,423	192.90	655,532
1993	63,181,565	140.01	11,465,473
1994	26,004,039	54.45	19,627,162
1995	55,508,678	116.65	1,113,473

Energy Planning

The Energy Planning Division performs an important role within the Ministry requiring both managerial and technical capabilities. The scope of activities performed range from routine tasks to the wider area of sectoral planning, policy formulation and implementation. The functions of the Division were expanded in 1995 to include activities involving market intelligence with respect to international petroleum companies, evaluation of requests for the provision of fiscal incentives, and alternative energy projects. In the conduct of its duties the Division has been adversely affected by two main constraints viz, the shortage of (i) professional and support staff, and (ii) the failure to upgrade the Ministry's computer equipment. These shortcomings were being addressed in 1995 with the major objective of increasing the progress of development of an analytical capability in the Division, which is essential for timely and effective decision-making.

A discussion on the activities performed by the Division in 1994/1995 is undertaken under the following headings:

- Policy matters
- Routine functions
- Olade
- Data management

Policy matters

Draft Energy Policy

During 1994 the Division addressed the fundamental issues raised by the Standing Committee on Energy with respect to the Draft Energy Policy. A revision of the policy document was undertaken and submitted to the Standing Committee in the second quarter of that year. With the change of administration in November, 1995, the Division commenced preparation of a working paper on a Draft Energy Policy in accordance with the new directorate. Some of the major constraints and characteristics of the energy sector which the energy policy document takes into consideration are as follows:-

- the economy depends upon petroleum exports for its revenues in an international environment in which prices and demand are determined by external forces;
- current energy reserves are exhaustible and there is the need for investments in ongoing exploration efforts;
- the sector depends on foreign financing in an environment of increasing worldwide competitiveness for investment capital;
- the sector requires large, lumpsum investments which are risky and

- have relatively long payout time periods; and
- the international market for energy is in a state of flux subject to factors such as ecological concerns, new and more efficient technologies, new energy products and alternative energy sources.

Standing Committee on Energy

The Division continued to play a significant role in the Standing Committee on Energy, of which the Ministry of Energy and Energy Industries is the secretariat. The Division is responsible for the preparation and compilation of all reports for meetings of the committee and the provision of personnel with responsibility for reporting on all proceedings and preparation of support documents. The Division was required to provide inputs and/or prepare specific reports with regard to a number of matters including the following:

- proposals for a new Competitive Bidding Order;
- guidelines for use in assessing applications for an exploration and production (Private Petroleum Rights) Licence;
- the use of methanol as a vehicular fuel in Trinidad and Tobago;
- the XXV Meeting of Ministers and the XXIV Council of Experts of the Latin American Energy Organisation (OLADE);
- the abandonment/sale of Amoco's Mora platform.
- the revision of margins on petroleum products and the introduction of unleaded gasoline
- phase 1 of the 1995 Competitive Bid Round

Routine functions

In its day-to-day activities, the Division performs a number of duties which, while being considered routine, are essential to the performance of the Ministry of Energy and Energy Industries. The duties which were undertaken in 1994/1995 are outlined below:

- Computation on a monthly basis of ex-refinery prices for domestic petroleum products and monitoring of subsidy levels for petroleum products. This is an essential part of the Ministry's responsibility with regard to the administration of the Petroleum Levy and Subsidy Act.
- Review of petroleum product prices and in this regard adjustments were made in 1994 to the wholesale price and dealer's margins for LPG and an examination made of the pricing structure for diesel. Changes were also made to the wholesale prices and dealer's margins with respect to gasoline (super and regular), CNG and LPG in 1995.
- Daily monitoring of the international crude markets and the

preparation and dissemination of a weekly bulletin on market prices and trends with quarterly and annual summary reports. In addition the Division prepared forecasts of short term crude price trends.

- Computation of domestic crude prices, preparation of pricing reports and provision of technical support for the ongoing work of the Permanent Petroleum Pricing Committee. This Committee continued to function under the coordination of the Technical Advisory Group to the Standing Committee on Energy. Membership in the Permanent Petroleum Pricing Committee consists of personnel from the Ministry of Finance, the Board of Inland Revenue Group and the Ministry of Energy and Energy Industries.
- Preparation of reports on investment trends in exploration, development and other related activities of the domestic petroleum companies. In this regard, performance reviews of individual companies were undertaken in 1994 and 1995 and forecasts made with respect to activities planned for the ensuing years.

Olade

The Ministry of Energy and Energy Industries on behalf of the Government of Trinidad and Tobago, hosted the Twenty-fourth Council of Experts and Twenty-fifth Meeting of Ministers of OLADE during November 3 - 8, 1994. The Energy Planning Division assisted in the Organisation and co-ordination of activities associated with these events.

The Minister of Energy and Energy Industries at the Twenty-fifth meeting of Ministers accepted responsibility to serve as Chairman of OLADE for the period 1994/1995. This, *inter alia*, made it mandatory for this country to participate in the Twenty-fifth Council of Experts and the Twenty-sixth Meeting of Ministers of OLADE which were held in November 9 - 10, 1995 in Quito, Ecuador.

The Division prepared a paper entitled, 'Strategies in the Development of the National Gas Industry in a Small Tropical Island Economy,' which was presented by the Permanent Secretary, Ministry of Energy and Energy Industries at the Twenty-fifth meeting of the Council of Experts. Members of staff from the Division were also in attendance at this meeting.

Data management

The development of an efficient and effective data management system continues to be an important objective of the Energy Planning Division. This is because of the role played by the Division with respect to the acquisition, verification, analysis and presentation of energy sector data. These data are essential not only for the operations of the Division but are also utilized by other sections within the Ministry. In addition, frequent requests for information are also entertained from local agencies (viz, Ministry of Finance and the Central Statistical Office) and international bodies (viz, the IMF, World Bank, and OLADE). The Division recognizes the need for adequate computer facilities in order to effectively perform its data

management functions and has been taking appropriate steps to satisfy this need. In the preparation of the 1996 budgetary estimates the sum of \$150,000 was requested by the Division for the purchase of five computers and accessories.

The primary source of petroleum data utilized within the Division is the Statistics and Development Section of the Ministry. Such data are utilized for analyses of petroleum (crude oil and natural gas) production trends, exploration and development activity, and refining and marketing trends. The Division also relies heavily on direct requests for data from the petroleum companies to complement the internal sources. Energy conversion, production and distribution by T&TEC, which is not part of the Ministry's portfolio, is a notable example of information which had to be sourced externally.

The Energy Economic Information System (SIEE) database is an integral component of the information system in the energy sector. This system is serviced by members of the Division and is supervised by the SIEE Advisor, who interacts with the Latin American Energy Organization (OLADE). The Division also assisted the library with the collation and verification of data used in the Caribbean Energy Information System (CEIS).

Library and Information Services

Computer System

The computer system in the library was upgraded to accommodate the continuous growth of the library's main bibliographical database. The new computer system was received in December 1995. During the transition period the Selective Dissemination of Information (SDI) service had to be curtailed. The opportunity was taken also to conduct maintenance work on the database with respect to replacement of outdated items. The process of standardizing the dictionary listing of the subject terms in accordance with the published thesauri on the industry was completed in 1994. A listing of terms used in the Ministry was printed for both the North and South Offices and an index to the classification numbers revised.

Internet facilities

In late 1994, the library obtained a connection to the Internet through the Ambionet Information System maintained by the United Nations Economic Commission for Latin America. This gave staff of the Ministry an excellent opportunity to benefit from hands-on experience of the Internet and the electronic mail services. At the end of 1995, a trial subscription was taken with WOW.net Limited, one of the local internet providers.

Services

During this two-year period, the book collection increased by 1264 items, through purchases and gifts, while periodicals increased by approximately 4000 issues. Loan of library materials totalled 999 items in 1994 and 983 items in 1995. Reference queries filled were 996 and 964 respectively.

Staffing

The Acting Librarian I, Ms. Calista Pierre, proceeded on study leave through the award of a scholarship by British Gas (Trinidad) Limited to pursue an undergraduate degree in Information Sciences. New staffing arrangements resulted in Ms Asha Mohammed being promoted to act as Librarian I and Ms Michelle Garcia as Library Assistant II assigned to the South Office Library. Ms Waheeda Deen joined the staff as Temporary Library Assistant I.

Caribbean Energy Information System (CEIS)

The activities of the CEIS during this period were as follows:

CEIS update

The promotion of the System's quarterly publication **-CEIS Update** and the successful sponsorship by Energy Companies of two copies of this publication to the 112 Secondary schools in Trinidad and Tobago. A formal handing over ceremony was arranged at the Learning Resource Centre in October 1994 at which the Ministers of Energy and Education officiated.

Newen

The collection of data in Trinidad and Tobago for the CEIS Directory on New and renewable energy sources (Newen) of the region. This proved to be quite an informative exercise as the results showed that, although Trinidad and Tobago is a primary oil producer, the country was outstanding in the number of applications in the range of renewable energy sources. The Directory was expected to be published in 1996.

Liaison Officers Meeting

A Liaison Officers Network Meeting was held in Guyana during January 16-20, 1995. In addition to discussion of the network's business matters, participants were also exposed to further training in completion of the data input forms for the renewable energy sources.

CEIS Promotion

A presentation on the CEIS Experience was made by Librarian III, and the Project Manager for CEIS at the annual ACURIL Conference held in Puerto Rico in May 1995.

Visit of Project Manager Phase III plans

The Project Manager for the CEIS, visited in November 1995 and met with the Permanent Secretary and Director of Energy Planning on Phase III proposals for the System. In view of the completion of donor funding to the project, a request for a financial contribution from Member Governments to continue the work of the System has been submitted.

Legal Section

The activities of the Legal Section during the period 1994 and 1995 were as follows:

Contracts negotiated and executed

- Release and Surrender of Exploration and Production Licence "Lower Reverse L" to Pecten/Trintoc
- Release and Surrender of Exploration and Production Licence to Amoco Deed No. 9050 of 1970 (Mora Platform))
- Contract for testing and analytical services - Cariri
- Licence to Northern Basin - Anderman Smith Caroni Inc.
- Release and Surrender of Exploration and production Licence Block S-11 Mobil/Trintopec
- Licence to Moraven Limited Block 44/57 Offshore East Coast

Advising the Ministry inter alia on:

- Licensing of Contractors by Ministerial Order Reg. 3 (2)
- Applications for Private Petroleum Rights Licence
- Compressed Natural Gas Regulations
- Quarries Legislation
- Amendment to the Competitive Bidding Order
- Interfacing of the Southern Basin Consortium, Public Petroleum Rights Licence and the Private Petroleum Rights Licence

- Negotiations for Production Sharing Contracts for: BHP/Elf and Enron
- Regulations for provision of compensation for persons affected by pollution from Petroleum Operations
- Law suits brought by private persons
- Legal Opinion or various issues emanating from regulation of the industry

Other activities included:

- Processing of applications for sub-licences and assignments for Ministerial Consent
- Preparing documentation for Ministerial Consents to: Unocal for assignment of interests to Arco Block 89/3. Arco for assignment to Unocal Block 89/3. East Brighton Block to Premier Tracmac and Petrotrin.
- Registration of Licences for Northern Basin Onshore Block 44/57 Moraven.
- Formulating a Petrochemical Licence.

Operations

Petroleum Inspectorate

During 1994 and 1995 the Inspection unit conducted the inspection of rigs, offshore structures and land production facilities totalling 292 and 257 respectively. Effluent samples from platforms, main storage, gas stations and pollution abatement facilities were taken and these totalled 49 in 1994 and 129 in 1995.

Service station storage matters decreased during the subject year. This decline was due to a change in the National Petroleum Marketing Company's storage tank maintenance/upgrade programs, as a result of the application of Powergen Company for the use of one 1000- ton Fuel Oil Tank and one 2000-ton Jet A1 fuel tank.

This year, Inspectors in this Section were also mandated to provide information regarding the existing CNG equipment used on plant and installed in vehicles throughout the country.

Storage and marketing

Applications for permission to use LPG increased due to new restaurants requiring the use of LPG as fuel. The LPG storage reflected a forty percent increase over the previous year.

In general the inadequate staffing of the Section was further affected by assignments to Point Galeota Operations assignments which continue to have a major impact on the realization of yearly targets.

Pipeline and Oil Loss

The following activities were undertaken during this period:

- Inspection of the National Oil Spill Contingency Plan warehouses and submission of recommendations for improvement of these facilities as well as stocking of the required quantity of equipment/chemicals to the relevant authorities.
- Investigation of Town and Country Department and related matters.
- Inspection of oil abatement facilities on a regular basis and recommendations for proper upkeep and improvement at these facilities were submitted to the relevant companies.
- Investigation of pollution incidents and preparation of the necessary reports.
- Pollution surveys of all coastal areas and streams which may have been affected by oil related activities.

- Maintenance of an updated pollution register for each oil company.

Refining and Petrochemicals

Activities for this period were as follows:-

Refinery Effluent Sampling
Service Station Mogas Sampling
Service Station Pump Calibration
Gasolene Bond Sampling
API Separator Inspections

During 1994-1995 a total of 84 effluent samples were taken at Pointe-a-Pierre and 53 at the Point Fortin refinery. Petrotrin was notified of the results, especially those exceeding limits, but no remedial action for improving the same materialized in 1995.

Monitoring of effluents of industries on the Point Lisas Estate commenced in July 1995 where 52 samples were taken. The results were submitted to the Chemical Engineering Section for their recommendations.

The gasolene bonds at Point Fortin, Pointe-a-Pierre and NPMC, Sea Lots, were each sampled once per month giving a total of 36 gasolene bond samples in 1994 and 33 in 1995. The octane rating of the super mogas was consistent at 95.0 RON.

Eighty-three gasolene samples from 75 service stations were taken throughout Trinidad to determine quality in 1994 and in 1995, 96 gasolene samples from 85 service stations were taken throughout Trinidad to determine quality. With the exception of four stations the octane rating remained at 95.0 (RON).

In order to ensure prompt response when off specification gasolene sample results were received, the Ministry and NPMC agreed that in cases where octane rating fell below 95.0 (RON), NPMC will lock out pumps at gas stations and investigate the matter further.

One thousand one hundred and fifty four pumps were calibrated at 207 service stations in 1994. One thousand and thirty-one pumps were calibrated at 187 service stations. A 69% zero error was found at pumps in stations in Trinidad. This is a good indicator of the success of this exercise. With the continuance of the same in 1996 we hope to alleviate some of the fears and misconceptions associated with incorrect sales at pumps and give the motoring public correct value for their money at any filling station in Trinidad and Tobago. This exercise is to be extended to Tobago in 1996.

Storage tanks continued to be visually tested for water content and same pumped out when found.

Although American Petroleum Institute separator inspections were conducted twice during each year at both Pointe-a-Pierre and Point Fortin refineries, they were monitored on a monthly basis when the

effluent samples were being taken. Unfavorable conditions were communicated to the company.

Petroleum Engineering

The Petroleum Engineering Unit of the Operations Section received 108 drilling programmes and 504 workover programmes in 1995. Eighty-one drilling programmes and 468 workover programmes were approved. During 1994, 140 drilling programmes and 349 workovers programmes were approved.

Plugging and Abandonment of Wells for the Brighton LNG Project

Discussion on this project began in November 1994, at which time Petrotrin's areas of responsibility in the project were defined. Petrotrin's responsibility included the abandonment of approximately 200 wells in an area of the Brighton field which was earmarked for the development of the industrial estate, LABIDCO. This had to be accomplished by June 1995. The Ministry supplied Petrotrin with our guidelines for the proper plugging and abandonment procedures for these wells. Since timing was critical, several meetings were held and methods of dealing with this major project were formulated to get it completed within schedule and, at the same time, to ensure that safety and technical considerations were not overlooked. Actual work commenced in February 1995. A total of 163 wells was successfully abandoned; 20 wells were found with leaks after abandonment. Twenty-two wells were not found. Two officers from the Ministry, an engineer and an inspector, were assigned to this project.

Industrial dispute at Trinmar, Petrotrin and PCOL

For about two months, August through October, industrial action at Trinmar, Petrotrin and PCOL resulted in decreases in production levels at these companies. During this period, monitoring of field operations was intensified to ensure safety and also to report on production levels.

Free Standing Wells at Trinmar

During 1995, some of Trinmar's free standing wells became problematic, with some falling over and others leaning. Through the Department's efforts, Trinmar embarked on a programme to abandon some of these wells and support others by means of a tripod.

Banyan Field Development

The Department played an important advisory role in the unitization of this field.

Dolphin Field Development Plan Approval

The Department expended many man-weeks in the study of this development plan and advised on its approval.

Guidelines for Operations in the Petroleum Industry

This was considered especially critical with the development of the Brighton Industrial Estate and the problems with Trinmar Wells. The draft document on guidelines for operations in the petroleum industry was completed and issued to the industry for comment.

Drilling Guidelines

Work was commenced on this document.

Verification of Well Test Results on Exploration Wells

An engineer of the Operations Section witnessed and reported on each zone tested in the seven exploration wells drilled by all the companies in 1995. An average well test lasted about four days. There were ten tests done in 1995, mostly offshore.

Reports prepared

- Daily reports of industry activities on all wells being drilled and major workover activities.
- Weekly industry activity reviews on oil production by companies with comparative data on the previous week, the previous month and average to date for the year. Drilling information is also presented, the depth drilled, the number of wells spud and the number of rigs in service. Some details of all exploration wells are also given.
- Monthly Operations Report and Monthly Bulletins.
- Annual Oil Company Performance Review - Engineers of the Operations Section prepared and submitted a report on the performance of the oil company for which each was responsible. This report was used by the Ministry's managers for preparation for the Annual Technical Meeting with the oil companies which took place during the first quarter of the year. The information covered in these reports consisted of production data, drilling activities, workovers, forecasts and new technology/techniques trends.

Mechanical engineering

For the period 1994-1995, activities of the Mechanical Engineering Section included the following:

- i. Review of design documentation of the original Ibis 'A', Ibis 'B', and Kiskadee 'B' Platforms submitted by Enron. Owing to a change in the field development plans, neither the Ibis 'A' nor the Ibis 'B' platform was installed in Trinidad. The Kiskadee 'B' platform was renamed Ibis 'B' and subsequently installed in the Ibis field.
- ii. On-site inspection, at the fabrication yards, of the original Ibis 'A' and Ibis 'B' Platforms.
- iii. Review of Amoco's project to inspect the legs and members of their platform structures
- iv. Continuation of the adaption, by the Bureau of Standards Ad Hoc

- Specification Committee on Gas Cylinders, of five ISO Standards related to periodic inspection and testing of cylinders intended for the storage of industrial gases.
- v Review of design documentation of Dolphin platform and approval of structural application of this platform.
- vi Review of pipeline design from Dolphin to Poui
- vii Review of tie-in systems of Dolphin pipeline onto the Poui platform.
- viii Review and approval of Vessel Permit Application for the scrubber installed on the Pelican platform.
- ix Review and approval of Enron's proposal to install two additional slots on the Ibis 'B' platform.

Field Activities/Inspections

- Witnessing of key activities during the installation of the Banyan platform.
- Assistance to the Inspectors in a number of rig inspections.
- Development of standards etc.
- Complete review and editing, along with Petroleum Inspectors of the draft document "Minimum Standards for the Operation and Maintenance of Pipelines in the Oil Industry of Trinidad and Tobago".
- Preparation of Ministry's standard policy for alterations to offshore platforms.
- Preparation of Ministry's requirements for Certified Verification Agents (C.V.A.'s) i.e. the third party inspector, for offshore platforms and structures.
- Completion of the adaption by the Bureau of Standards Ad Hoc Specifications Committee on Gas Cylinders, of five ISO Standards related to periodic inspection and testing of cylinder intended for the storage of industrial gases.

Other Activities

- Assistance in the collection of information on CNG and Compressed Natural Gas Vehicle (CNGV) systems and preparation of a list of approved systems.
- Preliminary work on a proposal for a Ministry of Energy Safety and Environmental Bulletin.
- Participation in Environment, Health and Safety Quarterly Meetings.
- Review of bids tendered for a vehicle for the Operations Section, and recommendation of the acquisition of the most suitable one.

Engineering and Technical Services

During 1994-1995, the Technical Services Section was engaged in the following activities:-

Computerization of the Ministry

Assessment of computer needs and the preparation of proposals for the computerization of the Ministry. A rationalization of the total funding for the computer project was done and attendant costing was carried out. In addition, all arrangements for the purchase of computer systems were followed through from defining of needs, eliciting of quotations from vendors, advising, purchasing, causing computers and equipment to be installed, and tested in the Energy Planning Division, the Executive offices, Geology, Technical Services, Operations Sections and Library.

Gas Reserves

Presentation on the gas reserves of Trinidad and Tobago which was made by a team consisting of the Director of Technical Services and the Senior Petroleum Engineer (Gas) to the Farmland/Mississippi Chemical Consortium and their financier upon request made by the National Gas Company in support of the natural gas project.

CNG Regulations

Finalization of the Petroleum (Compressed Natural Gas) regulations 1994, which was published in October 1994.

Duty free processing

Processing and approving duty-free entries in connection with offshore exploration and production and onshore special projects. Approximately 600 duty free entries, each containing an average of 30-40 duty free items, were processed. The Section also assisted in the processing of duty-free Minister's licences and work permit applications.

Gas projects

Provided technical evaluation of Dolphin gas development projects and special projects by enhanced recovery. Engaged in the follow up monitoring of the Poui and Teak field gas compression project.

Reservoir engineering

The performance of duties in the section was critically affected by the lack of engineers and appropriate engineering software to aid in evaluation of the nation's hydrocarbon resources, the promotion of secondary and enhanced oil recovery operations, and forecasting the nation's crude oil production etc.

Nevertheless, progress was made in evaluating the possible hydrocarbon potential of those reservoirs in the East Coast Blocks that were to be offered during the 1995 Competitive Bidding Round. These included Blocks 5, Block 2C the U-shaped Block and Block 4. Reservoir simulation studies were also conducted on these blocks to determine production rate profiles for assessment of their present worth.

The division participated in reservoir simulation exercises with British Gas at Reading, England to conclude the Ministry's approval of the Dolphin field gas depletion plan.

One new waterflood project was approved, namely the Amoco's MM02 sand waterflood. This is a small project that comprises one injector and one producer. The country's proved oil reserves stood at 490 MMB and the probable reserves at the beginning of 1995 were estimated at 415 MMB giving a total of 905 MMB of proved and probable oil. Natural gas liquids (butanes and propanes) were estimated at 70 MMB of proved reserves.

Gas Section

The main function of the Natural Gas Section is the monitoring and regulation of the production, compression, transmission, sale and utilization of natural gas. In addition, the section is to ensure that all operations involving these facets of the natural gas industry are carried out safely and efficiently. The section is also the main repository for natural gas data and information relating to:

production and various forms of utilization by the petroleum companies ; and
availability to, and consumption by the non-oil sector.

The main activities of the section included the following:

- i. Determination of gas demand - present and future.
- ii. Prevention of wastage of gas and ensuring conservation.
- iii. Determination of the country's gas reserves by companies and by area;
- iv. Determination of deliverability and future production trends of gas wells by fields;
- v. The maintenance of statistical records and the dissemination of information regarding natural gas;

Review of Activities

The Natural Gas Section continued to monitor the operations of the gas producing companies, Amoco, Enron, Trintomar and British Gas.

In the review period, gas well drilling activities were mainly focused on the Enron's Kiskadee field where, in 1994, the company completed the drilling of four development wells. In 1995 one well was drilled for Amoco (the Banyan #1), and one well in its licence area (KB#1), as part of an agreement reached to jointly develop and produce the Kiskadee sands, which extend into Amoco's licensed area. At year end Amoco was producing its Banyan well #1 at approximately 65 MMcf with 2,000 bopd. The section was also involved in the evaluation of a British Gas proposal to develop the Dolphin field.

In addition, the section monitored the compression operations of Amoco and NGC where compression performances continued to surpass those of the previous years, each company recording higher onstream factors.

In the review period, the section continued its twelve month forecast of the gas supply-demand to identify any shortfall in gas supplies. During the period no gas shortfalls were anticipated.

The country's total non-associated natural gas reserves as at January 1, 1996, were estimated to be 18.0 Tcf, of which, 12.34 Tcf was proven.

Increased activities are anticipated during 1996, with the development drilling of the British Gas/Texaco Dolphin field. In the coming year, the section would be involved in the evaluation of the LNG upstream development plans for Amoco's East Mayaro and South SEG fields. These developments would also involve the assessment of pipeline licence approvals.

The section continued to function with a Senior Petroleum Engineer and a Petroleum Engineering Assistant. An additional Petroleum Engineer II will be requested to assist in carrying out the functions of the gas section effectively.

Geology and Geophysics

Computer Equipment

The Ministry took delivery of a new Sun Sparc10 Workstation with Landmark software in January, 1994 from Pecten Trinidad Ltd. as part of their contract requirements for the Lower Reverse 'L' Block.

Tape Storage Project:

In December, 1994, the Ministry began a major exercise to demultiplex, reformat, and copy its 8640 magnetic tapes currently stored at Western Geophysical Company (Wesgeco) in London, England. These 9-track and $\frac{1}{2}$ " tapes represent data recorded in 1980/81, and Mobil 1975 seismic data, and contain seismic information on the deep water blocks and Block 4. The project was divided into three phases as follows:

Phase I:-	Transportation of tapes
Phase II:-	Demultiplex, reformat and copy:
Phase III:-	Storage/Cataloguing

This project was completed in 1995.

Quarry Unit

Exploratory activity

The Quarry Unit continued its industrial minerals resource evaluation for sand and gravel reserves in the Plantation Road area, Valencia Forest Reserve. This survey, which had begun with Phase I in 1993, was completed in February 1995. A total of 373.5 acres was surveyed in three separate phases. A total of 213.5 acres of land was re-evaluated. The auger crew drilled and logged 158 holes to a total depth of 3,051 feet drilled depth (d.d.) With an average depth of about 120 feet per hole. The survey crew cut, chained and levelled a total of 39,500 feet. Volumetric calculations of the area surveyed proved up a cumulative total of 853,935 cu. yds of sand and gravel reserves. After completing the Survey in the Valencia Forest Reserve in February, 1995, the crews were moved to the Melajo Forest Reserve where a new resource evaluation exercise began. This survey was conducted in two phases during February to December 1995 over a 122 acre parcel of State lands.

A total 148 holes was drilled and logged by the auger crew to an average hole depth of 21 feet and total drilled depth of 2,116 feet, while the survey crew cut, chained and levelled a total of 37,000 feet but only levelled the Phase I holes. Calculated volumetric reserves for Phase I was a total of 486,574 cu.yds of sand and gravel. At the completion of Phase II in 1996 volumetric calculations would be done.

Regulatory Activities

Routine site visits to quarries were carried out throughout the country, with emphasis on the St. Andrew/St. David and St. George East areas. Some visits were done in collaboration with other government agencies such as the Lands and Surveys Division, Water Resources Agency, Environmental Management Authority, Forestry Division, the Factory Inspectorate and other departments from time to time. The extraction and processing of industrial minerals were monitored to determine whether concessionaires followed the guidelines laid out in their respective Sand and Gravel Agreements, and that they were concerned about safety and the environment in which they were operating.

An increase in illegal quarrying activity was observed in the Wallerfield area, (St. George East) where sand and gravel were removed by at least two operators. There was also an increase in the siltation of rivers due to the discharge of effluents by the processing plants of quarry operators in the Oropouche River in the St. Andrew/St. David area, and the Aripo River in the St. George East area. This was a great nuisance to farmers in the Vega de Oropouche area and WASA's Piarco's water treatment plant respectively. Royalty payments/non payments were also monitored and concessionaires were advised to comply with the requirements of their agreements

Updating Quarry Location Maps/Operating Quarries List

Revised quarry maps for Trinidad and Tobago were prepared. A query-based database on all tabular data relating to quarries was developed and implemented. A list of all quarries and quarry operators was compiled.

Resource allocation

Despite several requests for additional acreage in gravel bearing State Lands by quarry concessionaires who had either exhausted or nearly exhausted their acreages, as well as applications by a few new potential operators, no new State Lands were allocated in 1994 and 1995. This was due to the non ratification of policy guidelines for the industrial minerals sector by Cabinet. The Quarry Unit processed all applications and advised applicants of the temporary moratorium on land allocation pending the final policy position of Cabinet. No Agreements were renewed for the period.

Policy and planning - Quarry Advisory Committee

Owing to the continued process of preparation and presentation of proposals of the issues concerning the new policy guidelines for effective administrative management of the industrial minerals sector by this Ministry, the Quarry Advisory Committee was convened infrequently in 1994 - 1995. Meetings were held on specific matters as required.

National Quarries Company Limited (NQCL) Consultancy Study

In 1995, the staff of the Quarry Unit served on the Cabinet appointed Steering Committee for the NQCL Consultancy Study. On the basis of the Consultant's report the Steering Committee reported to Cabinet on policy issues with respect to the Industrial Minerals Industry.

Supportive

Ministry of Trade and Industry

The export of industrial mineral aggregates to Caricom destinations continued in 1994 - 1995 as a production component for the industrial minerals sector. This Ministry, through the role of the Quarry Unit, has supported the Ministry of Trade and Industry by processing and evaluating each application for an export licence and making recommendations according to the decisions of the Cabinet Appointed Aggregates Export Committee.

Ministry of Planning and Development - Town and Country Planning Division

The Quarry Unit advised the Town and Country Planning Division in the following matters :

- Request for permission to develop a plastering sand quarry at Ravine Sable on private lands owned by Bertie Ramjawan.
- Request for permission to develop a limestone quarry on lands privately owned by Peter D'Arcueil at La Pastora Road, Lopinot.
- Request to quarry plastering sand on lands privately owned by Michael Boodoo at Sum Sum Hill, Claxton Bay.

Rio Claro/Mayaro Regional Corporation

The Rio Claro/Mayaro Regional Corporation had requested advice and received support in the location of an appropriate site for sand fill for use in the preparation of cricket pitches of recreational grounds in their area. Visits were made to verify the use of the sand removal site with officers from the Forestry Division and the Director of Surveys Office to the Guayaguayare Road area together.

Maintenance Training Security (MTS)

MTS was facilitated by the Quarry Unit in collaboration with the Director of Survey's office in sourcing beach sand at the Guayamara Beach for use in their plant propagation facility.

Lands and Surveys Division

As part of a Cabinet convened committee, staff of the Quarry Unit were involved in drawing up recommendations towards the development of a National Land Information System. This Committee, chaired by the Director of Surveys, prepared and submitted a final report to Cabinet for its deliberations.

Ministry of Labour & Cooperatives

A Cabinet appointed Blasting Advisory Committee was set up to assist the Industrial Inspections Supervisor of the Factory Inspectorate, Ministry of Labour and Cooperatives in discharging his duties in accordance with the relevant provisions of the Factories (Protective) Measures Order of 1994. This Committee held several meetings in 1994 - 1995 in which the competence of persons desirous of being recommended to the Commissioner of Police to be authorised to carry out blasting operations in Trinidad and Tobago were interviewed and assessed.

Visit of Israeli Geologist

The Ministry facilitated the visit of Israeli Government representative, Dr. Moshe Goldberg, who spent two weeks in Trinidad during December, 1995. He carried out research on our mud volcanoes and other geological sites. He was taken to all the sites by Quarry Unit staff.

Core Repository (Pointe-a-Pierre)

From February to May 1994 the field crew was assigned to duties in the Core Repository at Pointe-a-Pierre. The crew was involved in sorting samples, putting sample boxes on dexion shelves, arranging maps and disposing of old boxes and unidentifiable samples. During 1995 work continued with the inventory and cataloguing of the items, with the assistance of UWI summer students. Solid Waste Management Company assisted in the disposal of unwanted paper material.

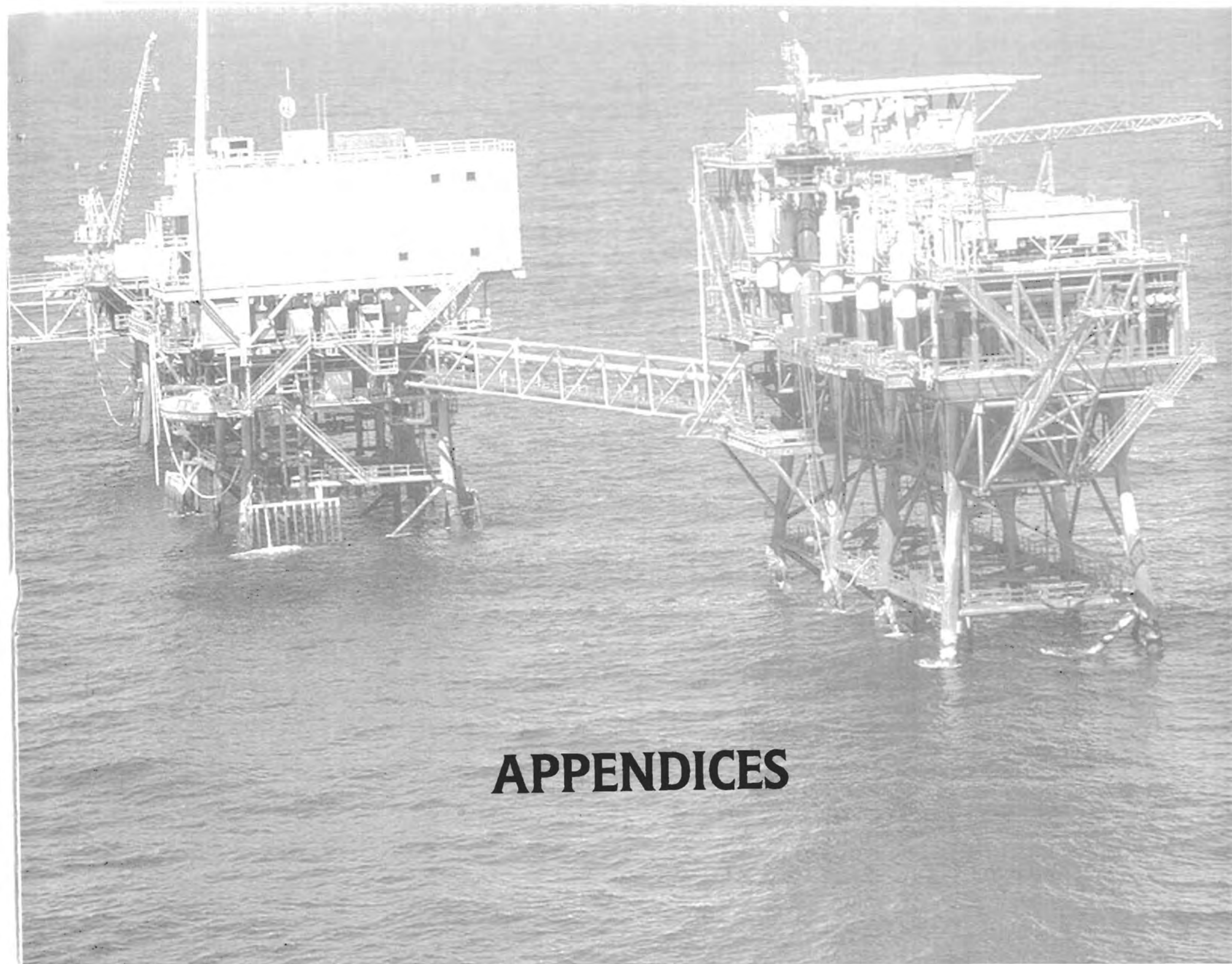
Staff of the Quarry Unit assisted and witnessed visits by oil company personnel interested in samples at the Core Repository. The process of upgrading the physical facility was pursued through award of a contract for the construction of a map room, and other structural repairs to the building.

Geographic Information System

A proposal for the establishment of a Geographic Information System for the Geological Section was drafted and was used in a request by local consultants for funding from the Inter-American Development Bank.

Institute of Marine Affairs (IMA)

The IMA convened a committee in 1995 to treat with the ongoing problems in Tobago of the use of the beaches as a source of sand for construction activity. The focus of the committee was on stopping all sand mining on Tobago's beaches, and seeking an alternative source of sand for the construction sector.



APPENDICES

APPENDIX I
SUMMARY OF EXPLORATORY AND SEMI-EXPLORATORY ACTIVITIES IN 1994

OPERATOR	WELL NAME	LOCATION	UNITS	LAHEE EXPLORATORY CLASS	DATE SPUDDED (METRES)	DATE COMPLETED (METRES)	DEPTH DRILLED	TD OF WELL	GEOLOGICAL OBJECTIVE	RESULT/ REMARKS
AMOCO	FLAMBOUYANT 2 ST-1	104,856 N 931,601 E	LINKS	B0 B2b	93.09.16	94.05.09	4 684	4 684	PLIOCENE SANDS	COMP. GAS
	SEG - 13	48,458 N 910,570 E	LINKS	B1	94.05.15	94.06.10	3 246	3 246	PLIOCENE SANDS	ABD. - GAS/COND.
	EAST MAYARO 3	136,545 N 982,237 E	LINKS	B1	94.06.16	94.09.13	4 572	4 572	PLIOCENE SANDS	ABD. - GAS/COND.
	EAST MAYARO 4	136,545 N 982,237 E	LINKS	B0 B1	94.09.18	94.11.09	4 750	4 750	PLIOCENE SANDS	ABD. - GAS/COND.
	SEG - 15	15,059.93 N 905,061.4 E	LINKS	C1	94.11.13	94.11.26	3 081	3 081	PLIOCENE SANDS	ABD. - DRY
	MARAVAL 1 ST-1	131,532 N 689,092 E	LINKS	A1	94.11.28	-	2 336	3 619	PLIOCENE SANDS	DRILLING
EXXON	ROCKY PALACE 1 ST	156,036.1 N 364,014.4 E	METRES	A3	93.08.05	-	4 092	-	NAP. HILL GAUTIER FORM	SUSPENDED
	IGUANA RIVER 1	182,927.35 N 564,853.05 E	LINKS	A3	94.02.19	-	3 890	3 890	GAUTIER CUCHE SANDS	SUSPENDED
UNOCAL	EMERALD 2	507,035 N 1,179,500 E	METRES	B3	94.01.07	94.09.30	3 344	3 344	NAP. HILL CHERT	ABD. - OIL SHOWS
	TOPAZ 1	497,688 N 1,186,009 E	METRES	B3	94.10.04	94.11.30	2 730	2 730	NAP. HILL CHERT	ABD. - OIL SHOWS
BR. GAS	MARLIN 1	949,500 - X 206,916 - Y	LINKS (UTM)	A3	94.12.06	-	3 522	3 620	PLEISTOCENE SANDS	DRILLING

APPENDIX I
SUMMARY OF EXPLORATORY AND SEMI-EXPLORATORY ACTIVITIES IN 1995

OPERATOR	WELL NAME	LOCATION	UNITS	LAHEE EXPLORATORY CLASS	DATE SPUDDED (METRES)	DATE COMPLETED (METRES)	DEPTH DRILLED	TD OF WELL	GEOLOGICAL OBJECTIVE	RESULT/ REMARKS
AMOCO	MARVAL-1 ST-3	131,532 N 689,092 E	LINKS	A-1	94.11.28	95.01.18	3 618	3 618	PLIOCENE SANDS	ABANDONED - DRY
	SEG - 14	43366.10 N 919506.20 E	LINKS	A-1	95.01.21	95.03.01	3 455	3 594	13,14,19,21 SANDS	ABD. AFTER TEST
	SEG-16	39319.18 N 923515.15 E	LINKS	A-1	95.03.28	95.04.11	1 890	1 890	14 SANDS	ABD. AFTER TEST
	NEQB-4	117887.9 N 961489.4 E	LINKS	A-1	95.10.06	95.10.31	3 476	3 476	G-2 SANDS	ABD. AFTER TEST.
	EL DIABLO ST-1	282909.1 N 816674.2 E	LINKS	A-2c	95.11.04	-	3 870	3 993	C1/E/F/T SANDS	DRILLING
	CORALLITA #1	124246.97 N 1043253.03 E	LINKS	(A1) A-2b	95.11.17	-	4 520	4 610	17 SANDS	DRILLING
BR. GAS	MARLIN #1	101331.5 N 602246.3 E	LINKS	A1	94.12.06	95.01.09	3 620	3 972	TOP MAYOR 1 THROUGH 9 SANDS	ABANDONED - DRY
	DOLPHIN #5-ST 1	1016590.50 N 199327.31 E	LINKS	A1	95.02.12	95.04.16	3 048	3 048	C-J SANDS	ABD. AFTER TEST.
EXXON	ST. CROIX	217439.38 N 564853.05 E	LINKS	(A3) C3	95.04.11	95.09.28	5 361	5 078	GAUTIER & CUCHE/ NAPARIMA	ABANDONED - DRY
	ROCKY PALACE 1	156036.1 N 364014.4 E	LINKS	(A3) C3	93.10.02	95.10.27	4 879	4 879	GAUTIER & CUCHE/ NAPARIMA	ABD. AFTER TEST.
UNOCAL	AMBER #1	104236.8 N 602224.0 W	LINKS	(A3) C3	95.04.20	95.07.07	2 694	2 694	NAPARIMA HILL CHARTS	ABD. AFTER TEST.

APPENDIX II
ANNUAL STATISTICS OF PRODUCTION, DRILLING, REFINING, EXPORTS AND IMPORTS 1995 - 1986

ITEM	UNIT	PERCENTAGE CHANGE 1995 OVER 1994	1995	1994	1993	1992	1991
1. CRUDE OIL	'000 BBL	0.74	47,584	47,235	44,634	49,195	52,423
2. CASING HEAD GASOLINE (C.H.P.S.)	'000 BBL	0.00	0	0	0	0	0
3. TOTAL CRUDE OIL AND NATURAL GASOLENE (1+2)	'000 BBL	0.74	47,584	47,235	44,634	49,195	52,423
4. CRUDE OIL PRODUCTION - STATE OIL RIGHTS	'000 BBL	1.01	45,657	45,201	42,373	46,871	50,120
5. CRUDE OIL PRODUCTION - PRIVATE OIL RIGHTS	'000 BBL	-5.26	1,927	2,034	2,261	2,324	2,303
6. TOTAL IMPORTS	'000 BBL	-13.14	11,003	12,668	16,478	18,259	15,806
7. IMPORTS OF REFINED PRODUCTS	'000 BBL	205.51	3,883	1,271	1,826	989	251
8. IMPORTS OF CRUDE OIL FOR REFINING	'000 BBL	-36.62	7,005	11,0521	4,469	16,843	15,333
9. IMPORTS OF OTHER OILS FOR REFINING AND BLENDING	'000 BBL	-66.67	115	345	183	427	222
10. TOTAL EXPORTS	'000 BBL	-6.75	51,641	55,382	48,729	61,807	60,150
11. EXPORT OF CRUDE OIL	'000 BBL	-6.93	21,486	23,086	20,504	23,380	26,245
12. EXPORTS OF REFINED PRODUCTS	'000 BBL	-6.63	30,155	32,296	28,225	8,427	33,905
13. RUNS TO STILL	'000 BBL	-5.03	35,705	37,597	38,190	42,277	41,438
14. DAILY REFINERY CAPACITY	BBL/DAY	0.00	260,000	260,000	260,000	255,000	255,000
15. NUMBER OF WELLS SPUDDED	AS STATED	30.43	90	69	56	59	104
16. TOTAL NUMBER OF WELLS COMPLETED	AS STATED	12.96	61	54	36	63	109
17. NUMBER OF WELLS COMPLETED AS OIL WELLS	AS STATED	0.00	34	34	28	52	90
18. NUMBER OF WELLS ABANDONED	AS STATED	166.67	24	9	5	11	16
19. TOTAL DEPTH DRILLED	METRE	14.63	148,912	29,904	69,072	77,366	153,133
20. DEPTH DRILLED ON STATE OIL RIGHTS	METRE	6.10	136,982	129,109	67,533	70,858	139,757
21. DEPTH DRILLED ON PRIVATE OIL RIGHTS	METRE	1400.63	11,930	795	1,539	6,508	13,376
22. AVERAGE DEPTH OF COMPLETED WELLS (16)	METRE	21.04	2,618	2,163	1,979	1,453	1,678
23. AVERAGE NUMBER OF WELLS PRODUCING	AS STATED	11.52	3,736	3,350	3,341	3,306	3,236
24. AVERAGE NO. OF WELLS PRODUCED BY FLOWING	AS STATED	-3.10	281	290	326	333	368
25. AVERAGE NO. OF WELLS PRODUCED BY ARTIFICIAL LIFT	AS STATED	12.91	3,455	3,060	3,015	2,973	2,868
26. AVERAGE DAILY PRODUCTION PER PRODUCING WELL	BARREL	-9.59	34.9	38.6	36.6	40.7	44.4
27. AVERAGE DAILY PRODUCTION PER FLOWING WELL	BARREL	23.50	129.8	105.1	87.8	101.2	103.7
28. AVERAGE DAILY PRODUCTION PER ARTIFICIAL LIFT WELL	BARREL	-15.79	27.2	32.3	31.1	33.9	36.8
29. TOTAL VALUE OF DOMESTIC EXPORTS *	'000\$	26.92	14,031,077	11,055,200	8,405,615	7,811,404	8,340,929
30. TOTAL VALUE OF PETROLEUM PRODUCTS (ITEM 29) *	'000\$	-79.79	661,845	3,275,004	2,932,086	2,979,658	2,794,214
31. TOTAL VALUE OF ASPHALT PRODUCTS *	'000\$	31.11	21,172	16,148	19,984	15,900	33,491
32. TOTAL NATURAL GAS PRODUCED	MILLION M ³	0.81	7,762	7,700	7,080	7,414	7,404
33. USED AS FUEL	MILLION M ³	2.42	4,361	4,258	4,030	4,301	4,038
34. REPLACED IN FORMATION	MILLION M ³	0.00	0	0	0	0	0
35. "LOSSES, NOT COLLECTED"	MILLION M ³	28.97	103	145	136	165	207

* Source : Central Statistical Office from The Annual Overseas Trade Part A

CONTINUED

APPENDIX II
ANNUAL STATISTICS OF PRODUCTION, DRILLING, REFINING, EXPORTS AND IMPORTS 1995 - 1986

ITEM	UNIT	1990	1989	1988	1987	1986
1. CRUDE OIL	'000 BBL	55,039	54,509	55,208	56,641	61,640
2. CASING HEAD GASOLINE (C.H.P.S.)	'000 BBL	0	0	0	1	25
3. TOTAL CRUDE OIL AND NATURAL GASOLINE (1+2)	'000 BBL	55,039	54,509	55,208	56,642	61,665
4. CRUDE OIL PRODUCTION - STATE OIL RIGHTS	'000 BBL	52,401	51,756	52,377	54,098	59,176
5. CRUDE OIL PRODUCTION - PRIVATE OIL RIGHTS	'000 BBL	2,638	2,753	2,831	2,543	2,464
6. TOTAL IMPORTS	'000 BBL	7,467	2,059	4,354	5,527	7,797
7. IMPORTS OF REFINED PRODUCTS	'000 BBL	924	1,020	1,751	2,115	5,742
8. IMPORTS OF CRUDE OIL FOR REFINING	'000 BBL	6,543	1,039	2,560	3,412	1,560
9. IMPORTS OF OTHER OILS FOR REFINING AND BLENDING	'000 BBL	0	0	43	36	495
10. TOTAL EXPORTS	'000 BBL	53,481	50,073	54,489	55,749	58,175
11. EXPORT OF CRUDE OIL	'000 BBL	28,030	27,167	27,205	28,370	32,867
12. EXPORTS OF REFINED PRODUCTS	'000 BBL	25,451	22,906	27,284	27,379	25,308
13. RUNS TO STILL	'000 BBL	33,589	27,854	31,206	31,472	29,936
14. DAILY REFINERY CAPACITY	BBL/DAY	255,000	305,000	305,000	305,000	305,000
15. NUMBER OF WELLS SPUDDED	AS STATED	119	86	142	145	176
16. TOTAL NUMBER OF WELLS COMPLETED	AS STATED	116	83	153	160	169
17. NUMBER OF WELLS COMPLETED AS OIL WELLS	AS STATED	91	70	110	111	133
18. NUMBER OF WELLS ABANDONED	AS STATED	13	13	19	15	18
19. TOTAL DEPTH DRILLED	METRE	153,498	136,206	177,631	189,735	222,294
20. DEPTH DRILLED ON STATE OIL RIGHTS	METRE	141,312	130,240	167,746	184,620	219,246
21. DEPTH DRILLED ON PRIVATE OIL RIGHTS	METRE	12,186	5,966	9,885	5,115	3,048
22. AVERAGE DEPTH OF COMPLETED WELLS (16)	METRE	1,450	1,635	1,333	1,295	1,395
23. AVERAGE NUMBER OF WELLS PRODUCING	AS STATED	3,172	3,199	3,252	3,256	3,209
24. AVERAGE NO. OF WELLS PRODUCED BY FLOWING	AS STATED	371	364	331	320	352
25. AVERAGE NO. OF WELLS PRODUCED BY ARTIFICIAL LIFT	AS STATED	2,801	2,835	2,921	2,936	2,857
26. AVERAGE DAILY PRODUCTION PER PRODUCING WELL	BARREL	47.5	46.7	46.4	47.7	52.6
27. AVERAGE DAILY PRODUCTION PER FLOWING WELL	BARREL	129.9	106.0	115.2	114.5	139.7
28. AVERAGE DAILY PRODUCTION PER ARTIFICIAL LIFT WELL	BARREL	36.6	39.1	38.6	40.4	41.9
29. TOTAL VALUE OF DOMESTIC EXPORTS *	'000\$	8,636,852	6,573,802	5,320,886	5,178,962	4,854,712
30. TOTAL VALUE OF PETROLEUM PRODUCTS (ITEM 29) *	'000\$	2,681,814	2,133,054	3,252,182	3,748,392	3,528,661
31. TOTAL VALUE OF ASPHALT PRODUCTS *	'000\$	25,061	36,794	24,350	22,665	21,866
32. TOTAL NATURAL GAS PRODUCED	MILLION M ³	6,651	7,233	7,438	7,512	7,585
33. USED AS FUEL	MILLION M ³	3,726	3,744	3,515	3,311	3,190
34. REPLACED IN FORMATION	MILLION M ³	0	0	0	0	0
35. "LOSSES, NOT COLLECTED"	MILLION M ³	206	254	246	187	149

APPENDIX III
SUMMARY OF DEVELOPMENT DRILLING IN TRINIDAD AND TOBAGO - 1994

FIELD, AREA OR DISTRICT	NUMBER OF OIL & GAS PRODUCERS COMPLETED	NUMBER OF ABANDONED WELLS	A. TOTAL COMPLETION	B. TOTAL DEPTH DRILLED IN METRES	DRILLING RIGS ON DEVELOPMENT WELLS AT 31st. DEC. 1994
2	7		7	24,801	2
4	1	-	1	1,183	-
5	14	-	14	-	-
8	3	-	3	1,420	-
11	17	2	19	66,930	3
14	-	2	2	1,509	-
TOTAL	42	4	46	95,843	5

"A. Only includes oil, gas and abandoned wells"

B. One (1) injector well metres drld. included (1296 m)

APPENDIX III
SUMMARY OF DEVELOPMENT DRILLING IN TRINIDAD AND TOBAGO - 1995

FIELD, AREA OR DISTRICT	NUMBER OF OIL & GAS PRODUCERS COMPLETED	NUMBER OF ABANDONED WELLS	A. TOTAL COMPLETION	B. TOTAL DEPTH DRILLED IN METRES	DRILLING RIGS ON DEVELOPMENT WELLS AT 31st. DEC. 1995
1	1	-	1	32,375	-
2	6	1	7	9,344	1
4	6	1	7	710	-
5	2	-	2	5,234	-
8	-	4	4	72,614	1
11	22	9	31	1,509	2
TOTAL	37	15	52	121,786	4

"A. Only includes oil, gas and abandoned wells"

APPENDIX III A

KEY TO AREA - NUMBER ON APPENDIX III

AREA NUMBER	DESCRIPTION
1	Soldado, North Marine, Couva Marine, Manicou, (Gulf of Paria Block 1)
2	Pt. Ligoure, F.O.S., Area IV and Guapo, Point Fortin West and Central, Parrylands Cruse, Guapo, Boodoosingh
3	Brighton (Land and Marine), Vessigny, Merrimac
4	Palo Seco, Los Bajos, Erin, Central Los Bajos, Mackenzie, South Erin, Grand Ravine
5	Forest Reserve, Fyzabad, Point Fortin East, New Dome, San Francique, Apex Quarry
6	Quarry, Coora, Quinam, Morne Diablo
7	Oropouche
8	Penal, Barrackpore, Wilson, Siparia"
9	Moruga North and West, Rock Dome, Inniss, Trinity, Catshill, Balata, Bovallius
10	Guayaguayare, Moruga East, Maloney
11	Galeota, Teak, Samaan, Poui, Cassia, Dolphin (Block 6), Diamond Prospect, East Coast, Reverse 'L' East, Reverse 'L' West, Mora, Pelican, Arima South East Galeota, North West Teak, OPC, West Samaan, West East Queen Beach Pamberi, Kiskadee
12	South Marine (South Coast), Carambola
13	Tabaquite, Pointe-a-Pierre, Springvale
14	Icacos, South West Peninsula

APPENDIX IV
MONTHLY ANALYSIS OF DRILLING AND WORKOVER ACTIVITY - 1994
(Depth drilled in metres)

MONTH	NEW WELLS STARTED	DRILLING WELLS COMPLETED												OLD WELLS				
		OIL & GAS PRODUCERS		INJECTION WELLS		ABANDONED						COMPLETED OTHER		TOTAL WELLS	TOTAL AGGR DEPTH	AGGR DEPTH PER WELL	RE- COM- PLETED	
						AFTER TESTING		DRY HOLES		TECHNICAL CAUSES							RE- COM- PLETED	ABAN- DONED
		NO.	AGGR DEPTH	NO.	AGGR DEPTH	NO.	AGGR DEPTH	NO.	AGGR DEPTH	NO.	AGGR DEPTH	NO.	AGGR DEPTH					
JANUARY	2	3	12,813	0	0	0	0	0	0	0	0	0	0	3	12,813	4,271	7	0
FEBRUARY	3	2	1,320	0	0	0	0	0	0	0	0	0	0	2	1,320	660	8	0
MARCH	5	4	7,745	1	2,060	0	0	0	0	0	0	0	0	5	9,805	1,961	4	0
APRIL	4	19	15,569	0	0	0	0	0	0	0	0	0	0	19	15,569	819	10	0
MAY	5	3	9,440	0	0	0	0	1	2,638	0	0	0	0	4	12,078	3,020	12	0
JUNE	4	4	9,826	0	0	0	0	1	823	0	0	1	3246	6	13,895	2,316	8	0
JULY	4	1	3,284	0	0	0	0	1	853	0	0	0	0	2	4,137	2,069	6	0
AUGUST	3	2	6,026	0	0	0	0	0	0	0	0	0	0	2	6,026	3,013	10	0
SEPTEMBER	5	1	3,119	0	0	2	7,916	0	0	0	0	0	0	3	11,035	3,678	10	1
OCTOBER	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
NOVEMBER	11	4	14,090	0	0	1	2,730	2	7,831	0	0	0	0	7	24,651	3,522	13	0
DECEMBER	11	0	0	0	0	0	0	0	0	1	5463	0	0	1	5,463	0	10	0
TOTAL 1994	69	43	83,232	1	2,060	3	10,646	5	12,145	1	5,463	1	3,246	54	116,792	2,163	107	1
TOTAL 1993	56	28	54,414	1	503	0	0	4	11,509	1	2,127	2	2,701	36	71,253	1,979	101	8

NB : AGGR. DEPTH = FINAL DEPTH DRILLED FOR EACH WELL

APPENDIX IV
MONTHLY ANALYSIS OF DRILLING AND WORKOVER ACTIVITY - 1995
(Depth drilled in metres)

MONTH	NEW WELLS STARTED	DRILLING WELLS COMPLETED												OLD WELLS				
		OIL & GAS PRODUCERS		INJECTION WELLS		ABANDONED						COMPLETED OTHER		TOTAL WELLS	TOTAL AGGR DEPTH	AGGR DEPTH PER WELL	-----	
						AFTER TESTING		DRY HOLES		TECHNICAL CAUSES							RE- COMP- LETED	ABAN- DONED
						NO.	AGGR DEPTH	NO.	AGGR DEPTH	NO.	AGGR DEPTH							
JANUARY	13	3	12,252	0	1	3,821	3	8,762	0	0	0	0	7	24,835	3,548	2	0	
FEBRUARY	13	2	4,126	0	0	0	3	5,027	0	0	0	0	5	9,153	1,831	11	0	
MARCH	13	3	8,615	0	1	3,594	1	1,210	0	0	1	1,589	6	15,008	2,501	6	0	
APRIL	9	1	3,516	0	2	4,958	0	0	0	0	0	0	3	8,474	2,825	6	0	
MAY	10	3	10,500	0	0	0	0	0	0	0	0	0	3	10,500	3,500	11	1	
JUNE	4	5	9,766	0	0	0	1	3,189	0	0	0	0	6	12,955	2,159	6	0	
JULY	4	5	8,408	0	1	2,694	1	5,581	0	0	0	0	7	16,683	2,383	7	0	
AUGUST	3	1	5,081	0	0	0	0	0	0	0	0	0	1	5,081	5,081	4	1	
SEPTEMBER	3	2	8,153	0	0	0	4	13,248	0	0	0	0	6	21,401	3,567	3	0	
OCTOBER	7	5	9,525	0	2	8,354	0	0	0	0	0	0	7	17,879	2,554	10	0	
NOVEMBER	6	3	3,749	0	0	0	0	0	3	3,858	0	0	6	7,607	1,268	4	1	
DECEMBER	5	3	7,840	0	0	0	0	0	1	2,129	0	0	4	9,969	2,492	8	0	
TOTAL 1995	90	36	91,531	0	0	7	23,421	13	37,017	4	5,987	1	1,589	61	159,545	2,615	78	3
TOTAL 1994	69	43	83,232	1	2,060	3	10,646	5	12,145	1	5,463	1	3,246	54	116,792	2,163	107	1

NB : AGGR. DEPTH = FINAL DEPTH DRILLED FOR EACH WELL

APPENDIX V
MONTHLY ANALYSIS OF LAND AND MARINE DEPTH DRILLED - 1994
(metres)

MONTH	STATE LAND	PRIVATE LAND	SUB-TOTAL LAND	MARINE	SUB-TOTAL STATE	TOTAL	RIG MONTHS	DAILY AVG. DEPTH	DAILY AVG. DEPTH/ RIG	MARINE % OF TOTAL DEPTH
JANUARY	871	232	1,103	8,161	9,032	9,264	5.00	299	59.8	88.1
FEBRUARY	1,985	563	2,549	2,103	4,089	4,652	6.25	166	26.6	45.2
MARCH	1,727	0	1,727	6,576	8,303	8,303	7.16	268	37.4	79.2
APRIL	4,439	0	4,439	5,898	10,337	10,337	6.47	345	53.3	57.1
MAY	1,423	0	1,423	7,108	8,531	8,531	5.23	275	52.6	83.3
JUNE	2,923	0	2,923	6,767	9,689	9,689	4.97	323	65.0	69.8
JULY	503	0	503	1,633	12,136	12,136	5.32	391	73.6	95.9
AUGUST	1,312	0	1,312	7,550	8,862	8,862	6.16	286	46.4	85.2
SEPTEMBER	2,045	0	2,045	3,594	5,639	5,639	5.60	188	33.6	63.7
OCTOBER	4,891	0	4,891	14,363	19,254	19,254	8.46	621	73.4	74.6
NOVEMBER	5,560	0	5,560	11,227	16,787	16,787	6.86	560	81.6	66.9
DECEMBER	5,116	0	5,116	11,334	16,450	16,450	7.41	531	71.6	68.9
TOTAL	32,794	796	33,589	96,315	129,109	129,904	74.89	356	57.0	74.1

APPENDIX V
MONTHLY ANALYSIS OF LAND AND MARINE DEPTH DRILLED - 1995
(metres)

MONTH	STATE LAND	PRIVATE LAND	SUB-TOTAL LAND	MARINE	SUB-TOTAL STATE	TOTAL	RIG MONTHS	DAILY AVG. DEPTH	DAILY AVG. DEPTH/ RIG	MARINE % OF TOTAL DEPTH
JANUARY	5,678	2,338	8,016	7,157	12,835	15,173	6.29	489	77.8	47.2
FEBRUARY	5,615	1,189	6,804	12,555	18,170	19,359	6.55	691	105.6	64.9
MARCH	6,592	2,327	8,919	7,466	14,058	16,385	5.61	529	94.2	45.6
APRIL	3,461	0	3,461	8,602	12,063	12,063	6.48	402	62.1	71.3
MAY	6,070	2,154	8,224	8,577	14,647	16,801	8.96	542	60.5	51.1
JUNE	5,017	0	5,017	9,999	15,016	15,016	6.73	501	74.4	66.6
JULY	2,579	0	2,579	7,377	9,956	9,956	4.53	321	70.9	74.1
AUGUST	444	0	444	4,843	5,287	5,287	4.29	171	39.8	91.6
SEPTEMBER	495	0	495	7,841	8,336	8,336	3.40	278	81.7	94.1
OCTOBER	2,071	3,539	5,610	5,176	7,247	10,786	5.10	348	68.2	48.0
NOVEMBER	574	383	957	12,383	12,957	13,340	5.33	445	83.4	92.8
DECEMBER	2,499	0	2,499	3,764	6,263	6,263	1.87	202	108.0	60.1
TOTAL	41,095	11,930	53,025	95,740	136,835	148,765	65.14	408	75.1	64.4

APPENDIX VI
CRUDE OIL PRODUCTION BY FIELDS, AREAS OR DISTRICTS - 1995

COMPANY, FIELDS AREAS OR DISTRICTS	DISCOVERY YEAR	TOTAL WELLS COMPLETED	ANNUAL PRODUCTION		CUMULATIVE PRODUCTION THROUGH DECEMBER, 1995
			1995	1994	
			BARRELS	BARRELS	'000 BARRELS
PRETOLEUM COMPANY OF TRINIDAD AND TOBAGO LTD.					
BALATA EAST AND WEST	1952	75	45,067	64,562	3,911
CATSHILL	1950	135	274,094	189,592	24,295
INNISS	1956	41	18,310	6,770	6,346
ROCK DOME	1962	3	0	0	16
PENAL	1936	289	235,982	251,173	64,366
NEW DOME	1928	31	4,952	2,702	3,171
SAN FRANCISQUE	1929	27	0	0	5,983
GUAPO/BOODOOSINGH	1922	884	767,689	1,301,559	95,706
PARRYLANDS 1-5	1913	511	209,620	331,093	43,337
POINT FORTIN AND GRAND RAVINE	1907	757	1,277,914	769,486	74,394
BEACH		0	24,363	0	24
ERIN	1963	28	155,921	100,138	6,838
MAHAICA	1954	6	0	0	0
GUAYAGUAYARE AND LOS BAJOS	1902	729	190,939	428,374	91,594
TRINITY	1956	95	91,658	80,352	15,845
BARRACKPORE	1911	424	486,411	576,647	38,209
ORPOUCHE	1944	131	77,684	79,150	7,431
MORNE DIABLO AND QUINAM	1926	103	8,324	22,835	7,851
FOREST RESERVE	1920	2,079	1,217,890	1,302,009	269,636
PALO SECO	1930	945	2,248,793	2,589,989	163,039
BRIGHTON LAND	1903	623	31,399	284,768	72,184
PT. LIGOURE/BRIGHTON MARINE	1937	15	166,792	103,880	3,361
COUVA MARINE	1963	6	0	0	301
CRUSE	1913	150	70,935	77,417	26,245
WILSON	1936	82	38,701	45,868	20,383
BALATA CENTRAL	1949	6	0	0	371
MAYARO		9	0	0	0
SIPARIA		2	2,928	3,169	16
FYZABAD/APEX QUARRY	1920-1938	1,049	721,489	768,668	177,965
MORUGA EAST	1953	80	29,267	33,048	2,868
MORUGA NORTH	1956	23	0	0	1,085
MORUGA WEST	1957	130	68,842	51,655	9,540
COORA/QUARRY	1936	744	480,339	530,970	95,819
MC KENZIE	1926	1,661	126,258	102,115	6,838
NORTH MARINE	1956	19	0	0	1,269
GALEOTA	1963	105	573,184	621,512	20,795
CENTRAL LOS BAJOS	1973	280	604,545	669,180	14,753
MARCELLE VALLEY		0	21,508	0	22
TABAQUITE	1911	238	1,942	17,318	1,978
MALONEY	1902	1	0	0	2
NAVETTE	0	0	175,237	0	175
ANTILLES VESSIGNY	0	0	29,331	0	29
GOUDRON	1902	2	8,349	0	57
LEASE OPERATORS		46	640,449	133,063	1,067
FARMOUT		0	102,946	0	103
TOTAL		12,564	11,230,052	11,539,062	1,379,218

CONTINUED

APPENDIX VI
CRUDE OIL PRODUCTION BY FIELDS, AREAS OR DISTRICTS - 1995

COMPANY,FIELDS AREAS OR DISTRICTS	DISCOVERY YEAR	TOTAL WELLS COMPLETED	ANNUAL PRODUCTION		CUMULATIVE PRODUCTION THROUGH DECEMBER, 1995
			1995 BARRELS	1994 BARRELS	
PRETOLEUM COMPANY OF TRINDAD AND TOBAGO LTD.			'000 BARRELS		
SIPARIA	1957	5	2,925	3,170	922
SAN FRANCIQUE	1929	116	122,282	129,176	4,830
FYZABAD/ROODAL	1918	281	78,981	91,084	14,017
PALO SECO	1915	83	7,937	3,698	1,692
BARRACKPORE	1970	9	25,076	27,014	566
ICACOS	1955	13	3,411	4,241	5,253
DEFUNCT FIELDS	1954	19	0	0	323
TOTAL			526	240,612	258,383
TRINIDAD NORTHERN AREAS					
FOS/FT	1954	35	53,490	111,653	7,651
SOLDADO	1955	742	11,526,422	12,012,090	561,198
TOTAL			777	11,579,912	12,123,743
AMOCO TRINIDAD OIL CO. LTD.					
TEAK	1969	141	7,606,154	9,241,668	315,837
SAMAAN	1971	85	5,012,799	4,769,673	211,679
POUI	1974	84	5,232,566	5,851,882	202,701
CASSIA	1973	10	243,927	440,005	18,617
MORA	1982	6	0	11,076	956
FLAMBOUYANT	1993	1	739,948	786,609	2,127
IMMORTELLE	1993	10	2,118,347	504,975	2,623
BANYAN	1995	1	600,237	0	600
TOTAL			338	21,553,978	21,605,888
TRINTOMAR					
PELICAN	1990	3	378,564	512,121	4,758
TOTAL			3	378,564	512,121
ENRON					
KISKADEE	1993	10	1,792,769	1,195,739	3,026
IBIS	1995	6	616,548	0	617
TOTAL			16	2,409,317	1,195,739
MORAVEN					
MORA	1982	7	183,971	11,076	1,140
TOTAL			7	183,971	11,076
GRAND TOTAL			14,231	47,576,406	47,246,012
					2,740,351

APPENDIX VII
CRUDE OIL PRODUCTION BY MONTHS AND METHODS - 1994
(barrels)

MONTH	FLOWING			GAS LIFT			PUMPING		
	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL
JANUARY	291	911,691	101.1	599	2,147,827	115.7	2,389	923,097	0.0
FEBRUARY	288	729,654	90.5	610	2,019,135	118.2	2,403	850,450	13.7
MARCH	297	875,601	95.1	613	2,228,074	117.2	2,402	933,801	11.4
APRIL	301	908,252	100.6	595	2,119,027	118.7	2,396	898,800	13.0
MAY	306	921,327	97.1	600	2,200,477	118.3	2,427	932,951	11.9
JUNE	283	851,941	100.3	641	2,124,984	110.5	2,375	881,355	12.7
JULY	266	927,536	112.5	608	2,110,758	112.0	2,456	907,017	11.6
AUGUST	299	933,094	100.7	608	2,149,419	114.0	2,463	904,966	11.9
SEPTEMBER	290	981,768	112.8	611	2,090,511	114.0	2,439	852,338	12.4
OCTOBER	290	1,004,215	111.7	621	2,157,244	112.1	2,419	878,281	11.4
NOVEMBER	276	995,682	120.3	613	2,026,934	110.2	2,433	833,991	12.0
DECEMBER	287	1,066,330	119.9	598	2,068,959	111.6	2,461	860,688	11.3
TOTAL 1994		11,107,091			25,443,349			10,657,735	
AVERAGE 1994	290	30,430	105.1	610	69,708	114.3	2,422	29,199	12.1

CONTINUED

APPENDIX VII
CRUDE OIL PRODUCTION BY MONTHS AND METHODS - 1994
(barrels)

MONTH	PLUNGER LIFT			OTHER METHODS			TOTAL NO. OF WELLS PRODUCING	TOTAL OIL PRODUCTION	DAILY AVG. PER PRODUCING WELL	B.O.P.D.	SALT WATER	
	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL					PRODUCTION	% OF TOTAL FLUID
JANUARY	1	2,369	0	22	600	0.9	3,302	3,985,584	38.9	128,567	5,558,626	58.2
FEBRUARY	1	2,083	0	20	379	0.7	3,322	3,601,701	38.7	128,632	5,072,548	58.5
MARCH	1	2,228	0	32	790	0.8	3,345	4,040,494	39.0	130,339	5,471,696	57.5
APRIL	1	2,043	0	32	703	0.7	3,325	3,928,825	39.4	130,961	5,341,045	57.6
MAY	1	2,426	0	33	785	0.8	3,367	4,057,966	38.9	130,902	4,826,642	54.3
JUNE	1	2,187	0	34	681	0.7	3,334	3,861,148	38.6	128,705	4,656,994	54.7
JULY	1	2,005	64.7	28	769	0.9	3,359	3,948,085	37.9	127,358	4,975,183	55.8
AUGUST	1	1,726	55.7	27	1,204	1.4	3,398	3,990,409	37.9	128,723	5,207,373	56.6
SEPTEMBER	0	0	0	23	745	1.1	3,363	3,925,362	38.9	130,845	4,691,473	54.4
OCTOBER	0	0	0	32	887	0.9	3,362	4,040,627	38.8	130,343	4,906,441	54.8
NOVEMBER	0	0	0	34	1,152	1.1	3,356	3,857,759	38.3	128,592	5,307,409	57.9
DECEMBER	0	0	0	23	999	1.4	3,369	3,996,976	38.3	128,935	5,629,811	58.5
TOTAL 1994		17,067			9,694			47,234,936			61,645,241	
AVERAGE 1994	1	47	70.1	28	27	0.9	3,350	129,411	38.6	129,411	168,891	56.6

APPENDIX VII
CRUDE OIL PRODUCTION BY MONTHS AND METHODS - 1995
(barrels)

MONTH	FLOWING			GAS LIFT			PUMPING		
	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL
JANUARY	293	1,145,357	126.1	631	2,030,727	103.8	2,777	921,718	10.7
FEBRUARY	291	911,578	111.9	600	1,838,286	109.4	2,835	830,912	10.5
MARCH	292	1,050,165	116.0	597	2,140,391	115.7	2,879	902,080	10.1
APRIL	289	1,084,138	125.0	578	2,021,947	116.6	2,881	859,913	9.9
MAY	286	1,044,980	117.9	594	2,177,320	118.2	2,902	918,069	10.2
JUNE	290	1,066,085	122.5	604	2,030,943	112.1	2,854	883,684	10.3
JULY	280	1,168,019	134.6	580	2,082,452	115.8	2,866	887,231	10.0
AUGUST	265	1,140,175	138.8	563	1,973,487	113.1	2,747	838,625	9.8
SEPTEMBER	269	1,132,147	140.3	546	1,856,730	113.4	2,743	781,027	9.5
OCTOBER	271	1,214,095	144.5	573	1,877,417	105.7	2,854	829,106	9.4
NOVEMBER	276	1,190,451	143.8	564	1,878,919	111.0	2,865	811,831	9.4
DECEMBER	275	1,153,427	135.3	557	1,993,465	115.4	2,865	898,072	10.1
TOTAL 1995		13,300,617			23,902,084			10,362,268	
AVERAGE 1995	281	36,440	129.5	582	65,485	112.5	2,839	28,390	10.0

CONTINUED

APPENDIX VII
CRUDE OIL PRODUCTION BY MONTHS AND METHODS - 1995
(barrels)

MONTH	PLUNGER LIFT			OTHER METHODS			TOTAL NO. OF WELLS PRODUCING	TOTAL OIL PRODUCTION	DAILY AVG. B.O.P.D.		SALT WATER	
	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL			PER PRODUCING WELL		PRODUCTION	% OF TOTAL FLUID
JANUARY	0	0	0	38	1,129	1.0	3,739	4,098,931	35.4	132,224	5,399,723	56.8
FEBRUARY	0	0	0	37	1,064	1.0	3,763	3,581,840	34.0	127,923	5,058,557	58.5
MARCH	0	0	0	35	1,589	1.5	3,803	4,094,225	34.7	132,072	5,720,446	58.3
APRIL	0	0	0	34	1,397	1.4	3,782	3,967,395	35.0	132,247	5,457,822	57.9
MAY	0	0	0	42	1,230	0.9	3,824	4,141,599	34.9	133,600	5,690,687	57.9
JUNE	0	0	0	33	944	1.0	3,781	3,981,656	35.1	132,722	5,544,244	58.2
JULY	0	0	0	35	976	0.9	3,761	4,138,678	35.5	133,506	5,364,013	56.4
AUGUST	0	0	0	20	363	0.6	3,595	3,952,650	35.5	127,505	5,258,666	57.1
SEPTEMBER	0	0	0	11	191	0.6	3,569	3,770,095	35.2	125,670	5,430,334	59.0
OCTOBER	0	0	0	27	931	1.1	3,725	3,921,549	34.0	126,502	5,737,768	59.4
NOVEMBER	0	0	0	26	777	1.0	3,731	3,881,978	34.7	129,399	5,106,994	56.8
DECEMBER	0	0	0	26	846	1.0	3,723	4,045,810	35.1	130,510	5,882,972	59.3
TOTAL 1995	0	0	0		11,437			47,576,406			65,652,226	
AVERAGE 1995	0	0	0	30	31	1.0	3,733	130,346	34.9	130,346	179,869	58.0

APPENDIX VIII
ANALYSIS OF CRUDE OIL PRODUCTION BY OPERATING COMPANIES - 1994
(barrels)

COMPANY	FLOWING			GAS LIFT			PUMPING		
	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL
AMOCO TRINIDAD OIL COMPANY LTD.	42	5,156,239	336.3	120	16,449,649	375.6	0	0	0.0
PREMIER CONSOLIDATED OILFIELDS LTD.	4	16,302	11.2	1	2,743	7.5	80	212,651	7.3
TRINIDAD NORTHERN AREA	60	2,922,452	133.4	242	7,658,891	86.7	47	1,542,400	89.9
TRINIDAD AND TOBAGO OIL COMPANY LTD.	122	919,443	20.6	243	1,326,072	15.0	972	3,370,349	9.5
TRINIDAD AND TOBAGO PETROLEUM COMPANY LTD.	53	384,795	19.9	2	5,994	8.2	1,321	5,532,335	11.5
TRINTOMAR	2	512,121	701.5	0	0	0.0	0	0	0.0
ENRON	3	1,195,739	1,092.0	0	0	0.0	0	0	0.0
TOTAL 1994	286	11,107,091	106.4	608	25,443,349	114.7	2,420	10,657,735	12.1
TOTAL 1993	324	10,439,513	88.3	596	23,193,472	106.6	2,403	10,978,857	12.5

CONTINUED

APPENDIX VIII
ANALYSIS OF CRUDE OIL PRODUCTION BY OPERATING COMPANIES - 1994
(barrels)

COMPANY	OTHER PLUNGER LIFT			OTHER			AV. NO OF WELLS PRODUCED	TOTAL OIL PRODUCTION	DAILY AVG. PER WELL	COMPANY'S PROD'N AS A% OF TOTAL PROD'N	SALT WATER	
	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL					PRODUC-TION	% OF TOTAL FLUID
AMOCO TRINIDAD OIL COMPANY LTD.	0	0	0	-	0	0	162	21,605,888	365.4	45.7	39,586,495	64.7
PREMIER CONSOLIDATED OILFIELDS LTD.	1	17,067	47	28	9,620	1	113	258,383	6.3	0.5	235,976	47.7
TRINIDAD NORTHERN AREAS	0	0	0		0	0	349	12,123,743	95.2	25.7	6,615,110	35.3
TRINIDAD AND TOBAGO OIL COMPANY LTD.	0	0	0	1	74	0	1,338	5,615,938	11.5	11.9	5,039,143	47.3
PETROLEUM COMPANY OF TRINIDAD AND TOBAGO	0	0	0	0	0	0	1,376	5,923,124	11.8	12.5	8,118,923	57.8
TRINTOMAR	0	0	0	0	0	0	2	512,121	701.5	1.1	2,016,582	79.7
ENRON	0	0	0	0	0	0	3	1,195,739	1,092.0	2.5	33,012	2.7
TOTAL 1994	1	17,067	46.8	29	9,694	0.9	3,344	47,234,936	38.7	100.0	61,645,241	56.6
TOTAL 1993	1	13,768	37.7	23	8,436	1.0	3,347	44,634,046	36.5	100.0	63,915,419	58.9

APPENDIX VIII
ANALYSIS OF CRUDE OIL PRODUCTION BY OPERATING COMPANIES - 1995
(barrels)

COMPANY	FLOWING			GAS LIFT			PUMPING		
	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL	AV. NO. OF WELLS	PRODUCTION	DAILY AV. PER WELL
AMOCO TRINIDAD OIL COMPANY LTD.	41	6,707,432	448.2	120	14,846,546	339.0	0	0	0.0
PREMIER CONSOLIDATED OILFIELDS LTD.	3	9,763	8.9	4	6,612	4.5	78	212,800	7.5
TRINIDAD NORTHERN AREAS	51	2,692,859	144.6	242	7,764,064	87.9	38	1,122,989	81.0
TRINIDAD AND TOBAGO OIL COMPANY LTD.	122	919,443	20.6	243	1,326,072	15.0	972	3,370,349	9.5
PETROLEUM COMPANY OF TRINIDAD AND TOBAGO	160	1,070,302	18.3	213	1,100,891	14.2	2,373	8,315,464	9.6
TRINTOMAR	3	378,564	345.7	0	0	0.0	0	0	0.0
ENRON	7	2,409,317	943.0	0	0	0.0	0	0	0.0
MORAVEN	0	0	0.0	4	183,971	126.0	0	0	0.0
LEASE OPERATORS/ FARMOUT 16	32,380	0	0	—	352	711,015	5.5		
TOTAL 1995	281	13,300,617	129.7	583	23,902,084	112.3	2,841	10,362,268	10.0
TOTAL 1994	286	11,107,091	106.4	608	25,443,349	114.7	2,420	10,657,735	12.1

CONTINUED

APPENDIX VIII
ANALYSIS OF CRUDE OIL PRODUCTION BY OPERATING COMPANIES - 1995
(barrels)

COMPANY	OTHER PLUNGER LIFT			OTHER			AV. NO OF WELLS PRODUCED	TOTAL OIL PRODUCTION	DAILY AVG. PER WELL	COMPANY'S PROD'N AS A% OF TOTAL PROD'N	SALT WATER	
	AV. PRODUCTION NO. OF WELLS	DAILY AV. PER WELL	AV. PRODUCTION NO. OF WELLS	DAILY AV. PER WELL							PRODUC- TION	% OF TOTAL FLUID
AMOCO TRINIDAD OIL COMPANY LTD.	0	0	0	0	0	0	161	21,553,978	366.8	45.3	40,811,438	65.4
PREMIER CONSOLIDATED OILFIELDS LTD.	0	0	0	31	11,437	1.0	116	240,612	5.7	0.5	207,194	46.3
TRINIDAD NORTHERN AREAS	0	0	0	0	0	0	331	11,579,912	95.8	24.3	6,636,631	36.4
PETROLEUM COMPANY OF TRINIDAD AND TOBAGO	0	0	0	0	0	0	2,746	10,486,657	10.5	22.0	15,120,444	59.0
TRINTOMAR	0	0	0	0	0	0	3	378,564	345.7	0.8	2,456,825	86.6
ENRON	0	0	0	0	0	0	7	2,409,317	943.0	5.1	188,342	7.3
MORAVEN	0	0	0	0	0	0	4	183,971	126.0	0.4	7,909	4.1
LEASE OPERATORS/ FARMOUT	0	0	0	0	0	0	368	743,395	5.5	1.6	223,443	23.1
TOTAL 1995	0	0	0	31	11,437	1.0	3,736	47,576,406	34.9	100.0	65,652,226	58.0
TOTAL 1994	1	17,067	46.8	29	9,694	0.9	3,344	47,234,936	38.7	100.0	61,645,241	56.6

APPENDIX IX
TOTAL AND DAILY AVERAGE CRUDE OIL PRODUCTION BY MONTHS FOR ALL COMPANIES - 1994
(Production in barrels)

MONTH	AMOCO TRINIDAD OIL CO. LTD.		PREMIER CONSOLIDATED OILFIELDS LTD.		TRINIDAD NORTHERN AREAS		TRINIDAD & TOBAGO OIL CO. LTD.		TRINIDAD & TOBAGO PETROLEUM CO. LTD.		TRINTOMAR		ENRON	
	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.
JANUARY	1,829,852	59,027	22,322	720	1,021,468	32,951	495,165	15,973	506,878	16,351	49,802	1,607	60,097	1,939
FEBRUARY	1,676,967	59,892	20,398	729	878,346	31,370	450,357	16,084	468,213	16,722	46,918	1,676	60,502	2,161
MARCH	1,882,819	60,736	22,455	724	995,971	32,128	486,070	15,680	516,309	16,655	54,458	1,757	82,412	2,658
APRIL	1,810,157	60,339	21,345	712	975,369	32,512	468,033	15,601	492,446	16,415	45,461	1,515	116,014	3,867
MAY	1,837,322	59,268	22,643	730	1,016,362	32,786	477,373	15,399	516,632	16,666	55,613	1,794	132,021	4,259
JUNE	1,736,443	57,881	21,220	707	989,696	32,990	454,166	15,139	493,491	16,450	51,018	1,701	115,114	3,837
JULY	1,735,939	55,998	21,740	701	1,040,177	33,554	485,274	15,654	508,970	16,418	53,616	1,730	102,369	3,302
AUGUST	1,730,558	55,824	21,522	694	1,076,577	34,728	481,722	15,539	509,723	16,443	57,259	1,847	113,048	3,647
SEPTEMBER	1,769,548	58,985	20,346	678	1,045,988	34,866	452,020	15,067	482,210	16,074	49,386	1,646	105,864	3,529
OCTOBER	1,861,533	60,049	22,298	719	1,064,383	34,335	461,677	14,893	490,735	15,830	39,358	1,270	100,643	3,247
NOVEMBER	1,826,444	60,881	20,887	696	993,602	33,120	445,838	14,861	462,738	15,425	4,664	155	103,586	3,453
DECEMBER	1,908,306	61,558	21,207	684	1,025,804	33,090	458,243	14,782	474,779	15,315	4,568	147	104,069	3,357
TOTAL 1994	21,605,888	59,194	258,383	708	12,123,743	33,216	5,615,938	15,386	5,923,124	16,228	512,121	1,403	1,195,739	3,276
TOTAL 1993	20,113,755	55,106	286,690	785	11,394,554	31,218	6,052,420	16,582	6,062,199	16,609	687,453	1,883	36,975	101

APPENDIX IX
TOTAL AND DAILY AVERAGE CRUDE OIL PRODUCTION BY MONTHS FOR ALL COMPANIES - 1995
(Production in barrels)

MONTH	AMOCO TRINIDAD OIL CO. LTD.		P.C.O.L.		TRINIDAD NORTHERN AREAS		TRINTOMAR		ENRON		MORAVEN		PETROTRIN		LEASE OPERATORS		FARMOUT	
	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.	PRODUCTION	B.O.P.D.
JANUARY	1,879,059	60,615	21,067	680	1,010,543	32,598	4,753	153	170,064	5,486	1,776	57	952,628	30,730	51,467	1,660	7,574	244
FEBRUARY	1,644,294	58,725	19,493	696	937,402	33,479	5,403	193	57,380	2,049	12,868	460	853,065	30,467	45,799	1,636	6,136	219
MARCH	1,811,597	58,439	21,587	696	1,047,828	33,801	16,664	538	184,358	5,947	23,603	761	926,411	29,884	54,575	1,760	7,602	245
APRIL	1,745,231	58,174	21,272	709	1,018,723	33,957	27,323	911	184,559	6,152	25,204	840	886,796	29,560	51,777	1,726	6,510	217
MAY	1,844,829	59,511	22,868	738	1,031,734	33,282	38,926	1,256	188,633	6,085	28,677	925	919,970	29,676	56,179	1,812	9,786	316
JUNE	1,750,587	58,353	20,772	692	1,000,103	33,337	32,249	1,075	203,568	6,786	26,880	896	884,784	29,493	53,729	1,791	8,983	299
JULY	1,814,965	58,547	21,517	694	1,033,780	33,348	37,995	1,226	235,909	7,610	24,166	780	901,562	29,083	58,148	1,876	10,636	343
AUGUST	1,844,432	59,498	18,803	607	892,021	28,775	47,481	1,532	222,833	7,188	10,433	337	854,788	27,574	53,079	1,712	8,779	283
SEPTEMBER	1,769,941	58,998	17,023	567	831,019	27,701	44,234	1,474	244,645	8,155	8,192	273	795,090	26,503	51,556	1,719	8,395	280
OCTOBER	1,786,967	57,644	18,259	589	907,334	29,269	41,718	1,346	251,157	8,102	11,440	369	839,343	27,076	54,913	1,771	10,417	336
NOVEMBER	1,810,314	60,344	18,612	620	904,752	30,158	35,466	1,182	236,717	7,891	5,788	193	808,286	26,943	52,436	1,748	9,607	320
DECEMBER	1,851,762	59,734	19,339	624	964,673	31,118	46,352	1,495	229,494	7,403	4,944	159	863,934	27,869	56,791	1,832	8,521	275
TOTAL 1995	21,553,978	59,052	240,612	659	11,579,912	31,726	378,564	1,037	2,409,317	6,601	183,971	504	10,486,657	28,731	640,449	1,755	102,946	282
TOTAL 1994	21,605,888	59,194	258,383	708	12,123,743	33,216	512,121	1,403	1,195,739	3,276	0	0	11,405,999	31,249	133,063	365	0	0

APPENDIX X
LAND AND MARINE CRUDE OIL PRODUCTION - 1994
(barrels)

MONTH	MARINE							TOTAL MARINE	DEVIATED FROM SHORE				LAND
	TNA: SOLDADO	TRINTOC A.B.M.	TRINTOC: PT. LIG	TRINTOPEC: GALEOTA	AMOCO	TRINTOMAR	ENRON		TNA: F.O.S	TRINTOC A.S.	TRINTOC: A.L.S	TRINTOPEC: GUAPO	
JANUARY	1,011,618	12,945	0	47,302	1,829,852	49,802	60,097	3,011,616	9,850	4,773	0	1,368	957,977
FEBRUARY	871,170	13,541	0	52,866	1,676,967	46,918	60,502	2,721,964	7,176	2,987	0	804	868,770
MARCH	988,450	14,157	0	54,432	1,882,819	54,458	82,412	3,076,728	7,521	4,860	0	1,394	949,991
APRIL	968,444	13,375	0	51,080	1,810,157	45,461	116,014	3,004,531	6,925	3,829	0	1,080	912,460
MAY	1,008,646	13,517	0	52,558	1,837,322	55,613	132,021	3,099,677	7,716	5,246	0	1,394	943,933
JUNE	980,369	14,372	0	47,325	1,736,443	51,018	115,114	2,944,641	9,327	3,870	0	1,126	902,184
JULY	1,029,618	15,122	0	54,380	1,735,939	53,616	102,369	2,991,044	10,559	4,641	0	948	940,893
AUGUST	1,066,580	14,316	0	56,142	1,730,558	57,259	113,048	3,037,903	9,997	4,810	0	1,145	936,554
SEPTEMBER	1,035,605	13,778	0	54,250	1,769,548	49,386	105,864	3,028,431	10,383	3,668	0	1,303	881,577
OCTOBER	1,052,986	11,870	0	55,138	1,861,533	39,358	100,643	3,121,528	11,397	6,456	0	1,489	899,757
NOVEMBER	981,881	15,074	0	48,232	1,826,444	4,664	103,586	2,979,881	11,721	4,569	0	1,104	860,484
DECEMBER	1,016,723	12,542	0	47,807	1,908,306	4,568	104,069	3,094,015	9,081	6,367	0	988	886,525
TOTAL	12,012,090	164,609	0	621,512	21,605,888	512,121	1,195,739	36,111,959	111,653	56,076	0	14,143	10,941,105

APPENDIX XI
AVERAGE NO. OF PRODUCING WELLS LAND AND MARINE - 1994

MONTH	MARINE							TOTAL MARINE	DEVIATED FROM SHORE				LAND
	TNA: SOLDADO	TRINTOC A.B.M.	TRINTOC: PT. LIG	TRINTOPEC: GALEOTA	AMOCO	TRINTOMAR	ENRON		TNA: F.O.S	TRINTOC A.S.	TRINTOC: A.L.S	TRINTOPEC: GUAPO	
JANUARY	345	30	0	33	159	2	2	571	19	18	0	10	2,684
FEBRUARY	346	33	0	36	160	2	2	579	18	20	0	10	2,695
MARCH	344	41	0	36	161	2	3	587	18	24	0	10	2,706
APRIL	329	39	0	33	163	2	4	570	16	25	0	10	2,704
MAY	326	42	0	35	164	2	5	574	16	20	0	10	2,747
JUNE	326	42	0	39	165	2	4	578	15	24	0	10	2,707
JULY	326	41	0	36	162	2	5	572	15	21	0	10	2,741
AUGUST	328	42	0	38	167	2	4	581	14	25	0	10	2,768
SEPTEMBER	330	34	0	35	162	2	4	567	14	22	0	10	2,750
OCTOBER	354	37	0	35	163	2	4	595	13	20	0	10	2,724
NOVEMBER	337	38	0	34	163	1	3	576	15	16	0	10	2,739
DECEMBER	331	36	0	36	163	1	6	573	15	20	0	10	2,751
AVERAGE	335	38	0	36	163	2	4	577	16	21	0	10	2,726

APPENDIX X
LAND AND MARINE CRUDE OIL PRODUCTION - 1995
(barrels)

MONTH	MARINE								TOTAL	DEVIATED FROM SHORE				LAND	TOTAL
	TNA: SOLDADO	TRINTOC A.B.M.	TRINTOC: PT. LIG	TRINTOPEC: GALEOTA	AMOCO	TRINTOMAR	ENRON	MORAVEN		TNA: F.O.S	TRINTOC A.B.M.	TRINTOC: A.L.S	TRINTOPEC: GUAPO		
JANUARY	999,641	11,298	0	54,515	1,879,059	4,753	170,064	1,776	3,121,106	10,902	3,168	8,500	986	977,825	4,098,931
FEBRUARY	928,102	10,481	0	50,563	1,644,294	5,403	57,380	12,868	2,709,091	9,300	2,818	7,637	811	872,749	3,581,840
MARCH	1,042,156	13,331	0	54,620	1,811,597	16,664	184,358	23,603	3,146,329	5,672	0	8,159	901	947,896	4,094,225
APRIL	1,012,496	12,302	0	53,140	1,745,231	27,323	184,559	25,204	3,060,255	6,227	0	7,648	802	907,140	3,967,395
MAY	1,026,188	10,737	0	54,611	1,844,829	38,926	188,633	28,677	3,192,601	5,546	70	7,616	668	949,001	4,141,602
JUNE	996,078	9,414	0	49,551	1,750,587	32,249	203,568	26,880	3,068,327	4,025	684	7,262	1,032	913,328	3,981,655
JULY	1,030,880	11,053	0	48,284	1,814,965	37,995	235,909	24,166	3,203,252	2,900	493	7,149	1,126	935,426	4,138,678
AUGUST	891,536	10,079	0	45,838	1,844,432	47,481	222,833	10,433	3,072,632	485	0	5,747	917	880,017	3,952,649
SEPTEMBER	831,019	9,811	0	40,399	1,769,941	44,234	244,645	8,192	2,948,241	0	204	6,714	986	821,854	3,770,095
OCTOBER	905,214	5,609	0	43,843	1,786,967	41,718	251,157	11,440	3,045,948	2,120	590	6,910	1,030	875,600	3,921,548
NOVEMBER	901,433	7,306	0	39,414	1,810,314	35,466	236,717	5,788	3,036,438	3,319	1,040	5,977	1,178	845,540	3,881,978
DECEMBER	961,679	9,253	0	38,406	1,851,762	46,352	229,494	4,944	3,141,890	2,994	990	6,358	1,480	903,920	4,045,810
TOTAL	11,526,422	120,674	0	573,184	21,553,978	378,564	2,409,317	183,971	36,746,110	53,490	10,057	85,677	11,917	10,830,296	47,576,406

APPENDIX XI
AVERAGE NO. OF PRODUCING WELLS LAND AND MARINE - 1995

MONTH	MARINE								TOTAL	DEVIATED FROM SHORE				LAND	TOTAL
	TNA: SOLDADO	TRINTOC A.B.M.	TRINTOC: PT. LIG	TRINTOPEC: GALEOTA	AMOCO	TRINTOMAR	ENRON	MORAVEN		TNA: F.O.S	TRINTOC A.B.M.	TRINTOC: A.L.S	TRINTOPEC: GUAPO		
JANUARY	335	40	0	38	164	1	7	2	587	16	19	1	10	3,152	3,739
FEBRUARY	335	34	0	36	165	1	5	3	579	14	22	1	11	3,184	3,763
MARCH	329	39	0	36	165	1	5	4	579	12	0	1	11	3,224	3,803
APRIL	325	34	0	35	159	1	5	4	563	12	0	1	11	3,219	3,782
MAY	339	26	0	36	158	3	6	4	572	12	3	1	11	3,252	3,824
JUNE	332	48	0	41	155	2	6	4	588	10	2	1	11	3,193	3,781
JULY	320	43	0	41	161	2	5	4	576	11	1	1	12	3,185	3,761
AUGUST	312	26	0	29	158	3	8	4	540	12	0	1	11	3,055	3,595
SEPTEMBER	284	21	0	31	158	3	8	4	509	0	3	1	12	3,060	3,569
OCTOBER	307	23	0	35	165	3	9	4	551	11	3	1	11	3,174	3,725
NOVEMBER	317	32	0	42	165	3	7	4	570	14	3	1	12	3,161	3,731
DECEMBER	313	23	0	44	166	3	8	4	561	13	3	1	12	3,162	3,723
AVERAGE	321	32	0	37	162	2	7	4	565	11	5	1	11	3,168	3,733

APPENDIX XII
MONTHLY CRUDE OIL PRODUCTION BY LEASE - 1994

MONTH	STATE LEASE			PRIVATE LEASE		
	NO.OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO.OF WELLS	PRODUCTION	DAILY AV. PER WELL
JANUARY	2,688	3,800,108	45.6	614	185,476	9.7
FEBRUARY	2,695	3,439,295	45.6	627	162,406	9.3
MARCH	2,704	3,858,062	46.0	641	182,432	9.2
APRIL	2,695	3,751,467	46.4	630	177,358	9.4
MAY	2,733	3,867,958	45.7	634	190,008	9.7
JUNE	2,719	3,690,512	45.2	615	170,636	9.2
JULY	2,743	3,776,865	44.4	616	171,220	9.0
AUGUST	2,784	3,824,600	44.3	614	165,809	8.7
SEPTEMBER	2,759	3,767,388	45.5	604	158,019	8.7
OCTOBER	2,749	3,879,471	45.5	613	161,156	8.5
NOVEMBER	2,755	3,704,702	44.8	601	153,057	8.5
DECEMBER	2,753	3,840,258	45.0	616	156,718	8.2
TOTAL 1994	32,777	45,200,686	45.3	7,425	2,034,295	9.0
AVERAGE 1994	2,731	123,837	45.3	619	5,573	9.0

APPENDIX XII
MONTHLY CRUDE OIL PRODUCTION BY LEASE - 1995
(barrels)

MONTH	STATE LEASE			PRIVATE LEASE			TOTAL	
	NO.OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO.OF WELLS	PRODUCTION	DAILY AV. PER WELL	NO.OF WELLS	PRODUCTION
JANUARY	3,017	3,918,471	41.9	722	180,460	8.1	3,739	4,098,931
FEBRUARY	3,026	3,424,599	40.4	737	157,241	7.6	3,763	3,581,840
MARCH	3,065	3,928,483	41.3	738	165,742	7.2	3,803	4,094,225
APRIL	3,053	3,802,247	41.5	729	165,148	7.6	3,782	3,967,395
MAY	3,080	3,971,429	41.6	744	170,173	7.4	3,824	4,141,602
JUNE	3,074	3,817,424	41.4	707	164,231	7.7	3,781	3,981,655
JULY	3,069	3,975,759	41.8	692	162,919	7.6	3,761	4,138,678
AUGUST	2,929	3,799,840	41.8	666	152,809	7.4	3,595	3,952,649
SEPTEMBER	2,914	3,623,341	41.4	655	146,754	7.5	3,569	3,770,095
OCTOBER	3,047	3,771,143	39.9	678	150,405	7.2	3,725	3,921,548
NOVEMBER	3,051	3,732,343	40.8	680	149,635	7.3	3,731	3,881,978
DECEMBER	3,044	3,884,383	41.2	679	161,427	7.7	3,723	4,045,810
TOTAL 1995		45,649,462			1,926,944			47,576,406
AVERAGE 1995	3,031	125,067	41.3	702	5,279	7.5	3,733	

APPENDIX XIII
CRUDE OIL PRODUCTION BY COMPANY LEASE - 1994
(barrels)

COMPANY	STATE LEASE		PRIVATE LEASE	
	PRODUCTION	% OF TOTAL PRODUCTION	PRODUCTION	% OF TOTAL PRODUCTION
AMOCO TRINIDAD OIL COMPANY LIMITED	21,605,888	100.0	0	0
PREMIER CONSOLIDATED OILFIELDS LIMITED	51,744	20.0	206,638	80.0
TRINIDAD NORTHERN AREAS	12,123,743	100.0	0	0
TRINIDAD AND TOBAGO OIL COMPANY LIMITED	4,919,565	87.6	696,419	12.4
TRINIDAD AND TOBAGO PETROLEUM COMPANY LIMITED	4,791,886	80.9	1,131,238	19.1
TRINTOMAR	512,121	100.0	0	0
ENRON	1,195,739	100.0	0	0
TOTAL 1994	45,200,686	95.7	2,034,295	4.3
TOTAL 1993	42,372,642	94.9	2,261,404	5.1

APPENDIX XIII
CRUDE OIL PRODUCTION BY COMPANY LEASE - 1995
(barrels)

COMPANY	STATE LEASE		PRIVATE LEASE	
	PRODUCTION	% OF TOTAL PRODUCTION	PRODUCTION	% OF TOTAL PRODUCTION
AMOCO TRINIDAD OIL COMPANY LIMITED	21,553,978	100.0	0	0.0
PREMIER CONSOLIDATED OILFIELDS LIMITED	50,141	100.0	190,471	79.2
TRINIDAD NORTHERN AREAS	11,579,912	100.0	0	0
PETROLEUM COMPANY OF TRINIDAD AND TOBAGO	9,328,450	85.4	1,589,655	14.6
TRINTOMAR	421,874	100.0	0	0.0
ENRON	2,361,688	100.0	0	0.0
MORAVEN	183,971	100.0	0	0.0
TOTAL 1995	45,296,043	96.2	1,780,126	3.8
TOTAL 1994	45,200,686	95.7	2,034,295	4.3

APPENDIX XIV
SUMMARY OF FLUID INJECTION IN TRINIDAD AND TOBAGO 1991 - 1995

NO.OF PROJECTS IN OPERATION AT END OF YEAR				INJECTION VOLUMES			OIL PRODUCED BY WELLS UNDER PROJECT INFLUENCE				OIL EXPRESSED AS A PERCENTAGE OF COUNTRY'S TOTAL PRODUCTION
YEAR	WATER	STEAM	CARBON DIOXIDE	CARBON DIOXIDE (Mcf/d)	WATER & OTHER FLUIDS (bwpd)	STEAM (bspd)	WATER INJECTION PROJECTS (bopd)	THERMAL RECOVERY PROJECTS (bopd)	CARBON DIOXIDE PROJECTS (bopd)	ALL PROJECTS (bopd)	
1991	18	16	5	3,562	24,608	42,926	11,898	10,361	237	22,496	15.7
1992	16	15	5	7,509	15,667	40,528	9,273	9,536	277	19,086	13.9
1993	12	15	5	6,554	48,422	40,510	8,931	8,880	288	18,099	14.8
1994	10	16	5	4,186	53,755	36,209	10,469	8,618	389	19,476	14.8
1995	13	18	5	2,141	41,977	30,417	10,407	8,016	536	18,959	14.4

APPENDIX XV
SECONDARY AND ENHANCED OIL RECOVERY OPERATIONS - 1994

WATER INJECTION

COMPANY	ACTIVE PROJECTS (bwpd)	WATER INJECTED (bopd)	OIL PRODUCED (bwpd)	WATER PRODUCED (Mcf/d)	GAS PRODUCED %	WATER CUT
AMOCO	5	15,339	7,870	5,002	5,802	38.9
TNA	1	32,387	1,558	2,926	3,103	65.3
PETROTRIN						
EX-TTPCL	1	3,244	498	97	373	16.3
EX-TRINTOC	3	2,785	543	724	175	57.1
ALL COS	10	53,755	10,469	8,749	9,453	45.5

STEAM INJECTION

COMPANY	ACTIVE PROJECTS	STEAM INJECTED (bspd)	OIL PRODUCED (bopd)	WATER PRODUCED (bwpd)	OIL/STEAM RATIO
PETROTRIN					
EX-TTPCL	6	26,972	6,875	18,678	0.25
EX-TRINTOC	9	7,728	1,637	5,642	0.21
PCOL	1	1,509	106	455	0.07
ALL COS	16	36,209	8,618	24,775	0.24

APPENDIX XV
SECONDARY AND ENHANCED OIL RECOVERY OPERATIONS - 1995

WATER INJECTION

COMPANY	ACTIVE PROJECTS (bwpd)	WATER INJECTED (bopd)	OIL PRODUCED (bwpd)	WATER PRODUCED (Mcf/d)	GAS PRODUCED %	WATER CUT
AMOCO	6	10,148	6,537	4,653	4,717	41.6
TNA	1	26,070	2,175	2,320	2,732	51.6
PETROTRIN	6	5,759	1,695	1,589	563	48.4
ALL COS	13	41,977	10,407	8,562	8,012	45.1

STEAM INJECTION

COMPANY	ACTIVE PROJECTS	STEAM INJECTED (bspd)	OIL PRODUCED (bopd)	WATER PRODUCED (bwpd)	OIL/STEAM RATIO
PETROTRIN	17	30,132	7,940	28,915	0.26
PCOL	1	285	76	417	0.27
ALL COS	18	30,417	8,016	29,332	0.26

APPENDIX XVI
WATER INJECTION SUMMARY BY PROJECTS - 1994

COMPANY	FIELD	PROJECT	WATER INJECTION (bwpd)	OIL PRODUCED (bopd)	WATER PRODUCED (bwpd)	GAS PRODUCED (Mcf/d)	WATER CUT %
AMOCO	TEAK	MM-01/L SAND	5,340	4,014	2,670	2,099	39.9
		0/1UM SAND	3490	583	75	698	11.4
		U SAND	4147	1946	402	334	17.1
	TOTAL		12,977	6,543	3,147	3,131	32.5
	POUI	10-0 SAND	1,502	430	1,017	602	70.3
		17-0 SAND	860	897	838	2069	48.3
	TOTAL		2,362	1,327	1,855	2,671	58.3
ALL	ALL	15,339	7,870	5,002	5,802	38.9	
TNA	MAIN FIELD	8011 WATERFLOOD	32,387	1,558	2,926	3,103	65.3
	ALL	ALL	32,387	1,558	2,926	3,103	65.3
PETROTRIN EX-TRINTOC	CATSHILL	CO-30.BLK.24 N SAND	1,126 897	80 243	46 170	26 100	36.5 41.2
	TRINITY	SHALLOW HERRERA	762	220	508	49	69.8
ALL	ALL	2,785	543	724	175	55.2	
EX-TRINTOPEC	GALEOTA	GAL/HF/15/11	3,244	498	97	373	16.3
	ALL	ALL	3,244	498	97	373	16.3
TOTAL	ALL	ALL	53,755	10,469	8,749	9,453	45.5

APPENDIX XVI
WATER INJECTION SUMMARY BY PROJECTS - 1995

COMPANY	FIELD	PROJECT	WATER INJECTION (bwpd)	OIL PRODUCED (bopd)	WATER PRODUCED (bwpd)	GAS PRODUCED (Mcf/d)	WATER CUT %
AMOCO	TEAK	MM-01/L SAND	4,308	3,444	2,056	1,551	37.4
		0-1UM SAND	2,527	497	163	681	24.7
		U SAND	1,908	1,062	664	129	38.5
		0/2 SAND	202	296	177	177	37.4
	TOTAL		8,945	5,299	3,060	2,538	36.6
	POUI	10-0 SAND	1,000	567	1,428	1,083	71.6
		17-0 SAND	203	671	165	1,096	19.7
	TOTAL		1,203	1,238	1,593	2,179	56.3
	ALL	ALL	10,148	6,537	4,653	4,717	37.3
TNA	MAIN FIELD	8011 WATERFLOOD	26,070	2,175	2,320	2,732	51.6
	ALL	ALL	26,070	2,175	2,320	2,732	51.6
PETROTRIN							
EX-TRINTOC	CATSHILL	CO-30.BLK.24	571	105	17	31	13.9
		N SAND	620	477	484	166	50.4
	TRINITY PT. FORTIN	SHALLOW HERRERA	176	287	444	86	60.7
		CRUSE "G"	0	133	74	53	35.7
	ALL		1,367	1,002	1,019	336	50.4
EX-TRINTOPEC	GALEOTA	PLATFORM "C"	1,945	381	405	113	51.5
		PLATFORM "B"	2,447	312	163	114	34.3
	ALL	ALL	4,392	693	568	227	45.0
TOTAL	ALL	ALL	41,977	10,407	8,560	8,012	45.1

APPENDIX XVII
STEAM INJECTION SUMMARY BY PROJECTS - 1994

COMPANY	FIELD (bspd)	PROJECTS INJECTED (bopd)	STEAM PRODUCED (bwpd)	OIL PRODUCED %	WATER CUT	WATER RATIO	OIL/STEAM
PETROTRIN							
EX-TRINTOPEC	QUARRY		4,110	1,030	2,718	72.5	0.25
	FYZABAD		2,592	485	2,073	81.0	0.19
	GUAPO		3,330	1,260	3,610	74.1	0.38
	CENTRAL LOS BAJOS		5,020	1,505	3,698	71.1	0.30
	PALO SECO		10,889	2,418	5,993	71.3	0.22
	BENN. V'GE		1,031	177	586	76.8	0.17
	ALL	ALL	26,972	6,875	18,678	73.1	0.25
EX-TRINTOC	F.RESERVE	Project 111	4,322	703	4,091	85.3	0.16
		Ph.1 West Ext.	292	66	68	50.7	0.23
		Phase 1 Ext.	84	53	42	44.2	0.63
		Phase 1 East	142	125	28.6	2.20	
	P.LANDS'E'.	Steamflood	1,101	545	82.2	0.11	
	Phase 1. Exp.	200	81	143	63.8	0.41	
	Phase 1a. Exp.	272	58	43	42.6	0.21	
	PT.FORTIN	Cruse 'E'	58	40	120	75.0	0.69
		Cruse 'E' Ext.	1,257	206	465	69.3	0.16
	ALL	ALL	7,728	1,637	5,642	77.5	0.21
PCOL	FYZABAD	Thermal 1	1,509	106	455	81.1	0.07
	ALL	ALL	1,509	106	455	81.1	0.07
ALL COS.	ALL	ALL	36,209	8,618	24,775	80.8	0.22

APPENDIX XVII
STEAM INJECTION SUMMARY BY PROJECTS - 1994 (continued)

CARBON DIOXIDE INJECTION SUMMARY BY PROJECTS - 1994

COMPANY	FIELD	PROJECT (Mcf/d)	INJECTION (bopd)	OIL (bwpd)	WATER (Mcf/d)	GAS	G.O.R
PETROTRIN	F.RESERVE Zone 5 Sds.	Forest Sds.	16	3	0	3	1000
		851	203	102	1,637	8064	
		Exp.CO2 CYC.	569	19	1	15	789
		UCWE	1,190	82	26	80	976
OROPOUCHE	CO2 FLOOD	1,560	82	13	1,195	14573	
ALL COS.	ALL	ALL	4,186	389	142	2,930	7532

APPENDIX XVII
STEAM INJECTION SUMMARY BY PROJECTS - 1995

COMPANY	FIELD (bspd)	PROJECTS INJECTED (bopd)	STEAM PRODUCED (bwpd)	OIL PRODUCED %	WATER CUT	WATER RATIO	OIL/STEAM
PETROTRIN							
	QUARRY		2872	845	3,908	82.2	0.29
	FYZABAD	Forest Cruse	992 222	172 98	1,297 599	88.3 85.9	0.17 0.44
	GUAPO		7,538	1,209	4,987	80.5	0.16
	CENTRAL LOS BAJOS		4,802	1,450	2,337	61.7	0.30
	PALO SECO		7,859	2,093	7,694	78.6	0.27
	BENN. V'GE		711	344	741	68.3	0.48
	F.RESERVE	Project 111	2,207	559	4,602	89.2	0.25
		Ph.1 West Ext.	40	55	84	60.4	1.38
		Phase 1 Ext.	46	50	65	56.5	1.09
		Phase 1 East	161	290	258	47.1	1.80
	P.LANDS'E'	Steamflood	701	202	955	82.5	0.29
		Phase 1. Exp.	36	97	292	75.1	2.69
		Phase 1a. Exp.	754	34	116	77.3	0.05
	PT.FORTIN	Cruse 'E'	0	70	111	61.3	-
	PT.FORTIN CENTRAL	Cruse 'E' Area IV	96	109	53	32.7	1.14
		Cruse 'E' Area IV	1,095	263	816	75.6	0.24
	ALL	ALL	30,132	7,940	28,915	78.5	0.26
PCOL							
	FYZABAD	Thermal 1	285	76	417	84.6	0.27
	ALL	ALL	285	76	417	84.6	0.27
ALL COS.	ALL	ALL	30,417	8,016	29,332	78.6	0.26

APPENDIX XVII
STEAM INJECTION SUMMARY BY PROJECTS - 1995 (continued)

CARBON DIOXIDE INJECTION SUMMARY BY PROJECTS - 1995

COMPANY	FIELD	PROJECT	INJECTION (Mcf/d)	OIL (bopd)	WATER (bwpd)	GAS (Mcf/d)	G.O.R
PETROTRIN	F.RESERVE	Forest Sds.	0	10	0	4	400
		Zone 5 Sds.	634	203	35	2,021	9956
		Exp.CO2 CYC.	0	28	4	18	643
		UCWE	276	226	54	126	558
	OROPOUCHE	CO2 FLOOD	1,231	69	2	1,175	17029
ALL COS.	ALL	ALL	2,141	536	95	3,344	6227

APPENDIX XVIII
NATURAL GAS PRODUCTION BY COMPANIES
1991 - 1995
(Thousand Cubic metres/Day)

COMPANY	1991	1992	1993	1994	1995
AMOCO	15781	17020	16991	16839	15715
TRINMAR	1984	1255	1061	1140	1068
TRINTOPEC	259	235	197	177	147
TRINTOC	556	609	594	591	418
P.C.O.L.	3	3	3	1	1
TRINTOMAR	1722	1142	470	248	304
ENRON			72	2107	3562
COASTLINE					29
TOTAL	20305	20264	19388	21102	21244

APPENDIX XIX
NATURAL GAS UTILIZATION: (1991-1995)
(Million Cubic Metres/Day)

	COMPANY	1991	1992	1993	1994	1995
REFINERY (AS FUEL)	Petrotrin (P-a-P)	0.99	1.05	1.02	1.07	1.07
	Petrotrin (P/F)	0.28	0.28	0.27	0.19	0.08
	Refinery Total	1.27	1.33	1.29	1.26	1.15
FIELD USE (AS FUEL)		1.36	1.27	1.39	1.26	1.07
PRODUCTION USE *		5.83	5.89	5.80	6.15	6.41
OIL COMPANIES TOTAL UTILIZATION	Sub-Total	8.46	8.49	8.49	8.67	8.63
FERTILIZER MANUFACTURE	Hydro-Agri	0.87	0.87	0.86	0.82	0.91
	Arcadian Ammonia	2.68	2.58	2.59	2.85	3.05
	Tringen 1	1.40	1.50	1.25	1.53	1.42
	Tringen 11	1.31	1.31	1.20	1.26	1.22
	Arcadian Urea	0.29	0.28	0.32	0.28	0.30
	Fertilizer Manu. Total	6.55	6.54	6.21	6.74	6.90
POWER GENERATION	T & TEC	3.68	3.88	3.87	3.95	4.21
CEMENT MANUFACTURE	Trinidad Cement Limited	0.24	0.28	0.27	0.28	0.27
METHANOL MANUFACTURE	T&T Methanol I	1.18	1.30	1.18	1.33	1.22
	CMC			0.28	1.37	1.35
	T&T Methanol II					0.00
IRON AND STEEL MANUFACTURE	Ispat	0.77	0.82	0.82	1.01	1.06
	Nucor				0.02	0.12
GAS PROCESSING	PPGPL	0.26	0.59	0.49	0.48	0.47
SMALL CONSUMERS		0.26	0.28	0.28	0.30	0.34
TOTAL		21.24	22.20	21.88	24.15	24.57

* - NB: Includes re-compressed gas used for gas lifting.

APPENDIX XX
ANNUAL STATISTICS FOR NATURAL GAS PRODUCTION AND UTILIZATION 1991-1995

	1991		1992		1993		1994		1995	
	MMSCF/D	%	MMSCF/D	%	MMSCF/D	%	MMSCF/D	%	MMSCF/D	%
PRODUCTION	716	100	715	100	685	100	745	100	751	100
GOR (M3/M3)	888		929		980		1009		1038	
A. USED AS FUEL:										
IN FIELDS	48	6.7	45	6.3	49	7.2	44	5.9	39	5.2
IN REFINERIES	45	6.3	47	6.6	46	6.7	45	6.0	41	5.4
BY NON OIL COMPANIES	298	41.6	323	45.2	295	43.0	323	43.4	341	45.4
SUB TOTAL	391	54.6	415	58.1	390	56.9	412	55.3	421	56
B. OTHER COMPLETE UTILIZATION:										
USED AS PROCESS GAS	161	22.5	160	22.4	163	23.8	209	28.1	207	27.6
INJECTED INTO FORMATION	0	0.0	0	0.0	0	0.0	0	0.0	0	0
CONVERTED TO N.G.L.*	0	0.0	0	0.0	15	2.2	15	2.0	14	1.9
SUB TOTAL	161	22.5	160	22.4	178	26.0	224	30.1	221	29.5
C. VENTED	164	22.9	140	19.5	117	17.1	109	14.6	109	14.5
TOTAL	164	22.9	140	19.5	117	17.1	109	14.6	109	14.5

* N.G.L. - NATURAL GAS LIQUID

APPENDIX XXI
THE FOLLOWING TABLE SHOWS FOR THE YEARS 1993, 1994, 1995 THE
QUANTITY OF ASPHALT EXTRACTED FROM THE PITCH LAKE AND THE
QUANTITY OF DERIVED PRODUCTS WHICH WERE EXPORTED AND
CONSUMED LOCALLY.

NATURAL ASPHALT	METRIC TONS		
	1993	1994	1995
...EXTRACTED BY MINISTRY OF WORKS FOR LOCAL USE	6 368	4 341	2694
...EXTRACTED BY TRINIDAD LAKE ASPHALT COMPANY	19 175	16 662	17330
TOTAL	25 543	21 003	20024
DERIVED PRODUCTS MANUFACTURED BY THE COMPANY			
EXPORTS :-			
...CRUDE ASPHALT	0	0	0
...DRIED ASPHALT	20 470	14 081	17517
...CEMENT ASPHALT	0	24	252
TOTAL	20 470	14 105	17769
LOCAL SALES :-			
...CRUDE ASPHALT	0	0	0
...DRIED ASPHALT	336	220	785
...CEMENT ASPHALT	717	0	239
TOTAL	1 053	220	1 024

APPENDIX XXII
DESTINATION OF EXPORTS OF CRUDE AND REFINED PRODUCTS FROM TRINIDAD AND TOBAGO - 1994
(all quantities in barrels)

COUNTRY	TOTAL REFINED PRODUCTS	% OF TOTAL EXPORTS	CRUDE PETROLEUM EXPORTS	L.P.G.	AVIATION GASOLENE	MOTOR GASOLENE	KEROSENE & AVIATION TURBINE FUEL	GAS & DIESEL OILS	FUEL OIL	PETRO- CHEMICALS	ASPHALT	LUBES & GREASES	OTHER
NORTH AMERICA -													
CANADA	0	0.00	0	0	0	0	0	0	0	0	0	0	0
USA	10,939,377	31.87	23,085,960	0	0	888,316	472,892	696,236	8,802,282	0	0	79,651	0
TOTAL N.A.	10,939,377	31.87	23,085,960	0	0	888,316	472,892	696,236	8,802,282	0	0	79,651	0
CENTRAL AMERICA -													
REPUBLIC OF PANAMA	794,311	2.31	0	0	0	0	0	291,523	502,788	0	0	0	0
GUATEMALA	83,796	0.24	0	0	0	0	14,826	60,000	0	0	0	8,970	0
OTHER C.A. (a)	1,104,884	3.22	0	0	0	0	0	219,431	810,459	0	0	74,994	0
TOTAL C.A.	1,982,991	5.77	0	0	0	0	14,826	570,954	1,313,247	0	0	83,964	0
SOUTH AMERICA -													
GUYANA	948,556	2.76	0	4,833	0	32,403	34,549	181,295	692,178	0	3,298	0	0
SURINAME	1,788,107	5.21	0	0	0	165,585	88,201	278,299	1,256,022	0	0	0	0
FRENCH GUIANA	1,874,183	5.46	0	0	6,520	261,275	234,610	1,049,169	312,199	0	10,410	0	0
OTHER S.A. (b)	1,760,628	5.13	0	0	0	1,760,628	0	0	0	0	0	0	0
TOTAL S.A.	6,371,474	18.56	0	4,833	6,520	2,219,891	357,360	1,508,763	2,260,399	0	13,708	0	0
WEST INDIES -													
BRITISH (c)	6,360,179	18.53	0	48,421	23,217	1,760,768	1,502,364	1,986,175	968,957	0	13,325	31,391	25,561
FRENCH (d)	1,715,322	5.00	0	10,102	16,531	275,976	305,491	538,066	567,834	0	1,322	0	0
NETHERLANDS (e)	946,974	2.76	0	0	0	0	0	246,356	672,713	0	1,172	26,733	0
HAITI	0	0.00	0	0	0	0	0	0	0	0	0	0	0
OTHER W.I. ISLANDS (f)	1,383,690	4.03	0	1,555	0	60,869	35,113	134,656	1,149,747	0	1,750	0	0
TOTAL W.I.	10,406,165	30.32	0	60,078	39,748	2,097,613	1,842,968	2,905,253	3,359,251	0	17,569	58,124	25,561
EUROPE -													
ITALY	799,601	2.33	0	0	0	0	0	0	799,601	0	0	0	0
ENGLAND	201,118	0.59	0	0	0	0	0	201,118	0	0	0	0	0
OTHER EUROPE (g)	301,328	0.87	0	0	0	0	0	0	301,328	0	0	0	0
TOTAL EUROPE	1,302,047	3.79	0	0	0	0	0	201,118	1,100,929	0	0	0	0
OTHERS													
JAPAN	2,638	0.01	0	0	0	0	0	0	0	2,638	0	0	0
OTHERS*	1,291,052	3.76	0	3,442	0	2,133	0	181,197	787,120	0	0	317,160	0
TOTAL OTHERS	1,293,690	3.77	0	3,442	0	2,133	0	181,197	787,120	2,638	0	317,160	0
TOTAL CARGOES	32,295,744	94.08	23,085,960	68,353	46,268	5,207,953	2,688,046	6,063,521	17,623,228	2,638	31,277	538,899	25,561
FOREIGN BUNKERS	2,034,515	5.92	0	29,449	3,650	235,109	425,921	847,615	491,059	1,712	0	0	0
TOTAL EXPORT	34,330,259	100	23,085,960	97,802	49,918	5,443,062	3,113,967	6,911,136	18,114,287	4,350	31,277	538,899	25,561

Note : These figures are only for Trintoc

* Countries not detailed

(a) Other C.A. : Ecuador, Nicaragua

(e) Netherlands : St. Eustatius, Aruba, Curacao

(b) Other S.A. : Uruguay, Colombia

(f) Other W.I. Islands : Bahamas, Cuba, Tortola, Virgin Gorda

(c) British : Antigua, Anguilla, Barbados, Bequia, Carriacou, Dominica,
Grenada, Jamaica, Montserrat, Nevis, St. Kitts, St. Lucia, St. Vincent.

(g) Other Europe : Mustique, Puerto Rico, Dominican Republic
Germany

(d) French : Guadeloupe, Martinique, St. Barthelmy, St. Barths, St. Maarten.

APPENDIX XXII
DESTINATION OF EXPORTS OF CRUDE AND REFINED PRODUCTS FROM TRINIDAD AND TOBAGO - 1995
(all quantities in barrels)

COUNTRY	TOTAL REFINED PRODUCTS	% OF TOTAL EXPORTS	CRUDE PETROLEUM EXPORTS	L.P.G.	AVIATION GASOLENE	MOTOR GASOLENE	KEROSENE & AVIATION TURBINE FUEL	GAS & DIESEL OILS	FUEL OIL	PETRO- CHEMICALS	ASPHALT	LUBES & GREASES	OTHER
NORTH AMERICA -													
CANADA	0	0.00	0	0	0	0	0	0	0	0	0	0	0
USA	4,435,942	14.41	21,483,814	0	0	439,580	0	239,879	3,752,585	0	3,898	0	0
TOTAL N.A.	4,435,942	14.41	21,483,814	0	0	439,580	0	239,879	3,752,585	0	3,898	0	0
CENTRAL AMERICA -													
REPUBLIC OF PANAMA	399,342	1.30	0	0	0	0	0	209,031	190,311	0	0	0	0
GUATEMALA	0	0.00	0	0	0	0	0	0	0	0	0	0	0
OTHER C.A. (a)	12,148	0.04	0	0	0	0	0	945	0	0	0	11,203	0
TOTAL C.A.	411,490	1.34	0	0	0	0	0	209,976	190,311	0	0	11,203	0
SOUTH AMERICA -													
GUYANA	852,513	2.77	0	18,308	748	9,954	26,542	130,604	661,610	0	4,747	0	0
SURINAME	2,063,182	6.70	0	0	0	191,227	64,012	379,923	1,428,020	0	0	0	0
FRENCH GUIANA	1,569,174	5.10	0	11,821	2,591	276,504	224,712	819,006	230,191	0	4,349	0	0
OTHER S.A. (b)	2,634,713	8.56	0	0	0	1,755,925	219,580	560,486	0	0	0	98,722	0
TOTAL S.A.	7,119,582	23.13	0	30,129	3,339	2,233,610	534,846	1,890,019	2,319,821	0	9,096	98,722	0
WEST INDIES -													
BRITISH (c)	8,456,882	27.48	0	117,044	20,521	2,435,928	2,081,717	2,602,246	1,134,077	0	25,534	0	39,815
FRENCH (d)	2,179,607	7.08	0	53,756	10,714	347,823	395,032	487,943	877,113	0	7,226	0	0
NETHERLANDS (e)	1,086,586	3.53	0	0	0	119,479	0	2,030	965,077	0	0	0	0
HAITI	131,994	0.43	0	2,940	0	0	0	0	129,054	0	0	0	0
OTHER W.I. ISLANDS (f)	4,574,250	14.86	0	6,627	0	8,059	182,410	688,458	3,688,696	0	0	0	0
TOTAL W.I.	16,429,319	53.38	0	180,367	31,235	2,911,289	2,659,159	3,780,677	6,794,017	0	32,760	0	39,815
EUROPE -													
ITALY	1,236,644	4.02	0	0	0	0	0	0	1,236,644	0	0	0	0
ENGLAND	0	0.00	0	0	0	0	0	0	0	0	0	0	0
OTHER EUROPE (g)	251,820	0.82	0	0	0	0	0	0	250,888	0	932	0	0
TOTAL EUROPE	1,488,464	4.84	0	0	0	0	0	0	1,487,532	0	932	0	0
OTHERS													
JAPAN	1,269	0.00	0	0	0	0	0	0	0	1,269	0	0	0
OTHERS*	268,576	0.87	0	0	0	0	43,880	224,696	0	0	0	0	0
TOTAL OTHERS	269,845	0.88	0	0	0	0	43,880	224,696	0	1,269	0	0	0
TOTAL CARGOES	30,154,642	97.98	21,483,814	210,496	34,574	5,584,479	3,237,885	6,345,247	14,544,266	1,269	46,686	109,925	39,815
FOREIGN BUNKERS	621,420	2.02	0	0	0	174,479	0	220,758	200,112	0	0	26,071	0
TOTAL EXPORT	30,776,062	100.00	21,483,814	210,496	34,574	5,758,958	3,237,885	6,566,005	14,744,378	1,269	46,686	135,996	39,815

Note : These figures are only for Trintoc

* Countries not detailed

(a) Other C.A. : Ecuador, Nicaragua

(b) Other S.A. : Uruguay, Colombia

(c) British : Antigua, Anguilla, Barbados, Bequia, Carriacou, Dominica, Grenada, Jamaica, Montserrat, Nevis, St. Kitts, St. Lucia, St. Vincent.

(d) French : Guadeloupe, Martinique, St. Barthelmy, St. Barths, St. Maarten.

(e) Netherlands : St. Eustatius, Aruba, Curacao

(f) Other W.I. Islands : Bahamas, Cuba, Tortola, Virgin Gorda Mustique, Puerto Rico, Dominican Republic

(g) Other Europe : Germany

APPENDIX XXIII
MOVEMENTS OF REFINED PRODUCTS - 1994
(all quantities are in barrels)

PRODUCT	OPENING INVENTORY	PRODUCTION	PURCHASES FROM THE REFINERY	IMPORTS	OTHER RECEIPTS	TOTAL OPENING AND RECEIPTS	LOCAL CONSUMPTION			SALES TO NPMC	SALES TO OTHER COMPANIES	EXPORTS			TRANSFERS REFINERY	TRANSFER INTER TANK	THIRD PARTY TRANSFER	ENDING INVEN- TORIES	TOTAL CLOSING INVENTORY
							OWN USE	L.A.T.T.	TOTAL			CARGOES	MARAVEN	FOREIGN BUNKERS					
LPG	12,374	609,233	0		20,296	641,903	166	0	166	537,842	9,549	49,077	0	29,449	0			15,820	641,903
Mogas - Premium	207,337	7,327,338	4,380		209,697	7,748,752	9,828	0	9,828	2,291,487	313,980	4,048,890	0	235,109	622,549			226,909	7,748,752
Mogas - Regular	12,812	244,167	0		110,000	366,979	65	0	65	121,675	0	118,607	0	0	112,454			14,178	366,979
Mogas - Unfinished	144,238	366,309	0	45,466	6,888	562,901	482	0	482	1,059	72	261,367	0	0	58,682	0	0	241,239	562,901
Naptha	301,905	(949,246)	1,938,325	102,639	637,045	2,030,668	0	0	0	0	0	22,270	0	0	1,896,167	0	0	112,231	2,030,668
Aviation Gasoline	2,678	44,999	0	6,380	0	54,057	0	0	0	5,249	12,694	27,624	0	3,650	0	0	0	4,840	54,057
Av. Turbine Fuel/Kero	371,281	4,275,583	0	0	574,180	5,221,044	1,619	0	1,619	637,573	303,963	2,280,632	0	425,921	595,753	0	525,264	450,319	5,221,044
White Spirit	2,040	11,394	0		2,745	16,179	27	29	56	5,857	1,487	2,698	0	413	2,745			2,923	16,179
Gas/Diesel Oil	702,692	6,979,596	507,117	897,735	277,080	9,364,220	25,167	0	25,167	1,421,007	790,659	4,705,550	476,069	847,615	640,619	0	0	457,534	9,364,220
Petrochemicals	40,247	(3,984)	0	11,377	1,036	48,676	3	0	3	4,004	1,924	2,638	0	1,299	1,036			37,772	48,676
Lubes	91,919	530,683	0	0	71,129	693,731	13,625	0	13,625	65,401	0	427,437	143,048	0	26,335	0	0	17,885	693,731
Fuel Oil	2,003,886	16,780,862	11,632	252,396	2,263,912	21,312,688	80,000	0	80,000	248,163	2,480,374	14,612,612	299,713	491,059	1,290,732		590,129	1,219,906	21,312,688
Asphaltic Products	17,915	177,688	0	0	0	195,603	0	66,855	66,855	64,457	10,051	29,731	0	0	0	0	0	24,509	195,603
Other Finished Products	0	24	0	0	0	24	0	0	0	0	6	0	0	0	0	0	0	18	24
Unfinished Products	1,231,454	(185,693)	0	299,134	591,005	1,935,900	134	0	9	0	0	589,615	0	0	150,914	0	0	1,195,362	1,935,900
TOTALS	5,142,778	36,208,953	2,461,454	1,615,127	4,765,013	50,193,325	131,116	66,884	198,000	5,403,774	3,924,759	27,178,748	918,830	2,034,515	5,397,986	0	1,115,393	4,021,445	50,193,325

Note : These figures are only for Trintoc

APPENDIX XXIII
MOVEMENTS OF REFINED PRODUCTS - 1995
(all quantities are in barrels)

PRODUCT	OPENING INVENTORY	PRODUCTION	PURCHASES FROM THE REFINERY	IMPORTS	OTHER RECEIPTS	TOTAL OPENING AND RECEIPTS	LOCAL CONSUMPTION			SALES TO NPMC	SALES TO OTHER COMPANIES	EXPORTS		TRANSFERS REFINERY	TRANSFER INTER TANK	THIRD PARTY TRANSFER	ENDING INVENTO- RIES	TOTAL CLOSING INVENTORY
							OWN USE	L.A.T.T.	TOTAL			CARGOES	FOREIGN BUNKERS					
LPG	20,545	1,005,866	0	0	51,594	1,078,005	95	0	95	803,620	32,646	226,397	0	0	0	0	15,247	1,078,005
Mogas - Premium	226,909	7,829,777	0	1,328	193,111	8,251,125	12,387	0	12,178	2,292,525	322,467	5,290,952	174,479	0	0	0	158,315	8,251,125
Mogas - Regular	14,178	87,050	0	0	0	101,228	16	0	16	78,358	0	0	0	0	0	0	22,854	101,228
Mogas - Unfinished	241,824	(112,822)	0	9,984	58	139,044	193	0	21	501	115	39,815	0	10,042	0	0	88,378	139,044
Naptha	112,231	(86,984)	0	17,185	53,304	95,736	0	0	0	0	0	0	0	17,238	0	0	78,498	95,736
Aviation Gasoline	6,152	33,964	0	4,744	0	44,860	0	0	0	3,422	9,696	24,878	0	0	0	0	6,864	44,860
Av. Turbine Fuel/Kero	450,319	3,656,914	219,121	107,826	107,209	4,541,389	1,572	13	1,535	703,262	222,039	3,259,158	0	267,519	0	0	87,826	4,541,389
Marine Diesel	1,055	1,846	0	0	0	2,901	51	0	0	0	0	1,795	0	0	0	0	1,055	2,901
White Spirit	2,923	(1,891)	2,268	0	0	3,300	4	0	1	0	0	544	0	1,351	486	0	915	3,300
Gas Oil	456,479	7,440,078	24,140	698,804	98,036	8,717,537	30,543	0	28,028	1,495,978	342,345	5,957,187	220,758	127,397	2,954	0	540,375	8,717,537
Petrochemicals	20,479	686	0	10,724	0	31,833	52	0	52	3,267	497	1,584	0	714	484	0	25,289	31,889
Lubes	212,279	150,948	0	0	46,438	409,665	1,631	0	1,631	44,808	0	112,590	26,071	0	7,673	0	216,892	409,665
Fuel Oil	1,219,906	14,074,862	247,505	397,505	1,849,979	17,789,757	1,022	0	1,022	309,224	500,751	15,595,336	200,112	184,370	42,173	(41,425)	998,194	17,789,757
Asphaltic Products	24,509	162,020	0	0	0	186,529	6	64,377		46,941	10,725	43,365	0	0	0	0	21,115	186,529
Other Finished Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unfinished Product	994,290	460,001	1,304	352	108,365	1,564,312	0	0	0	0	0	239,879	0	8,974	259,939	0	1,055,520	1,564,312
TOTALS	4,004,078	34,702,315	494,338	1,248,452	2,508,094	42,957,277	47,572	64,390	44,579	5,781,906	1,441,281	30,793,480	621,420	617,605	313,709	(41,425)	3,317,337	42,957,277

Note : These figures are only for Trintoc

Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1994
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 31st DECEMBER)

COMPANY	NET ROYALTY PRODUCTION (Barrels)	FIELD STORAGE VALUE		ROYALTY PAYABLE \$	GASOLINE		LEAD mls
		Per barrel	\$		Barrel	%	
PETROTRIN							
EX :							
TRINTOPEC (LAND)	2,084,784	72.35	150,833,352.00	15,083,335.20	84,386	4.05	-
GALEOTA	315,949	94.83	29,961,244.23	3,745,155.53	50,393	15.95	123,317.57
TRINTOC (PF)	998,107	79.73	79,576,641.10	7,957,664.11	114,176	11.44	3,883,415.56
TRINTOC (PAP)	1,442,365	73.68	106,267,334.60	10,626,733.46	133,996	9.29	1,315,665.44
PCOL	17,144	78.82	1,351,261.45	135,126.15	1,096	6.39	-
TNA	6,246,531	76.24	476,240,187.67	47,624,018.77	737,292	11.80	28,187,256.30
TRINTOMAR (A)	53,434	17.81	951,499.24	110,373.91	-	-	-
	155,235	97.30	15,104,889.31	1,888,111.16	50,369	32.45	-
AMOCO	10,832,328	101.85	1,103,303,215.75	137,912,901.97	1,501,696	13.86	29,896,691.16
ENRON	625,192	100.48	62,821,395.44	7,852,674.43	241,510	38.63	-
TOTAL	22,771,069	88.99	2,026,411,020.79	232,936,094.69	2,914,914	12.80	63,406,346.03

Note : A - Field Storage Value based on market value..

Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1994
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 30th JUNE)

COMPANY	NET ROYALTY PRODUCTION (Barrels)	FIELD STORAGE VALUE		ROYALTY PAYABLE \$	GASOLINE		LEAD mls
		Per barrel	\$		Barrel	%	
PETROTRIN							
EX :							
TRINTOPEC (LAND)	2,086,580	66.99	139,781,611.52	13,978,161.15	84,274	4.04	-
GALEOTA	305,563	89.43	27,325,025.73	3,415,628.22	49,397	16.17	119,912.12
TRINTOC (PF)	970,894	67.57	65,599,957.10	6,559,995.71	104,302	10.74	3,974,077.38
TRINTOC (PAP)	1,494,177	63.78	95,296,342.40	9,529,634.24	129,986	8.70	1,494,190.92
PCOL	14,899	68.53	1,020,970.39	102,097.04	1,039	6.97	-
TNA	5,877,212	64.85	381,147,571.20	38,114,757.12	567,997	9.66	22,189,182.96
TRINTOMAR (A)	450,191	10.32	4,645,975.94	538,933.21	-	-	-
AMOCO	10,773,560	97.74	1,052,956,748.14	131,619,593.52	1,492,340	13.85	27,327,441.96
ENRON	603,135	97.18	58,614,342.12	7,326,792.77	236,610	39.23	-
TOTAL	22,576,211	80.90	1,826,388,544.54	211,185,592.97	2,665,945	11.81	55,104,805.34

Note : A - Field Storage Value based on market value..

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Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1994
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 31st DECEMBER)

COMPANY	GAS OIL				TOTAL GAS OIL		FUEL OIL	
	53 - 57	48 - 52	43 - 47	#2 FUEL	Barrel	%	Barrel	%
PETROTRIN								
EX :								
TRINTOPEC (LAND)	3,520	-	14,080	287,281	304,881	14.62	1,695,517	81.33
GALEOTA	-	-	-	159,130	159,130	50.37	106,426	33.68
TRINTOC (PF)	-	26,317	116,338	19,933	162,588	16.29	721,343	72.27
TRINTOC (PAP)	40,573	82,154	82,943	158,686	364,356	25.26	944,013	65.45
PCOL	-	-	1,159	2,564	3,723	21.72	12,325	71.89
TNA	-	651,213	-	-	651,213	11.77	4,858,026	87.79
TRINTOMAR (A)	-	-	-	-	-	-	-	-
- -	61,669	-	61,669	-	39.73	43,197	27.83	
AMOCO	-	4,116,685	3,873,892	-	7,990,577	73.61	1,340,055	12.35
ENRON	257,927	-	-	-	257,927	41.26	125,755	20.11
TOTAL	302,020	4,938,038	4,088,412	627,594	9,956,064	43.72	9,846,657	43.24

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Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1994
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 30th JUNE)

COMPANY	GAS OIL				TOTAL GAS OIL		FUEL OIL	
	53 - 57	48 - 52	43 - 47	#2 FUEL	Barrel	%	Barrel	%
PETROTRIN								
EX :								
TRINTOPEC (LAND)	-	-	19,479	270,287	289,766	13.89	1,712,540	82.07
GALEOTA	-	-	-	148,307	148,307	48.54	107,859	35.30
TRINTOC (PF)	28,992	31,819	114,416	12,708	187,935	19.36	678,657	69.90
TRINTOC (PAP)	43,386	85,369	83,299	165,749	377,803	25.29	986,388	66.02
PCOL	-	-	1,200	2,092	3,292	17.75	10,568	56.99
TNA	-	671,611	-	-	671,611	11.43	4,637,604	78.91
TRINTOMAR (A)	-	-	-	-	-	-	-	-
AMOCO	-	-	7,972,190	-	7,972,190	74.00	1,309,030	12.15
ENRON	240,010	-	-	-	240,010	39.79	126,515	20.98
TOTAL	312,388	788,799	8,190,584	599,143	9,890,914	43.81	9,569,161	42.38

Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1995
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 31st DECEMBER)

COMPANY	NET ROYALTY PRODUCTION (Barrels)	FIELD STORAGE VALUE		ROYALTY PAYABLE \$	GASOLINE		LEAD mls
		Per barrel	\$		Barrel	%	
PETROTRIN							
EX :							
TRINTOPEC (LAND)	2,282,522	111.99	255,609,045.30	25,560,904.53	122,115	5.35	-
GALEOTA	255,976	83.93	21,483,554.96	2,685,444.37	39,625	15.48	128,944.79
TRINTOC (PF)	973,638	82.10	79,938,314.00	7,993,831.40	100,772	10.35	3,765,524.27
TRINTOC (PAP)	1,468,426	68.41	100,456,423.40	10,045,642.34	138,766	9.45	1,386,516.42
PCOL	17,306	79.16	1,370,000.00	137,000.00	1,116	6.45	-
TNA	5,533,579	82.08	454,207,635.76	45,420,763.58	582,483	10.53	22,005,167.12
TRINTOMAR	214,212	66.61	14,269,038.00	1,783,629.75	124,757	58.24	-
AMOCO	10,854,598	103.96	1,128,479,511.79	141,059,938.97	1,562,352	14.39	23,648,799.72
ENRON	1,387,581	99.26	137,729,220.16	17,216,152.52	443,424	31.96	-
MORAVEN (A)	64,963	99.50	6,464,141.74	808,017.72	-	-	-
TOTAL	23,052,801	95.43	2,200,006,885.11	252,711,325.18	3,115,410	13.51	50,934,952.32

Note : A - Field Storage Value based on market value .

Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1995
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 30th JUNE)

COMPANY	NET ROYALTY PRODUCTION (Barrels)	FIELD STORAGE VALUE		ROYALTY PAYABLE \$	GASOLINE		LEAD mls
		Per barrel	\$		Barrel	%	
PETROTRIN							
EX :							
TRINTOPEC (LAND)	2,242,141	77.56	173,908,981.34	17,390,898.13	113,228	5.05	-
GALEOTA	317,000	104.50	33,125,520.76	4,140,690.10	47,613	15.02	135,813.22
TRINTOC (PF)	945,854	90.18	85,297,160.00	8,529,716.00	96,950	10.25	3,654,721.24
TRINTOC (PAP)	1,476,148	76.64	113,132,425.60	11,313,242.56	121,782	8.25	1,486,315.70
PCOL	18,545	55.27	1,025,000.00	102,500.00	1,215	6.55	-
TNA	6,046,333	86.11	520,672,186.09	52,067,218.61	671,633	11.11	25,917,650.64
TRINTOMAR	133,158	112.51	14,981,171.92	1,872,646.49	78,032	58.60	-
AMOCO	10,352,543	104.25	1,079,208,604.18	134,901,075.52	1,462,931	14.13	21,412,688.64
ENRON	980,719	105.75	103,712,287.26	12,964,035.91	354,094	36.11	-
MORAVEN (A)	118,906	107.70	12,806,397.41	1,600,799.68	-	-	-
TOTAL	22,631,347	94.46	2,137,869,734.56	244,882,822.99	2,947,478	13.02	52,607,189.44

80 Note : A - Field Storage Value based on market value .

Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1995
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 31st DECEMBER) (continued)

COMPANY	GAS OIL				TOTAL GAS OIL		FUEL OIL	
	53 - 57	48 - 52	43 - 47	#2 FUEL	Barrel	%	Barrel	%
PETROTRIN EX :								
TRINTOPEC (LAND)	5,417	-	19,649	350,409	375,475	16.45	1,784,932	78.20
GALEOTA	-	-	-	124,788	124,788	48.75	91,563	4.01
TRINTOC (PF)	-	34,988	106,425	18,750	160,163	16.45	712,703	31.22
TRINTOC (PAP)	38,620	79,540	80,331	162,008	360,499	24.55	969,161	42.46
PCOL	-	-	1,054	2,624	3,678	21.25	12,512	0.55
TNA	-	643,140	736,131	-	1,379,271	24.93	3,571,825	64.55
TRINTOMAR	-	-	-	39,415	39,415	18.40	50,040	2.19
AMOCO	-	-	7,957,401	-	7,957,401	73.31	1,334,845	12.30
ENRON	571,438	-	-	-	571,438	41.18	372,719	26.86
MORAVEN (A)	-	-	-	-	-	-	-	-
TOTAL	615,475	757,668	8,900,991	697,994	10,972,128	47.60	8,900,300	38.61

Appendix XXIV
SUMMARY OF CRUDE OIL ASSESSED FOR STATE ROYALTY WITH PRICES AND ANALYSES - 1995
(FOR HALF YEARLY ASSESSMENT PERIOD ENDING 30th JUNE) (continued)

COMPANY	GAS OIL				TOTAL GAS OIL		FUEL OIL	
	53 - 57	48 - 52	43 - 47	#2 FUEL	Barrel	%	Barrel	%
PETROTRIN EX :								
TRINTOPEC (LAND)	-	-	15,022	285,425	300,447	13.40	1,828,466	81.55
GALEOTA	-	-	-	159,705	159,705	50.38	109,682	34.60
TRINTOC (PF)	-	22,840	107,381	18,751	148,972	15.75	699,932	74.00
TRINTOC (PAP)	38,872	80,845	84,255	156,946	360,918	24.45	993,448	67.30
PCOL	-	-	1,280	2,494	3,774	20.35	13,556	73.10
TNA	-	935,347	-	-	935,347	15.47	4,439,353	73.42
TRINTOMAR	-	-	-	25,113	25,113	18.86	30,013	22.54
AMOCO	-	3,925,122	3,687,756	-	7,612,878	73.54	1,276,734	12.33
ENRON	400,158	-	-	-	400,158	40.80	226,467	23.09
MORAVEN (A)	-	-	-	-	-	-	-	-
TOTAL	439,030	4,964,154	3,895,694	648,434	9,947,312	43.95	9,617,651	42.50

Appendix XXV
THE ROYALTY ASSESSMENT ON CRUDE OIL AND NATURAL GAS PRODUCED
ON STATE OIL MINING LEASES FOR EACH HALF-YEARLY PERIOD DURING 1993 - 1995

SOURCE OF REVENUE	UNITS	31-12-95	30-06-95	31-12-94	30-06-94	31-12-93	30-06-93
ROYALTY ON NATURAL GAS	(\$TT)	9,291,491.73	9,930,144.79	5,263,774.91	5,143,410.68	971,990.77	996,833.94
MINIMUM RENT NET OFFSET BY ROYALTY ON CRUDE OIL	(\$TT)	6,440,838.16	6,382,328.12	6,018,362.91	6,070,512.70	7,744,959.23	7,475,389.74
ROYALTY ON CRUDE OIL	(\$TT)	252,711,325.18	244,882,822.99	232,936,094.69	211,185,592.97	213,720,253.09	192,304,499.53
HALF YEARLY TOTAL	(\$TT)	268,443,655.07	261,195,295.90	244,218,232.51	222,399,516.35	222,437,203.09	200,776,723.21
YEARLY TOTAL	(\$TT)	488,830,933.25		466,617,748.86		423,213,926.30	

THE VOLUMES UPON WHICH THE ABOVE ASSESSMENTS WERE MADE WERE AS FOLLOWS :

SUBSTANCE ASSESSED FOR ROYALTY UNITS		31-12-95	30-06-95	31-12-94	30-06-94	31-12-93	30-06-93
NATURAL GAS	M.C.F.	131,228,725	116,455,476	113,150,892	127,370,748	126,421,937	104,593,482
CRUDE OIL NET	BARREL	23,052,801	22,631,347	22,771,069	22,576,211	20,695,036	21,034,255
FIELD STORAGE VALUE PER BARREL	(\$TT)	95.43	94.46	88.99	80.90	91.08	79.86
ROYALTY PAYABLE PER BARREL	(\$TT)	10.96	10.82	10.23	9.35	10.33	9.14

DATA USED TO EVALUATE CRUDE OIL FOR STATE ROYALTY ASSESSMENTS :

PRODUCT	UNITS	31-12-95	30-06-95	31-12-94	30-06-94	31-12-93	30-06-93
0.7% Sulphur Grade Fuel	(\$TT)	85.330946	92.351219	87.137700	83.684392	-	-
1% Sulphur Grade Fuel	(\$TT)	82.125937	89.833665	83.014572	75.509465	71.099717	70.053108
3% Sulphur Grade Fuel	(\$TT)	75.185823	85.634575	75.268676	60.723030	52.244690	53.606132
No. 2 Fuel	(\$TT)	119.089701	115.033596	115.567640	111.360321	114.924998	108.365971
43- 47 D.I. Gas Oil	(\$TT)	120.091817	116.061202	116.568497	112.357074	115.893811	109.197694
48- 52 D.I. Gas Oil	(\$TT)	120.401113	116.370776	116.877403	112.664714	116.192827	109.454399
53- 57 D.I. Gas Oil	(\$TT)	121.019703	116.989922	117.495215	113.279993	116.790859	109.967809
70- 72 Oct. M Headed Motor Gas	(\$TT)	113.578141	127.767750	114.830223	110.564492	106.032334	111.195530
Average Middle Rate for Sight Draft on N.Y. / T.T. Currency for U.S. \$1.00	(\$TT)	5.891407	5.896676	5.883870	5.860058	5.695563	5.513296
Value of Tetra Ethyl Lead in TT cents per Millilitre	cTT / m m	8.143823	12.675073	10.753903	8.058139	8.981356	7.726871

