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TRINIDAD AND TOBAGO

MINISTRY OF PETROLEUM AND MINES

ANNUAL REPORT

FOR THE YEAR

1975

GOVERNMENT PRINTERY, TRINIDAD, TRINIDAD AND TOBAGO—1980

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FOREWORD

The year 1975 in which Trinidad and Tobago reached its highest ever level of crude oil production was designated the year of Oil and Food. The Petroleum Industry will continue to play a dominant role in the economic transformation of the country, and in recognition of this factor the Conference on the Best Uses of Our Petroleum Resources was convened by the Prime Minister in February, 1975.

Offshore production continued to dominate the oil producing scene and accounted for 81 per cent of all oil produced in the country, almost 60 per cent of which was produced from the East Coast. In the refining sector of the Industry, the throughput decreased by some 35 per cent mainly as a result of industrial unrest. Although exports of refined products fell by some 25 per cent between 1974 and 1975 in keeping with the decline in refinery throughput, the continued impact of OPEC's pricing structure on world markets resulted in substantial increases in Government revenues.

The increasing revenues from oil are being channelled into areas of economic activity which will expand the country's national income and employment, and thereby ensure for our people a better standard of living. In addition, Trinidad and Tobago has extended financial assistance to some of its CARICOM partners in an effort to ensure that the integration movement is sustained.

The Government wholly-owned National Gas Company of Trinidad and Tobago was established in 1975 with exclusive rights to transport and sell natural gas to domestic consumers through an integrated pipeline system. The system will serve in the first instance the Point Lisas Industrial Estate, where several energy-intensive and energy-using industries are to be established.

I wish to take this opportunity to express the hope that all those engaged in the Petroleum Industry, directly and indirectly, will continue to serve as faithfully as they have in the past. It is becoming increasingly clear that the growth and expansion of the Industry, and downstream projects associated with it, are dependent upon their determination and zeal.

Minister of Petroleum and Mines

HIGHLIGHTS OF THE PETROLEUM INDUSTRY, 1975

1975 which was designated "The Year of Oil and Food", began with two major Conferences on those subjects. The Conference on Oil, held during January, discussed a paper titled: "Best Use of Our Petroleum Resources" from which several recommendations in respect of petroleum operations have emerged, and Government proposes to implement some of these in the near future.

The level of exploration and exploitation continued to be high in 1975 and crude oil production achieved a record level of 78.6 million barrels, i.e., 15.4 per cent higher than that of the previous year, in spite of a major strike which affected the Texaco Trinidad Inc. operations. It is estimated that a loss in excess of 2 million barrels of crude was incurred over a period of approximately two months. Offshore production accounted for 81 per cent of total oil production as Amoco's prolific East Coast fields continued to boost output, thereby contributing almost 60 per cent of total production.

Amoco was the only company in the country to increase its production during the year. The average marine well in Trinidad produced 492 barrels of oil per day, while the average Amoco well—whose producers are all marine—produced 2,011 barrels of oil per day. These figures illustrate the major contribution of the Amoco fields.

The performance of the drilling sector of the industry was also adversely affected by industrial unrest in the country during March and April. Cumulative footage drilled in 1975 fell short of the previous year's figure by 8 per cent. Of the 839,649 feet drilled in 1975, 81 per cent was achieved as a result of the drilling of development wells.

1975 also witnessed the start of drilling activity by Trinidad and Tobago Oil Company Limited (formerly Shell Trinidad Limited) in their Point Fortin field. The company drilled 13 wells during the year.

Refinery throughput slumped to 85.7 million barrels from a figure of 130.8 million barrels in 1974, or by 34 per cent. Mainly responsible for this decline was the industrial unrest at the Texaco refinery which has a rated capacity of 355,000 barrels a day or 78.0 per cent of total refinery capacity in the country. The TRINTOC refinery also recorded a decline in throughput from a level of 20.7 million barrels in 1974 to 17.1 million barrels in 1975.

Deminex, acting as operator in a partnership group formed with Occidental, made a natural gas discovery in well KK4–2 which was drilled in the North Coast Marine Area. The well tested natural gas from two zones.

The total production of Natural Gas declined marginally from a total of 128.3 million M.c.f. in 1974 to 126.4 million M.c.f. in 1975. This decline may be attributed partly to measures of conservation which have been instituted by the companies at the request of the Ministry of Petroleum and Mines. Gas reserves have been estimated at 11.2 trillion cubic feet which is in excess of the country's immediate requirements. In the light of these gas reserves, Government is considering new comprehensive proposals for the establishment of an LNG plant.

In keeping with Government's policy to establish a company to be the sole seller of natural gas for the domestic market, a wholly-owned Government company was formed and registered as the National Gas Company of Trinidad and Tobago Limited. This company will transport and sell natural gas through an integrated pipe-line system.

Since the energy crisis of 1973 Government signified its intention to intensify industrialisation and to diversify the economy by using the energy resources of oil and gas as a base. In accordance with these proposals a number of energy-based projects are under active consideration including a joint-venture fertilizer complex between the Government of Trinidad and Tobago and W. R. Grace, an Iron and Steel Plant and an Aluminium Smelter, while talks are continuing between Government and Amoco and other companies for the establishment of additional fertiliser plants. The development of Point Lisas as an industrial estate to accommodate these and other projects is progressing satisfactorily.

The Petroleum Levy and Subsidy provisions were extended to shrimping and fishing trawlers which fall under the control and ownership of the National Fisheries Company. This incentive became necessary in order to ensure the viability of the company in the light of the support given by other countries in the Caribbean to their fishing industries.

Government adjusted the tax reference prices in 1975 in keeping with the OPEC prices applicable for the year. In order to ensure an increased level of revenue from the industry, the Petroleum Profits Tax on oil producing companies was also increased from 47½ per cent to 50 per cent. In addition, the refinery throughput tax in respect of the Texaco Refinery was increased from 15 cents U.S. per barrel to 16 cents U.S. per barrel. These increases were effective from 1st January, 1975.

Table I summarises and compares overall production and drilling activity in Trinidad and Tobago for the years 1972, 1973, 1974 and 1975. Figures II and III also vividly illustrate annual drilling and production statistics.

TABLE I

Summary of Statistics for the Trinidad and Tobago Petroleum Industry, 1972-1975

	1972	1973	1974	1975
Annual Crude Oil Production (bbls)	51,210,809	60,669,960	68,133,818	78,620,938
Annual Natural Gas Production (Mcf) ...	104,338,218	119,979,353	128,293,247	126,434,192
Average GOR (SCF/bbl)	2,037	1,978	1,883	1,609
Annual CHPS (Natural Gasoline) Production (bbls)	137,238	79,043	68,965	60,991
Daily Refinery Capacity (bbls/day)	450,000	450,000	456,000	456,000
Annual Refinery Throughput (bbls/year) ...	144,273,516	141,686,784	130,819,840	85,660,318
Total Wells completed during the year ...	188	212	212	189
Average depth of completed wells (feet) ...	4,462	4,506	4,509	4,442
Total footage drilled during the year (feet) ...	838,842	955,185	909,980	839,649
Oil and Gas Wells completed during the year ...	165	181	187	150
Drilling success-ratio (per cent)	87.8	85.4	88.2	85.2
Average Rigs running	10.8	11.4	10.9	14.3

GEOLOGICAL AND GEOPHYSICAL ACTIVITY

Geophysical activity by oil companies during 1975 was carried out only on marine areas surrounding Trinidad and Tobago. The surveys were carried out mainly to further delinate structures which were indicated by earlier large scale surveys.

Amoco Trinidad Oil Company carried out a seismic survey over its licensed area off the East Coast of Trinidad in which a total number of 530 line miles were shot.

Texaco Trinidad Inc. as operator for Texaco/Tenneco conducted a marine survey consisting of 674 line miles on the East Coast of Trinidad. The Company also shot approximately 1,185 line miles on their own acreage 446 of which were in the Gulf of Paria, 706 off the East Coast and 36 miles in open acreage in the Gulf of Paria.

Deminex/Mobile carried out a seismic survey over their East Coast acreage shooting approximately 897 line miles, while Trinidad Tesoro Petroleum Company Limited shot 186 line miles over their Galeota lease on the East Coast.

A total of 3,475 line miles was shot in 2.153 party months (*See* Table II)

TABLE II

Party Months of Geophysical Exploration, 1975

Company	*Seismograph*
Amoco Trinidad Oil Company	.433
Texaco-Tenneco	.300
Texaco Trinidad Inc.	.670
Trinidad Tesoro Petroleum Co. Ltd. ...	.250
Deminex/Mobil	.500
TOTAL	2.153

DRILLING

The performance of the drilling Sector of the industry was also adversely affected by industrial unrest in the country during March and April. Cumulative footage drilled in 1975 fell short of the previous year's figure by 8 per cent. Of the 839,649 feet drilled in 1975, 81 per cent was achieved as a result of the drilling of development wells.

During the year the number of rigs operating was slightly higher than in 1974 however, as 145.55 rig-months were achieved compared with 142.5 rig-months in the previous year.

The tempo of offshore drilling activity was stepped up in 1975, when 477,195 feet, that is, 57 per cent of total footage, were drilled for the year. This figure was 53 per cent greater than the offshore footage drilled in 1974. An average of 9 rigs operated in offshore areas during 1975 as compared with 7 during the previous year.

Exploration Activity

Wildcat footage drilled in 1975 totalled 163,676, which was 46 per cent higher than the corresponding figure for last year. At the end of this year there were three (3) rigs actively engaged in drilling wildcats, as compared to one (1) rig during the same period last year.

All exploratory wells drilled in 1975 had offshore prospects as their targets. These wells were drilled by seven operators in licences located in the northern, eastern and western marine areas of the country.

Of the 17 exploratory wells, 15 were wildcats. The Trinidad-Tesoro well, GUM–915, and the T.N.A. well, S—390, were semi-appraisal prospects. Only one exploratory well was completely dry—South West Poui. Two wells which were abandoned for mechanical reasons, East Poui 1, and KK4—1, were plugged before these wells reached their approved total depths, and hence they were replaced by subsequent wells.

It is therefore more accurate to consider 13 exploratory wells—10 wildcats—as being completed during the year. The success ratio of wildcat drilling was 90 per cent in terms of discovering oil and/or gas, but since many of the wells were abandoned without being tested, it will not be very meaningful to give a success ratio in terms of economic successes. The important wells drilled during the year are shown in Figure II.

Table III summarises exploratory drilling activity for 1975.

Development Drilling

Development drilling activity was greatly affected by industrial unrest during the early part of the year, and as a result, only 155 development wells were successfully completed in 1975 as compared to 186 during 1974. Development footage sunk in 1975 was 675,973. This is a decrease of 15 per cent from the previous year's figure.

Nine rigs were involved in development drilling, which was the same number as in 1974. The success ratio of development drilling in 1975 was 88 per cent.

A very significant development in this sphere of activity was the initiation of drilling activity by Trinidad and Tobago Oil Co. (TRINTOC) in their Point Fortin Field. The company completed 13 wells by year end.

Trinidad Tesoro, with their continuing vigorous drilling programme, accounted for 68 of the development wells drilled. Most of the drilling was done in their Fyzabad, Guapo and Palo Seco fields and in September, the company drilled OR—1 their first completion in the Oropouche field.

Texaco Trinidad Inc. completed 29 development wells as producers, 2 of which were gas wells.

Offshore, Amoco Trinidad Oil Company had 26 completions, the majority of which came from their Samaan and Poui platforms.

Trinidad Northern Areas was responsible for 16 successful completions from the North and East Soldado fields on Platforms 18 and 19.

Premier Consolidated Oilfields Ltd. successfully drilled and completed one well in the Roodal field in January, 1975.

Table IV summarises, by areas, the development drilling activity in Trinidad and Tobago during 1974.

CRUDE OIL PRODUCTION

Crude oil production in 1975 continued to rise in spite of set-backs in the industry caused by industrial unrest during the months of March and April, and in terms of output and petroleum prices, this was a good year for the local industry. Offshore production strengthened by Amoco's prolific East Coast fields continued to dominate the oil producing scene, and accounted for almost 60 per cent of all oil produced in the country.

An average of 215,400 b.o.p.d. was produced during the year, the first time in Trinidad's oil producing history that the 200,000 b.o.p.d. level was consistently maintained. Cumulative production for the year was 78,620,938 barrels, which was an increase of 15 per cent over last year's figure. It is significant that the daily production per producing well averaged 78 barrels in 1975 as compared to 57 barrels two years ago.

As was expected, Amoco Trinidad Oil Company continued to be the country's leading producer and averaged 124,675 b.o.p.d. for the year, which was an increase of 54 per cent on its output of last year.

Amoco was the only company in the country to increase its production during the year. The average marine well in Trinidad produced 492 b.o.p.d. while the average Amoco well-whose producers are all marine-produced 2,011 b.o.p.d. These figures illustrate the major contribution of the Amoco fields.

Trinidad Northern Areas Limited daily production fell by some 41,000 barrels to 47,930 barrels. This is the first time since 1966 that Trinidad Northern Areas' production has fallen below 50,000 b.o.p.d. Production by this marine producing company was affected by industrial unrest early in the year and a fire which put a production platform out of action, and even at year's end, production did not reach the level attained in the first two months of the year. It is expected that with increased drilling activity in 1976 production should again top the 50,000 b.o.p.d. mark.

The land producers fared no better in 1975 than they did in the previous year for they all suffered declines in production. The crippling effect of industrial action, which it is estimated accounted for a loss in excess of 2,000,000 barrels of crude over two months, counteracted to some extent the large increase in production experienced in the East Coast marine fields.

The steady decline in the production of Trinidad-Tesoro Petroleum Company Ltd., which began in mid 1974, continued throughout 1975, and was aggravated somewhat by the industrial unrest which affected all land operations and a fire at the company's Trintes Platform off Point Galeota. The company produced oil at an average daily rate of 17,808 barrels, which was 18 per cent less than its producing rate during the previous year.

Although Texaco Trinidad Inc. continued their development drilling and secondary recovery programmes their production fell by an alarming 27 per cent from their 1974 figures, and the company produced oil at an average rate of 17,713 b.o.p.d. This great drop in production was experienced despite the fact that the company's production was boosted by some 650 b.o.p.d. from Tricentrol Limited whose assets were acquired by Texaco on January 1, 1975. The company should show a better performance during 1976.

Figure IV illustrates graphically the contribution of new and recompleted wells to the country's total crude oil production.

Table V gives a detailed comparison by fields of production for the years 1974 and 1975.

TABLE III

Summary of Wildcat Drilling in 1975

Operator	Well Name	Location	Basis for Location	Lahee Exploratory Classification	Completion Date	Total Depth (Ft.)	Name and/or Age of Deepest Formation	Results/Remarks
Amoco (T'dad) Ltd.	SEG—10	N 77,672; E893,549	S&SSG	C1	27/1/75	12,760	Miocene	Abandoned—oil
	NEQB—1	N116,361; E959,832	do.	C1	20/3/75	13,819	do.	Abandoned—gas
	Nariva—1	N165,057; E741,217	do.	C3	19/6/75	14,010	do.	do.
	S. West POUI	N137,580; E703,147	do.	C1	14/8/75	12,000	do.	Abandoned—dry
	East POUI 1	N146,412; E711,650	do.	C1	24/8/75	1,026	do.	Abandoned—Mechanical
	East POUI 2	N146,412; E711,650	do.	C1	6/12/75	12,500	do.	Abandoned after testing oil
	East POUI 3	N149,190; E709,550	do.	C1	31/12/75	7,920	do.	Abandoned—oil
Trinidad Northern Areas	S. 383 & 383 RD.	N179,110; E201,550	do.	B1	15/7/75	8,336	Cruse	Oil producer
	S. 390	N179,350; E198,100	do.	B1	16/9/75	7,650	Lower Cruse	do.
Occidental	KK 4—1	N1240231.07m,E661614.64m*	do.	C3	8/7/75	756	Tertiary	Abandoned—Mechanical
	KK 4—2	N1240231.07m, E661614.64	do.	C3	29/11/75	14,550	do.	Abandoned—gas
DEMINEX/AGIP/TENNECO	[illegible]—1	N1254559; E738278*	do.	A3	Drilling	3,426	do.	Drilling
.E. Coast Consortium	IBIS—1	N 86,150; E764,750	do.	C3	15/8/75	17,425	Gros Morne	Abandoned after testing gas
	KISKIDEE 1	N61,800; E839,700	do.	C3	21/11/75	16,119	Upper Miocene	do.
	PELICAN 1	N110,200; E798,100	do.	A3	Drilling	12,822	Gros Morne	Drilling
Texaco Trinidad Inc.	CO—1	N371,068; E261,349	do.	A3	Drilling	11,442	Lower Creteceous	do.
Trinidad Tesoro Petroleum Co. Ltd.	GUM—915	N194,780; E256,270	do.	2B	5/3/75	6,370	—	Abandoned—dry

*UTM co-ordinates

TABLE IV

Summary of Development Drilling in Trinidad and Tobago—1975

Area Number	Producers Completed	Dry Holes Completed	Total Completions	Footage Drilled (feet)	Rigs Active 31.12.75
1	16	—	16	65,692	2
2	29	1	30	71,844	—
3	—	—	—	—	—
4	42*	1	43	139,699*	2
5	41	6	47(a)	96,791(a)	1
6	2	—	2	9,772	1
7	4	1	5	25,310	1
8	2	1	3	9,927	—
9	—	—	—	—	—
10	3	—	3	9,110	—
11	24	2	26	247,828	2
TOTAL ...	163	12	175	675,973	9

*Includes 6 steam injection wells—footage 7,641.

(a) Includes 1 water injection well—footage 4,875.

For definition of Areas, *see* Table IVA following:

TABLE IVA

Key to Area—Numbers on Map (Figure II), on Table and in Text

Area Number	*Description*
1	Soldado, North Marine, Couva Marine
2	Pt. Ligoure, F.O.S., Area IV and Guapo, Point Fortin West and Central, Parrylands, Cruse
3	Brighton (Land and Marine), Vessigny, Merrimac
4	Palo Seco, Los Bajos, Erin
5	Forest Reserve, Fyzabad, Point Fortin East, New Dome, San Francique
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
11	Galeota, Teak, Samaan, Poui
12	South Marine (South Coast)
13	Tabaquite, Pointe-a-Pierre
14	Icacos
15	North Coast

TABLE V

Oil Production in Trinidad and Tobago—1975

Company/Field	Discovery Year	Total Wells drilled	Name and/or Age of Producing Formation	Annual Production		Cumulative Production through December 1975 ('000) bbls.
				1974 bbls.	1975 bbls.	
TRINIDAD AND TOBAGO OIL CO.						
Balata East and West	1952	48	Miocene	26,117	20,405	2,078
Catshill	1950	117	do.	303,038	300,743	20,705
Inniss	1956	33	do.	57,187	59,513	5,609
Rock Dome	1962	3	do.	—	—	16
Penal	1936	258	do.	624,908	454,171	56,590
New Dome	1928	31	do.	3,719	6,100	3,050
Point Fortin East	1929	137	do.	611,311	492,872	22,165
San Francique	1929	27	do.	17,439	17,139	5,834
Area IV and Guapo	1963	156	do.	157,613	167,388	33,006
Parrylands 1–5	1913–1918	351	do.	326,243	301,533	34,296
Point Fortin Central	1916	104	do.	184,416	233,844	12,322
Point Fortin West	1907	206	do.	128,756	165,800	18,097
Los Bajos	1918	29	do.	—	—	546
Erin	1963	4	do.	—	—	710
TOTAL		1,504		2,440,745	2,219,510	215,024
TRINIDAD NORTHERN AREAS						
Fos—Ft	1954	30	do.	287,143	187,029	3,163
Soldado	1955	403	do.	18,716,295	17,307,743	289,554
TOTAL		433		19,003,438	17,494,772	292,717
AMOCO TRINIDAD OIL CO.						
Teak	1971	47	do.	18,805,823	18,287,043	61,140
Samaan	1971	39	do.	10,145,325	20,227,674	36,189
Poui	1974	9	do.	562,721	6,991,552	7,555
TOTAL		95		29,513,069	45,506,269	104,884
TEXACO TRINIDAD INC.						
Guayaguayare	1902	692	do.	2,103,328	1,432,236	75,455
Trinity	1956	94	do.	201,164	234,264	13,338
Barrackpore	1911	312	do.	564,406	430,530	24,020
Oropouche	1944	112	do.	709,995	402,018	4,669
Morne Diablo/Quinam	1926	—	do.	63,355	42,439	7,276
Forest Reserve	1913	1,883	do.	2,737,501	2,193,397	234,428
Palo Seco	1929	30	do.	1,374,029	1,024,144	80,135
Brighton	1903	612	do.	972,775	684,654	67,678
Erin	1963	21	do.	130,688	79,126	1,810
Couva Marine	1963	6	do.	37,507	54,834	271
Cruse	1913	150	do.	87,005	55,135	25,373
Wilson	1936	74	do.	129,471	101,564	18,884
Tabaquite	1911	225	do.	42,983	31,059	1,540
Balata Central	1949	6	do.	—	—	371
TOTAL		4,217		9,154,207	6,765,400	555,248

TABLE V—*Continued*

Oil Production in Trinidad and Tobago—1975—*Continued*

Company/Field	Discovery Year	Total Wells drilled	Name and/or Age of Producing Formation	Annual Production		Cumulative Production through December 1975 ('000) bbls.
				1974 bbls.	1975 bbls.	
TRINIDAD TESORO PETROLEUM CO. LTD.						
Fyzabad	1920–32	852	Miocene	1,377,577	1,299,219	153,157
Guapo	1922	544	do.	1,057,121	715,314	36,579
Moruga East	1953	62	do.	46,703	41,290	2,028
Moruga North	1956	20	do.	10,748	13,636	897
Moruga West	1957	129	do.	96,886	87,876	8,468
Coora/Quarry	1936	599	do.	1,122,999	1,005,659	80,506
Palo Seco/Erin	1926	1,113	do.	3,234,777	2,600,134	81,024
North Marine	1956	15	do.	32,317	933	1,236
Galeota	1972	19	do.	460,404	211,045	1,661
Central Los Bajos	1973	71	do.	447,411	512,113	999
Oropouche	1975	1	do.	—	12,424	13
TOTAL		3,425		7,886,943	6,499,648	366,568
PREMIER CONSOLIDATED OILFIELDS LTD.						
Siparia	1957	5	do.	9,980	7,386	777
San Francique	1929	75	do.	43,059	39,113	2,829
Fyzabad	1918	253	do.	53,180	63,232	12,728
Palo Seco	1915	83	do.	8,369	8,032	1,595
Barrackpore	1970	3	do.	11,732	10,028	82
Icacos	1955	17	do.	11,096	7,543	417
Rock Dome/Bovallius	1965	13	do.	—	—	134/189
TOTAL		449		137,416	135,339	18,751
GRAND TOTAL ...				68,135,818	78,620,933	1,553,192

SUMMARY OF FLUID INJECTION OPERATIONS DURING 1975

Secondary recovery operations underwent a general decline during 1975 although two new waterflood projects by T.N.A. and Trinidad-Tesoro were commissioned during the year. Oil production from fluid injection projects fell by 10 per cent to 10,600 barrels per day, while there were decreases in the volumes of fluids injected, especially in gas injection where there was a decline of 71 per cent from last year's injection rate. Fluid injection projects accounted for less than 5 per cent of the country's total oil production.

Gas Injection

The decline in the volume of gas injected from 14 mmcfd in 1974 to 4 mmcfd in 1975 was accompanied by a drop in production of 41 per cent to 966 barrels per day. The low level of gas injection activity is evidence of the continuing unavailability of gas for use in secondary recovery operations.

Texaco Trinidad Incorporated reclassified its Forest Reserve Upper Cruse Western Extension Project as a waterflood project although a small volume of gas was still being injected into the reservoir. Gas injection in their Guayaguayare field was substantially reduced from the 1974 level but oil production from the project area was increased by 37 per cent to 724 barrels per day.

Trinidad-Tesoro continued operating their 7 projects from last year. Following the established pattern for gas injection operations in the country, the company's overall injection rate was decreased by 2 mmcfd while production fell by 13 per cent to 440 barrels per day.

Water Injection

Two new waterflood schemes were instituted in 1975 and a combination gas/water project was converted to predominantly water injection, bringing the total number of water injection projects to 16. The greater number of schemes resulted in slightly higher production rates, and injection rates averaged 37,700 barrels of water per day in 1975 as compared with 58,500 barrels per day in 1974. Oil production from waterflood areas averaged 5,500 barrels per day which was a 10 per cent increase on the corresponding figures for last year.

Eleven waterflood projects were operated by Texaco during the year including 2 carbon dioxide flood schemes in Forest Reserve. Oil was recovered at a rate of 5,400 barrels per day from these projects; this is a 3 per cent drop from the 1974 level.

Trinidad-Tesoro initiated another cyclic waterflood project in the Upper Cruse Sand in the Coora field. The company has 3 waterflood schemes in operation, 2 cyclic floods in Coora and a polymer injection scheme in Fyzabad. An average of 220 barrels of oil per day are produced from these schemes.

Trintoc's Catshill waterflood project showed statisfactory progress during the year in producing an average of 250 barrels of oil per day or 18 per cent more than in the previous year.

Water injection in a staggered line drive pattern commenced in May this year in TNA's Main Field 8011 Reservoir. Response to the flood was detected after 3 months of operation and by the end of the year almost 300,000 barrels of water had been injected into the formation and 12,000 barrels of secondary oil had been recovered.

Steam Injection

Production levels were not maintained in the 6 steam injection projects which continued in operation during the year. Trinidad-Tesoro managed to increase the volume of steam put into the ground by 36 per cent, injecting 2,340 barrels per day; production from the company's 4 steam injection projects fell, however, by 13 per cent to 2,900 barrels of oil per day. The company was also engaged in recovering some 36,000 barrels of primary oil in the Central Los Bajos area by the "huff and puff" method of steam injection.

Texaco's 2 projects in Forest Reserve produced a daily average of 950 barrels of oil or 32 per cent less than in 1974.

The ratio of oil produced per barrel of steam injected remained at 0.92 which was the figure for 1974. There was an overall drop from the 1974 average, both in the volume of steam injected, 4,200 barrels per day, and the daily average oil recovery rate of 3,800 barrels.

Summaries of Trinidad and Tobago Fluid Injection and Production Statistics are included for the period 1971–1975 in Table VI. Statistics, by company for each type of fluid-injection project, are presented in Table VII. Water Injection Statistics, Steam Injection Statistics by Projects and Statistics for Gas Injection by Areas, are shown under separate cover in Tables VIII, IX and X respectively.

TABLE VI

Summary of Fluid Injection Operations in Trinidad and Tobago—1971-1975

YEAR	PROJECTS				INJECTION STATISTICS			CRUDE OIL PRODUCTION STATISTICS					
	Number of projects in operation at end of year				Gas (mmcf)	Water (bbls)	Steam (bbls)	Total oil recovered from wells under project influence (in bbls)					Oil expressed as a percentage of total oil production
	Gas	Water	Steam	Others				Gas Injection Projects	Water Injection Projcts	Thermal recovery Projects	Other recovery Projects	All Projects	
1971	32	8	7	—	10,826	12,123,572	1,959,720	3,568,723	2,357,145	1,367,721	—	7,293,589	15.5
1972	22	13	4	—	8,555	15,548,166	2,432,077	2,372,841	2,447,627	1,540,530	—	6,360,198	12.4
1973	13	18	6	1	6,573	19,063,428	2,248,606	811,100	2,088,992	1,593,344	304,003	4,797,439	7.9
1974	9	13	6	2	3,220	21,347,585	1,867,416	603,930	1,803,749	1,720,680	184,805	4,313,164	6.3
1975	8	16	6	2	1,443	13,758,293	1,530,743	352,920	1,992,222	1,395,432	146,105	3,886,679	4.9

TABLE VII

Fluid Injection Operations—1975

NATURAL GAS INJECTION

Company	Number of Active Projects	Gas Injected (mcf)	Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	Gas-Oil Ratio (cf/bbl)
T.T.I.	1	451,403*	192,411	47,380	1,028,499	5,350
T.T.P.C.L.	7	991,584	160,509	3,233	1,232,817	7,681
TOTAL	8	1,442,987*	352,920	50,613	2,261,316	6,407

*This figure includes natural gas injected in the Forest Reserve Middle Field Project which is a waterflood project.

CARBON DIOXIDE INJECTION

Company	Number of Active Projects	Gas Injected (bbls)	Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	Gas-Oil Ratio (cf/bbl)
T.T.I	2	633,668	146,105	34,963	866,917	5,933
TOTAL	2	633,668	146,105	34,963	866,917	5,933

WATER INJECTION

Company	Number of Active Projects	Water Injected (bbls)	Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	Per cent Water Cut
T.T.I.	11	11,644,799*	1,437,787	2,816,858	2,242,248	66.2
TRINTOC	1	299,348	93,746	9,076	23,461	8.8
T.T.P.C.L.	3	299,806	81,106	22,361	69,746	21.6
T.N.A.	1	1,514,340	379,583	156,541	455,500	29.2
TOTAL	16	13,758,293*	1,992,222	3,004,836	2,790,955	60.1

*This figure includes water injected in one (1) CO2 Flood in Forest Reserve and one (1) Gas Injection in Guayaguayare.

STEAM INJECTION

Company	Number of Active Projects	Steam Injected (bbls)	Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	Per cent Water Cut
T.T.I.	2	675,224*	347,148	393,485	135,870	53.1
T.T.P.C.L.	4	855,519	1,048,284	470,695	306,122	31.0
TOTAL	6	1,530,743*	1,395,432	864,180	441,992	38.2

*This figure includes steam injected in the Forest Reserve Zone 4 project which is a hot water injection scheme.

TABLE VIII

Water Injection—1975

Company	Field	Project	Water Injected (bbls)	Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	Per cent Water Cut
T.T.I.	Forest Reserve	UCRA*	88,276	—	—	—	—
		U.C. 645	1,140,345	114,626	193,612	298,056	62.8
		Bernstein UM Cruse	704,400	71,786	75,328	105,449	51.2
		UCWE— Middle Field	1,165,395	107,321	70,641	437,531	40.0
		Zone 4	—	58,182	20,893	17,058	26.4
	Guayaguayare	Navette 410	2,347,686	363,274	889,163	432,069	71.0
		410 Ext.	366,605	72,063	184,221	85,690	71.9
		307 Waterflood	1,207,883	279,992	595,684	332,521	68.0
		307 Ext.	13,185	31,714	38,576	37,240	54.9
		Navette 007[1].	691,151	—	—	—	—
	Brighton	L.B., Nariva	1,426,459	29,234	857	96,178	2.9
	Trinity	Shallow Herrera	1,450,227	234,264	524,627	284,466	69.1
	Palo Seco	L.F. '234' Sands	1,043,187	75,331	223,256	115,990	74.8
T.T.I.	All Fields	All Projects	11,644,799	1,437,787	2,816,858	2,242,248	66.2
T.T.P.C.L.	Coora	CO/UC/314/1	128,737	—	—	—	—
		CO/UC/317/11	130,489	21,103	4,250	18,742	16.8
	Fyzabad	FM/UF/169/1[2]	40,580	60,003	18,111	50,734	23.0
T.T.P.C.L.	All Fields	All Projects	299,806	81,106	22,361	69,476	21.6
TRINTOC	Catshill	CO 30 Sands	299,348	93,746	9,076	23,461	8.8
TRINTOC	All Fields	All Projects	299,348	93,746	9,076	23,461	8.8
T.N.A.	Soldado	Cruse	1,514,340	55,595	—	—	—
T.N.A.	All Fields	All Projects	1,514,340	55,595	—	—	—
All Companies ...	All Fields	All Projects	13,758,293	1,668,234	2,848,295	2,335,185	63.1

*CO_2 Flood—Production listed in CO_2 table.

[1]Gas-water Injection—Production listed in Natural Gas table.

[2]Polymer Injection

Carbon Dioxide Injection—1975

Company	Field	Project	Fluid Injected				Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	G.O.R. (cf/bbl)	Per cent Water cut
			CO_2 (mcf)	Water (bbls)	Steam (bbls)	Gas (mcf)					
T.T.I. ...	Forest Reserve	UCRA	610,805	88,276*	—	—	137,396	34,800	855,245	6,225	20.0
		Forest Sds	22,863	—	—	—	8,709	163	11,672	1,340	—
T.T.I.	All Fields	All Projects	633,668	88,276*	—	—	146,105	34,963	866,917	5,933	—
All Companies	All Fields	All Projects	633,668	88,276*	—	—	146,105	34,963	866,917	5,933	—

*This figure is included under water injection.

TABLE IX

Steam Injection—1975

Company	Field	Project	Steam Injected (bbls)	Oil Produced (bbls)	Water Produced (bbls)	Gas Produced (mcf)	Per cent Water Cut
T.T.I	Forest Reserve	Forest Sands					
		Zones 5 and 6	369,083	281,810	333,398	92,098	54.0
		Upper Cruse	296,450	65,338	60,087	43,772	48.0
		Zone 4*	9,691	—	—	—	—
T.T.I.	All Fields	All Projects	675,224	347,148	393,485	135,870	53.1
T.T.P.C.L.	Fyzabad	Pilot	7,593	88,619	8,351	236	8.6
	Palo Seco	Main Project					
		UF/LML'E	656,236	461,544	271,574	2,196	37.0
	Guapo	Experimental	181,773	471,666	159,179	301,442	25.0
		Gen. 3					
		Other than 3	9,917	26,455	31,591	2,248	45.6
T.T.P.C.L.	All Fields	All Projects	855,519	1,048,284	470,695	306,122	31.0
All Companies ...	All Fields	All Projects	1,530,743	1,395,432	864,180	441,992	38.2

*This is a Hot Waterflood Project listed in water injection table.

TABLE X

Gas Injection—1975

Company	Field	Gas injected (mcf)	Oil Produced (bbls)	Gas Produced (mcf)	G.O.R. (cf/bbl)
T.T.I.	Forest (1)	213,016*	—	—	—
	Guayaguayare	238,387	192,411	1,028,499	5,350
T.T.I.	All Fields	451,403	192,411	1,028,499	5,350
T.T.P.C.L.	Quarry (4)	265,492	70,691	214,746	3,037
	Fyzabad (2)	557,833	76,285	944,733	12,384
	Palo Seco (1)	168,259	13,533	73,338	5,419
T.T.P.C.L.	All Fields	991,584	160,509	1,232,817	7,681
All Companies	All Fields	1,442,987*	352,920	2,261,316	6,407

*This figure represents gas injected in the Forest Reserve Middle Field Project which is a waterflood—Production listed in water injection table.

( )Figure in parentheses indicate the number of active gas injection projects existing in each field.

NATURAL GAS PRODUCTION AND UTILIZATION

The increase in oil production this year also brought gas production to a higher level of 346.4 mmcf per day at an average gas oil ratio of 1608 scf per barrel. Of this amount 25.9 per cent was produced from the older land fields at an average gor of 2234 scf per barrel and 256.6 mmcf per day from the marine areas at an average gor of 1465 scf per barrel. As is to be expected Amoco-Trinidad Oil Co. produced more than half of the total gas produced accounting for 52.4 per cent of gas production. The three (3) major land producing companies, Texaco, Trinidad-Tesoro and Trintoc, shared land gas production almost equally among themselves with respective shares of this production at approximately 34, 35 and 30 per cent each.

During 1975, industrial action at the Texaco refinery and in the land producing fields had the direct effect of decreasing land gas utilization efficiency. As a result the percentage of gas wasted (excluding gas wasted after pressure utilization) rose from 6.4 per cent in 1974 to 9.1 per cent this year. However, in spite of the increase in production off the East Coast, marine gas wasted (excluding gas wasted after pressure utilization) fell from a percentage of 56.3 per cent in 1974 to 55.6 per cent in 1975. This was almost entirely due to 1975 being the first full year of gas supply from the East Coast areas to the Trinidad and Tobago Electricity Commission.

The formation of the National Gas Company in August this year will ensure that increasing volume of the gas produced offshore will be brought onshore for industrial usage.

In all, of the average of 346.4 million cubic feet per day produced, 137.2 mmcf per day was sold and 59.6 mmcf per day used in the refineries or in the producing fields themselves, with the refineries accounting for 71.8 per cent of this own use. The declining volumes of available gas on land resulted in only 5.5 mmcf being injected into the formation on a daily basis.

Of the 137.2 mmcf per day sold, 86.8 mmcf per day was sold to non-oil companies with more than 90 per cent of this going as usual to Federation Chemicals Ltd. and the Trinidad and Tobago Electricity Commission. The remaining volumes of gas sold to non-oil companies went to seventeen (17) small consumers who had an average purchase per consumer of only 175,000 scf per day.

The trend of gas production over the past five years is given in Table XI.

TABLE XI

Annual Statistics for Natural Gas Production and Utilization 1972-1975

	1971		1972		1973		1974		1975	
	Millions of S.C.F.*	%	Millions of S.C.F.*	%	Millions of S.C.F.*	%	Millions of S.C.F.*	%	Millions of S.C.F.*	%
Production ...	109,814	100.0	104,338	100.0	119,979	100.0	123,293	100.0	126,434	100.0
G.O.R. (S.C.F./bbl.)	2,329	—	2,037	—	1,978	—	1,883	—	—	—
Used as Fuel:										
In Fields ...	8,091	7.4	8,415	8.1	8,223	6.9	7,645	6.0	6,000	4.7
In Refineries ...	27,117	24.7	25,776	24.7	22,506	18.7	20,034	15.6	15,763	12.5
In Other Industries ...	20,658	18.8	22,940	21.9	23,970	20.0	23,029	17.9	29,855	19.7
Sub Total ...	55,866	50.9	57,131	54.7	54,699	45.6	50,708	39.5	46,618	36.8
Other Complete Utilization:										
Used as process Gas ...	8,931	8.1	9,858	9.5	9,624	8.0	8,071	6.3	6,844	5.4
Injected into Formation ...	12,112	11.0	9,230	8.9	6,381	5.3	5,705	4.4	2,018	1.6
Converted into C.H.P.S. ...	112	0.1	95	0.1	61	0.1	49	0.1	60	0.1
Sub Total ...	21,155	19.2	19,183	18.4	16,066	13.4	13,825	10.8	8,922	7.1
Vented:										
After use of Pneumatic Energy ...	11,033	10.1	6,345	6.1	6,439	5.4	6,635	5.2	6,884	5.4
Without Use ...	21,760	19.8	21,679	20.7	42,775	35.6	57,125	44.5	64,010	50.6
Sub Total ...	32,793	29.9	28,024	26.8	49,214	41.0	63,760	49.7	70,894	56.1

*Standard Cubic Feet.
%—Per cent of Total Natural Gas Produced.

REFINING AND PETROCHEMICAL MANUFACTURE

Refining

In 1975 a total of 85,660,318 barrels of crude oil was refined in Trinidad and Tobago corresponding to a daily average throughout of 234,686 barrels per calender day. This represents a decrease of 34.5 per cent in the volume of crude processed compared with 1974, the lowest figure experienced since 1960, and resulted mainly because of labour problems which began in late 1974 at the Texaco Harbour Division and ultimately led to the total shut down of the Texaco Refinery in March. Fortunately, Trintoc's operations were unaffected by such problems and continued to produce for the domestic and foreign markets.

Trinctoc's overall total throughout was 17,075,255 barrels or a daily average of 46,782 bbls/day. For the same period in 1974 Shell (later Trintoc) managed a throughput of 20,663,691 bbls or a daily average of 56,613 bbls per day. Comparing the daily average throughput between STL and its successor company Trintoc for the year 1974 and 1975, Trintoc's throughout declined by 17.4 per cent, which by any standards was a good performance. Texaco's total throughout for the year was 68,571,122 barrels or daily average of 187,866 bbls/day. For the corresponding period in 1974 total crude throughput amounted to 110,142,089 barrels or a daily average of 301,759 bbls/day. This daily average throughput declined by 37.7 per cent compared to 1974.

From zero throughput for the month of April the Texaco refinery gradually reached the respectable figure of 269,997 bbls/day by December. During the shutdown major maintenance work was carried out on many units resulting in a gradual building of throughput.

The main refinery products were:—

	1975	1974	*Per cent change*
Fuel Oils	... 48.4	74.5	—35.0
Gasolines	... 14.1	19.1	—26.2
Gas/Diesel Oils	... 10.8	14.9	—27.5
Aviation Fuel	... 3.9	8.4	—53.6
Kerosene	... 3.9	6.1	—36.1
Lubes/Greases	... 0.5	1.2	—58.3
Petrochemicals	... 0.6	1.3	—53.8

Crude feedstock to the Texaco Refinery originated from the following sources in the amounts indicated.

Texaco

Name of Crude	Country	Volume bbls.	Per cent
Trinidad		12,340,716	18.00
Lago Medio	Venezuela	315,403	0.46
Bombal	do.	68,083	0.10
Minas	Indonesia	15,009,575	21.89
Duri	do.	1,591,717	2.32
Arabian Light	Saudi Arabia	27,924,250	40.72
Arabian Medium	do.	29,879	0.04
Arabian Heavy	do.	2,625,656	3.83
Bern	do.	941,231	1.37
Iranian Light	Iran	7,267,553	10.60
Angolan	Angola	437,499	0.64
Nigerian Light	Nigeria	19,500	0.03
		68,571,122	100.00

Trintoc's refinery has been on indigenous crudes throughout the entire year except for one shipment of Nigerian crude in April, (593,714 bbls).

Petrochemicals

Production of petrochemical intermediates from Texaco's refinery amounted to 670,552 barrels in 1975 as compared to 1,351,868 barrels in 1974. The main products were:—

	Percent of Total Production		
	1975	1974	Percent Change
Normal Paraffin	61.1	44.8	+36.4
Toluene	18.4	27.3	—32.6
Benzene	9.5	7.5	+26.7

Production and Exports of Important Petrochemical Intermediates Trinidad and Tobago—1975.

Quantities in Barrels

Petrochemical Intermediates	1975		1974	
	Production	Exports	Production	Exports
Normal Paraffins	409,760	518,650*	608,225	604,132
Di-isobutylene	2,345	943	25,535	30,955*
Nonene	11,933	4,902	19,802	21,887*
Tetramer	23,462	18,935	29,975	26,971
Benzene	63,864	62,914	101,756	92,686
Toluene	123,258	141,870*	369,718	421,284*
Xylene	15,853	16,874*	47,846	45,996
Cyclohexane	9,297	31,433*	142,075	132,330
Unrefined Napthenic Acids	10,780	14,161*	11,693	5,124

*Excess of Exports over production made up from stocks.

Crude Oil Balance

Availability		Million bbls.	Disposal		Million bbls.
Stock at 1st January	3.9		Exports		48.7
Production	78.6		Delivered to Refinery		85.7
Less loss	0.4	78.2			
Imports		58.1	Stocks at 31st December		5.8
		140.2			140.2

Refined Products Balance

Availability		Million bbls.	Disposal		Million bbls.
Stock at 1st January	9.1		Shipments		70.3
Imports	0.6		Bunkers		17.8
Crude delivered	85.7		Local Consumption		2.4
Refinery Gas and Loss	2.8				
	82.9				
Products obtained		82.9	Stock at 31st December		4.1
		92.6			92.6

The significant decrease in the year 1975 was due to industrial unrest in the earlier part of the year which caused the refinery to shut down for 3 months.

The volume of exciseable products amounted to 2,488,310 pounds. The exciseable sale of gasoline amounted to 1,717,228 pounds an increase of 0.1 per cent compared to 1974. The exciseable duty on these amounted to $10,969,627. The exciseable tax on gasoline was 27 cents for premium and 18 cents for regular.

Sales of bottled propane showed a decrease of 2.7 per cent from the 1974 figure amounting to 42,159,889 lbs. on which excise duty at 2 cents per lb was paid.

Details of petroleum exciseable products are listed hereunder:—

Premium Gas bbls.	*Regular Gas* bbls.	*Gas/Diesel* bbls.	*Propane* lbs.
1,118,044	599,184	771,082	42,159,889

Nitrogenous Fertilizers

Ammonia production totalled 232,611 short tons, corresponding to an average of 637 short tons/day. This represented a 4.7 per cent decrease in production. Production of ammonium sulphate and urea also decreased by 11.6 per cent and 10.0 per cent to 77,710 and 71,099 short tons respectively.

A total of 14,566 mmcf of natural gas was utilized, a decrease of 10.0 per cent over last year's figure. Of this amount 6,843 mmcf were used as feedstock for ammonia, nitrogenous fertilizer and hydrogen, with 7,722 mmcf being consumed as fuel.

Marketing

Petrol Filling Station—Sales and Marketing Position in 1975.

In 1975, the number of filling stations in operation in Trinidad and Tobago was 220.

Statistics on sale and retail outlets are distributed among the two marketing companies as follows. (Trintoc retail outlets are now reported under National Petroleum Marketing Company.)

	Texaco	*N.P.*	*Total*
Number of Stations	77	143	220
Volume (Mogas I.G.)	15,753,237	43,227,983	58,981,220
Average per Station	204,587	302,293	—
Market per cent of Total Sales ...	26.7	73.3	100.0
Per cent of Total Number of Stations	35.0	65.00	100.0

The total throughput was 5.3 per cent greater than the 1974 total of 56,017,495 I.G. For the five (5) year period 1971 to 1975 local consumption rose from 47,258,887 to 58,981,220 giving an average growth rate of 5.0 per cent.

Year	*Total Consumption of Mogas I.G.*
1971	47,258,887
1972	50,490,514
1973	52,546,106
1974	56,017,495
1975	58,981,220

ACCIDENT REPORT—1975

Accidents reported for the year 1975 numbered 311. This figure represents an increase of 41 per cent compared with the 1974 total of 219. There were marked increases in the number of accidents occurring in the Texaco's Forest Reserve Field and in the fields operated by Amoco and Trinidad-Tesoro. In addition, operations in the "L" shaped block by the South-East Coast Consortium were also responsible for an increase in the number of accidents for 1975.

There were however marked decreases in the number of accidents in all Texaco's other fields, and in Trinmar fields.

Accidents were classified as serious and non-serious depending on the extent of the injury. Serious accidents comprised 12.3 per cent, showing a slight decrease of 2.3 per cent over last year's 14.6 per cent. Accidents in the serious category consisted principally of crush injuries and amputation of fingers caused in machinery operations, compound fractures, injury to ribs, back injuries affecting the spine in some instances, severe blows to head and facial injuries caused either by falls when performing usually hazardous jobs at great heights or by equipment during mechanical operations. First degree burns, internal injuries, and severe eye injuries were also classified as serious.

Non-serious or minor accidents included typical injuries such as sprains, superficial burns, abrasions, bruises, contusions to limbs, dislocation of shoulders, strained muscles resulting from strenuous jobs and small cuts.

There were three fatal accidents in 1975. Two occurred in the offshore operations by Amoco and the other occurred in the operations by Trinidad-Tesoro.

On the Santa Fe Drilling Barge, *Mariner I*, a fatal accident occurred when a crane operator was pinned between the winch and guide structure.

On the *Skinmar III*, a floorman was killed during drilling operations.

In November 1975, an employee of Oilwell Contractors Limited was killed when an air hose whipped.

In 1975, there were several accidents involving serious damage to equipment but with no injury to persons. One of these accidents was a fire at Trinidad-Tesoro's No. 1 compressor station in Fyzabad, which caused some equipment damage.

At Texaco's No. 6 berth in the Pointe-a-Pierre Harbour, an oil tanker loaded with crude oil was undergoing berthing operations when it ran into the northern side of the berth causing extensive damage and pollution to the area.

Fire broke out on Platform II in the Soldado Main Field when the Soldado crane barge collided with a high pressure gas line, causing the line to break. This accident resulted in extensive damage to the equipment.

There were numerous accidents occurring in the oilfields apart from those accounted for on the Accidents Statistics Table. These, although not falling under the jurisdiction of the Ministry of Petroleum and Mines, were brought to our attention and in some cases investigations were carried out.

TABLE XII

Accident Statistics—1975

Company	Field	Total	Fatalities	Serious				Minor			
				D.	P.	E.	O.	D.	P.	E.	O.
Texaco	Forest Reserve	64	—	2	1	—	—	14	47	—	—
	Barrackpore	10	—	1	—	—	—	—	9	—	—
	Guayaguayare	6	—	—	—	—	—	2	4	—	—
	Brighton	2	—	—	—	—	—	—	2	—	—
		82	—	3	1	—	—	16	62	—	—
South East Consortium ...	—	36	—	8	—	—	—	28	—	—	—
Amoco	All	111	2	10	3	1	—	84	11	—	—
Deminex	—	1	—	1	—	—	—	—	—	—	—
Trinmar	All	19	—	3	—	1	—	10	2	2	1
Tesoro	All	56	1	1	3	—	—	1	44	2	4
P.C.O.L.	All	1	—	—	—	—	—	—	1	—	—
Trintoc	All	5	—	—	3	—	—	1	1	—	—
		311	3	26	10	2	—	140	121	4	5

D.=Drilling P.=Production E.=Engineering O.=Others

ROYALTY ASSESSMENT

Appendix VIII presents a summary of Crude Oil Assessed for Crown Royalty by Company, showing averaged prices per barrel and analyses for the half-yearly periods ending 30th June and 31st December, 1975.

Net Royalty production increased from 31,157,987 barrels and 33,851,990 barrels in the first and second half of 1974 to 36,882,973 barrels and 39,101,504 barrels respectively in 1975. The reason for this is the Amoco Trinidad Oil Co's production which continued its upward trend throughout 1975.

Prices of petroleum products continued rising. Total Royalty on crude for the year was therefore $182,693,761 as compared with $160,834,354 for 1974 and $74,843,071 for 1973 (*See* Appendix IX average price in TT currency per bbl).

Appendix IX presents a summary of Royalty assessed for Crude Oil, Natural Gasolene and Natural Gas produced, and Minimum Rents on Crown Oil Mining Leases/Licences for the half-yearly period in 1973, 1974 and 1975.

Total Royalty in 1975 of $184,278,587 is higher than 1974 and 1973 respectively at $163,052,222 and $76,941,614. Greater production in 1975 is therefore mainly responsible for this increase as well as the higher rate of Royalty of 12½ per cent applicable to Amoco Trinidad Oil Co. and TTPCL Galeota Field.

LEASES AND LICENCES

Total acreage under licence decreased from 5,697,501 acres at the end of 1974 to 5,387,896 acres at the end of 1975.

During the year Amoco surrendered 311,102 acres of their licence on the East Coast.

The following is an outline of the situation as at 31st December, 1975.

Crown Oilrights	Acres	Roods	Perches
Public Petroleum Rights	222,142	3	33
Private Petroleum Rights (Encroachments)	50,142	1	17
Exploration and Production Licences (Public Petroleum Rights) ...	4,460,724	0	00
Marine Licences	545,940	0	00
Total Crown Oilrights	5,006,664	0	00
Private Oilrights			
Private Leases	108,845	0	00
Total acreage of all Lands under Licence	5,387,896	2	02

A detailed survey of State and Private Leases and Licences is set out on a Company basis in Table XIII.

TABLE XIII

Oil Rights under Lease and Licence as at 31st December, 1975

Company	State																					Private Oil Rights Land			Total Crown and Private		
	Land Leases									Submarine																	
	Public Petroleum Rights			Private Petroleum Rights			Total			High Seas			Territorial Waters			Exploration Licence			Total								
	A	R	P	A	R	P	A	R	P	A	R	P	A	R	P	A	R	P	A	R	P	A	R	P	A	R	P
Trinidad Northern Areas Limited (T.N.A.)	32	3	33	—	—	—	32	3	33	83,434	0	00	100,213	0	00	—	—	—	183,647	0	00	—	—	—	183,679	3	33
Texaco Trinidad Inc. (T.T.I.)	127,482	3	35	33,495	3	32	160,978	3	27	411,806	0	00	15,344	0	00	323,759	0	00	750,909	0	00	87,678	3	34	999,566	1	21
Trinidad Tesoro Petroleum Co. Ltd. ...	16,176	3	27	8,861	3	16	25,038	3	03	50,700	0	00	42,831	0	00	78,929	0	00	172,460	0	00	14,626	0	16	212,124	3	19
Trinidad and Tobago Oil Company (Trintoc)	60,734	3	18	5,239	2	24	65,974	2	02	—	—	—	—	—	—	—	—	—	—	—	—	938	0	08	66,912	2	10
Premier Consolidated Oilfields Limited (P.C.O.L.)	10,718	2	09	2,640	1	13	13,358	3	22	—	—	—	—	—	—	—	—	—	—	—	—	5,599	0	14	18,957	3	36
Trinidad Canadian Oils (T.C.O.)	6,996	2	31	—	—	—	6,996	2	31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,996	2	31
State of Timothy Roodal	—	—	—	9	2	12	9	2	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	2	12
Consortium T.T.I./Trintoc/T.T.P.C.L. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	187,400	0	00	187,400	0	00	—	—	—	187,400	0	00
Amoco Trinidad Oil Co.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,368,995	0	00	1,368,995	0	00	—	—	—	1,368,995	0	00
Texaco/Tennaco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	260,000	0	00	260,000	0	00	—	—	—	260,000	0	00
Texaco/G.O.T.T.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	373,142	0	00	373,142	0	00	—	—	—	373,142	0	00
Amerada Hess—565 Corp.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	248,760	0	00	248,760	0	00	—	—	—	248,760	0	00
Phillip-Cleary-Apco	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	165,840	0	00	165,840	0	00	—	—	—	165,840	0	00
Deminex-Agip	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	517,767	0	00	517,767	0	00	—	—	—	517,767	0	00
Deminex/Mobil	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	303,424	0	00	303,424	0	00	—	—	—	303,424	0	00
Occidental	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	313,680	0	00	313,680	0	00	—	—	—	313,680	0	00
Peeanic-Santa Fe Terra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	160,640	0	00	160,640	0	00	—	—	—	160,640	0	00
TOTAL	222,142	3	33	50,247	1	17	272,390	1	10	545,940	0	00	158,388	0	00	4,302,336	0	00	5,006,664	0	00	108,845	0	00	5,387,896	2	02

LEGAL DEVELOPMENTS FOR 1975

The Legal Section played an important role in meeting heavy demands brought about by the steady increase in petroleum activities in the country. The miscellany of legal matters dealt with during the period under review, arose from the necessity for the drafting of contracts, licences, etc., as well as for advising on the legal aspects on:—

(i) Matters arising out of licences granted under the Petroleum Act and Regulations including reduction of guarantees given under Regulation 45 of the Petroleum Regulations 1970 for the performance of work obligations, extension of periods for performance of drilling obligations, and review of certain terms and conditions of licences;

(ii) matters arising out of the petroleum legislation including fixing of prices of certain petroleum products for certain types of sales and revision of certain orders made under the Petroleum Act and Regulations.

Appended are some highlights of activities in which the legal Section was involved:

ASSIGNMENTS:

(*a*) By Deed dated 10th March, 1975, and registered as No. 17171 of 1975 Phillips Petroleum Caribbean Ltd. and Cleary Petroleum Corporation assigned to Clear Creek Company Inc. their interest in licence No. 9683/1970 over blocks HH 10, HH 11, JJ 10 and JJ 11 originally granted to Phillips, Cleary and Apco Oil Corporation.

(*b*) In June, 1975, a Deed of Assignment from Deminex to Agip and Tenneco of a 1/3 interest in Licences 6691, 6692 and 6693 of 1970 and 671 of 1974 was approved by the Minister. The legal formalities (execution by the parties, etc.) were to be finalised.

CONSENT TO ASSIGNMENTS:

(*a*) Pursuant to an Agreement dated April 1, 1975, between Occidental of Trinidad Inc., Deminex, Agip of Trinidad and Tobago Ltd. and Tenneco Oil Company of Trinidad, in May, 1975, the Minister of Petroleum and Mines gave consent to an intended assignment of a 60 per cent interest in the Exploration and Production Licences No. 9684 of 1970 (over blocks JJ 4, KK 4, and LL 8) and No. 9685/70 (over block JJ 7) from Occidental to Deminex, Agip and Tenneco.

(*b*) On 22nd August, 1975, consent was given by the Minister of Petroleum and Mines to an assignment from Ashland Caribbean Inc. to Amerada Hess Corporation of Trinidad and Tobago of the 50 per cent interest of Ashland Corporation Inc. in the Exploration and Production (Public Petroleum Rights) Licence dated 10th August, 1979, and registered as No. 10149/71 and originally granted to Amerada Hess Corporation of Trinidad and Tobago and 565 Corporation.

GRANT OF EXPLORATION AND PRODUCTION (PUBLIC PETROLEUM RIGHTS) LICENCE:

On the 22nd day of April, 1975, Amoco Trinidad Oil Company was granted an Exploration and Production (Public Petroleum Rights) Licence under its Exploration Licence registered as No. 9052 of 1970 as a result of a commercial discovery in SEG Well No. 9. This Licence registered as No. 5767 of 1975 was granted over approximately 96,176 acres off the East Coast of Trinidad.

LEGISLATION:

The Legal Section was involved in the drafting of:

(*a*) the Petroleum Amendment Act, 1975, which amended S.30A of the Petroleum Act, 1969 and the Petroleum Taxes Amendment Act, 1975 which amended the Petroleum Taxes Act, 1974;

(*b*) the Price of Petroleum Products Order 1975 dated 25th September, 1975, and published as Government Notice No. 124 of 1975 on 2nd October, 1975, which fixed the wholesale price of Diesel Oil and Gas Oil to be sold by the National Fisheries Co. Ltd;

(*c*) Government Notices Nos. 155–158 which gave public Notice of Production Sharing Contracts which were granted in December, 1974.

REVISION OF CONTRACTS:

The following draft contracts were revised:

(*a*) Contract between the Government of Trinidad and Tobago and G. Wimpey Caribbean Limited for the storage and handling of pipe;

(*b*) Construction Contract Document inviting tenders for the construction of a 24 inch Pipeline from Beachfield to Picton. Considerable time was spent by the State Counsel I on this matter and on the performance of miscellaneous functions arising out of this contract.

(*c*) Contracts relating to the Government/Grace Ammonia Project.

(*d*) Some time was spent on discussions of the draft contract between Government and Amoco (which was agreed in 1974) for the supply of gas to T & TEC with a view to clarifying certain ambiguities which were discovered in contract and formalising the document but little progress was made on this matter.

EMERGENCY UNDER SECTION 35 OF THE PETROLEUM ACT:

In March, 1975, because of a current labour situation, a critical problem developed with respect to the distribution of Petroleum Products and the Governor-General used his powers under the provisions of section 35 of the Petroleum Act, 1969, to decree an Emergency for the purposes of that Act. As a result of this situation, certain orders were enacted. These included the Trade (Supply of Goods) (No. 2) Regulation, 1975 (G. N. 40/75) and the Trade (Petroleum Product, Acquisition and Disposal) Order, 1975 (G. N. 42/75).

NOTICE OF SURRENDER OF LICENCE

In September, 1975, Phillips Petroleum Caribbean Limited and Clear Creek Company Inc. gave notice of determination of Licence No. 9683 of 1970 in respect of Blocks HH 11, part of HH 10 and JJ 11 to be effective on 4th July, 1975.

OFFICIAL BUSINESS OUTSIDE TRINIDAD AND TOBAGO

In February, 1975, the Senior State Counsel was required to proceed to Memphis, Tennessee to attend meetings and to perform legal functions in connection with a contract between the Trinidad Nitrogen Company Limited (owned 49 per cent by W. R. Grace & Co. and 51 per cent by the Government of Trinidad and Tobago) and W. R. Grace & Co.

STAFF

1975 was a year of considerable activity and involvement in international matters for the Ministry. The Government of Trinidad and Tobago, through the Ministry of Petroleum and Mines, held a Conference "Best Uses of our Petroleum Resources" at Chaguaramas Convention Centre from 13th to 15th January, 1975 under the Chairmanship of Dr. Kenneth Julien.

The Conference was convened by the Prime Minister and participants included eight Ministries of Government, six Statutory Boards and Agencies, six organizations, four International Agencies and nineteen Private Companies and Corporations. Observer status was accorded the Ministry of External Affairs and the Point Lisas Development Corporation.

The major items discussed at the Conference were oil production, gas production, petrochemicals, fertilizer projects, shipping, and infrastructure requirements.

The Energy Planning Division within the Ministry of Petroleum and Mines was established in March, 1975 with the emphasis on project planning and development. The Division comprises a small team of highly skilled professional and experienced technicians, mainly in the project development fields of engineering and economics.

L.N.G.

Mr. Basharat Ali, Chemical Engineering Specialist, and Dr. Akin Young Hoon, Chemical Engineer II, were members of the Government of Trinidad and Tobago/Amoco Project negotiating team, participating in the preparation of the final feasibility study of the GOTT/Amoco Joint Venture Ammonia Project in which the Government of Trinidad and Tobago will hold a 51 per cent majority interest.

Dr. Young Hoon was further assigned to work with Messrs. Kellogg and Company in Houston, Texas for six months in connection with the first phase of the GOTT/Amoco Joint Venture Ammonia Plant.

A feasibility study was prepared to determine the economic viability of a joint venture ammonia, urea and woven poly-propylene bag project between Amoco and the Government of Trinidad and Tobago. The total investment cost of the plant at the Brighton West Coast site is $356 million. The facilities projected included two (2) Ammonia Units (1,000 Metric Tons per day capacity), one (1) 1,620 metric tons per day Urea Plant with the necessary offsite facilities and utilities and a woven poly-propylene bag manufacturing plant with a capacity of ten million bags per year. The bags were to package the urea from the proposed Amoco-GOTT Fertilizer Project.

Mr. Malcolm Jones, Chemical Engineer II, and Mrs. K. Bhoolai, Acting Senior State Counsel, visited Tennessee, U.S.A. from 16th to 22nd February, 1975, in connection with the Joint Venture (Trinidad Nitrogen Company Limited—TRINGEN) between the Government of Trinidad and Tobago and W. R. Grace.

Mr. Malcolm Jones was appointed President of the Trinidad Nitrogen Company (TRINGEN) with effect from 1st March, 1975.

Ninth World Petroleum Congress

Trinidad and Tobago was represented by Mr. Hugh Hinds, Chief Petroleum Engineer, and Mr. Basharat Ali, Chemical Engineering Specialist, at the Ninth World Petroleum Congress held in Tokyo Japan from 11th to 24th May, 1975. The theme of the Congress this year was "Petroleum and the Welfare of Mankind."

Trinidad and Tobago, at present, is one of the developing countries most actively engaged in the petroleum industry and representation at the Congress was beneficial.

Oil Mission

Mr. O. O. Fernandes, Special Adviser to the Minister of Petroleum and Mines, and Mr. Basharat Ali, Chemical Engineering Specialist, were members of the team of delegates from Trinidad and Tobago on an Oil Mission to visit the People's Republic of China and Indonesia. The Mission visited several Major Oil Companies.

Conferences

OLADE

Mr. Rodney Appleton, Senior Economist, was a member of the delegation which attended the Fifth Meeting of Ministers of Energy and Petroleum (OLADE) in Kingston, Jamaica, from 24th to 28th February, 1975.

Mr. Rodney Appleton also attended the Sixth Ministers Meeting of the Latin American Energy Organization held in Mexico from 8th to 12th September, 1975. The delegation was headed by the Ambassador to Venezuela, Mr. Wilfred Naimool.

UNITED NATIONS

Mr. Appleton also formed part of the delegation from Trinidad and Tobago which attended the United Nations meeting on Co-operation among Developing Countries in Petroleum Matters in Geneva from 10th November to 21st December, 1975.

The general debate and discussions centered around the scope for co-operation in exploration, production, refining, marketing, transportation and the training of technical manpower and the exchange of information.

Mr. John Scott, Geologist III, represented Trinidad and Tobago at the Geophysics of the Caribbean Region and its Resources, which was held in Kingston, Jamaica, from 17th to 22nd February, 1975. The Mandate for the workshop was to develop a programme to investigate the structure and origin of the Caribbean region, and its relationship to the processes of resources and development, and to facilitate the understanding of geological hazards.

Training

Messrs. Horace Williams and Nelson Ramsaywak, both Petroleum Inspectors, were granted three months study leave to pursue courses at the School of Production and Gas Technology in the University of Austin, Texas.

APPENDIX I

ANNUAL STATISTICS OF PRODUCTION, DRILLING, REFINING, EXPORTS AND IMPORTS 1965 - 1975

ITEM	Unit	Percentage Difference 1975 - 1974	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965
1. Crude Oil	,000 bbls	+ 15.4	78,621	68,136	60,678	51,211	47,148	51,847	57,418	66,884	64,995	55,633	48,859
2. Casting Head Gasoline (C.H.P.S.)	'000 bbls	- 11.6	61	68	79	137	141	168	150	164	192	188	197
3. Total Crude Oil and Natural Gasoline (1 + 2)	'000 bbls	+ 15.4	78,682	68,205	60,749	51,348	47,289	51,215	57,568	67,868	65,187	55,791	49,056
4. Crude Oil Production - Crown Oil Rights	'000 bbls	+ 16.8	76,018	65,078	57,736	48,246	43,929	47,894	54,014	63,345	60,961	51,648	45,274
5. Crude Oil Production - Private Oil Rights	'000 bbls	- 14.9	2,603	3,058	2,934	2,965	3,219	3,452	3,485	3,559	4,834	3,955	3,585
6. Total Imports	'000 bbls	- 38.5	58,796	95,636	103,977	107,662	107,567	115,445	105,418	93,380	84,146	93,508	94,050
7. Imports of Refined Products	'000 bbls	+ 465.2	260	46	21	76	75	69	43	48	43	-	2
8. Imports of Crude Oil for Refining	'000 bbls	- 39.1	58,144	95,472	103,624	107,150	106,867	113,275	103,762	91,447	80,437	93,228	93,398
9. Imports of Other Oils for Refining and Blending ...	'000 bbls	+ 232.2	392	118	332	436	625	2,101	1,613	1,884	3,666	280	650
10. Total Exports	'000 bbls	- 9.9	139,714	153,297	155,998	149,992	146,663	154,974	147,878	142,076	141,779	135,678	132,440
11. Exports of Crude Oil	'000 bbls	+ 51.6	48,307	31,870	23,614	14,005	6,998	8,669	6,139	6,983	5,801	4,705	4,452
12. Exports of Refined Products	'000 bbls	- 24.7	91,407	121,427	132,384	135,972	139,665	146,305	141,648	135,093	135,978	130,973	127,988
13. Runs to Stills	'000 bbls	- 34.5	85,660	130,819	141,687	144,274	146,547	154,860	154,077	151,282	138,925	144,193	137,165
14. Number of Wells Started	As stated	- 16.9	182	219	205	191	248	140	127	176	213	273	225
15. Total Number of Wells Completed	As stated	- 10.9	189	212	212	195	220	135	130	176	221	275	224
16. Number of Drilling Wells Completed as Oil Wells ...	As stated	- 14.8	150	176	181	166	175	107	99	151	197	244	201
17. Number of Drilling Wells Abandoned, & c	As stated	+ 14.3	24	21	31	30	45	28	31	25	24	31	23
18. Total Footage Drilled (All Wells)	Feet	- 7.7	839,648	909,980	955,185	841,742	938,259	662,977	690,671	942,686	928,210	1,187,202	1,058,736
19. Footage Drilled on Crown Oil Rights	Feet	+ 8.7	772,279	766,787	874,867	760,768	743,784	566,878	677,874	928,915	880,839	1,078,133	1,012,922
20. Footage Drilled on Private Oil Rights	Feet	- 53.0	67,370	143,193	80,318	80,973	195,475	96,899	12,697	13,771	47,371	109,069	45,814
21. Average Depth of Completed Drilling Wells (15) ...	Feet	- 1.5	4,442	4,509	4,506	4,294	4,268*	4,911	5,313	5,356	4,328	4,318	4,823
22. Total Number of Wells Producing (Average during year)	As stated	- 6.8	2,777	2,981	2,894	2,932	3,035	3,123	3,257	3,381	3,427	3,377	3,227
23. Number of Wells Produced by Flowing (Average during year)	As stated	- 12.1	438	498	506	525	559	626	708	795	891	934	920
24. Number of Wells Produced Artificial Lift (Average during year)	As stated	- 5.8	2,339	2,483	2,388	2,407	2,476	2,497	2,549	2,586	2,536	2,443	2,307
25. Average Daily Production per Producing Well	Barrel	+ 24.0	77.6	62.6	57.4	47.7	42.6	44.8	48.3	54.1	52.0	45.1	41.5
26. Average Daily Production Flowing Well	Barrel	+ 44.6	358.7	248.0	204.4	146.8	114.4	119.9	125.2	137.3	117.6	96.3	88.9
27. Average Daily Production per Artificial Lift Well ...	Barrel	- 2.0	24.9	25.4	25.3	25.1	25.4	25.0	25.9	26.5	26.9	25.6	22.6
28. Total Value of Domestic Exports	$'000	- 2.4	3,839,970	3,934,151	1,052,476	1,050,023	1,000,940	944,131	934,658	910,636	755,100	717,170	678,313
29. Total Value of Petroleum Products (Item 28)	$'000	- 23.9	1,925,785	2,532,081	831,496	830,983	804,831	668,438	644,676	725,430	593,653	580,947	563,319
30. Total Value of Lake Asphalt Products	$'000	- 8.0	4,240	4,657	3,876	3,299	3,561	3,991	2,764	3,209	3,368	3,570	3,139
31. Total Natural Gas Produced	MMCF	- 1.5	126,434	128,293	119,979	104,338	109,814	121,060	137,500	151,445	140,338	118,927	111,503
32. Used as Fuel	MMCF	- 7.9	46,618	50,599	54,700	57,131	55,866	56,488	58,348	56,410	53,846	48,692	41,517
33. Replaced in Formation	MMCF	- 64.7	2,017	5,706	6,381	9,230	12,112	19,018	24,728	21,324	22,625	19,841	13,866
34. Losses, Not Collected...	MMCF	+ 11.2	70,898	63,760	49,213	28,016	32,793	35,356	43,464	62,916	54,355	50,394	56,120

* revised data.

APPENDIX II

MONTHLY ANALYSIS OF DRILLING AND WORKOVER WELLS, 1975.

MONTH	RIG/ MONTH	New Wells Started	DRILLING WELLS COMPLETED										TOTAL	AGGREGATE DEPTH	AVERAGE DEPTH	CLOSED IN		MONTHLY FOOTAGE DRILLED			AVERAGE FOOTAGE DRILLED		OIL WELLS	
			OIL & GAS PRODUCERS		INJECTION & OBSERVATION WELLS		ABANDONED									NO.	AGGREGATE DEPTH	CROWN	PRIVATE	TOTAL	/Day	/Rig /Day	RECOMPLETED	ABANDONED
							AFTER TESTING		DRY HOLES		TECHNICAL CAUSES													
			NO.	AGGREGATE DEPTH	NO.	AGGREGATE DEPTH	NO.	AGGREGATE DEPTH	NO.	AGGREGATE DEPTH	NO.	AGGREGATE DEPTH												
JANUARY	14.27	20	15	66.679	-	-	1	8.540	2	14.654	-	-	8	88.873	4.893	-	-	74.671	6.986	81.657	2.634,1	184,6	9	5
FEBRUARY	12.20	14	10	42.866	1	1.260	-	-	1	11.027	-	-	12	55.153	4.596	-	-	76.512	2.919	79.431	2.836,8	232,5	7	-
MARCH	7.59	7	11	62.634	2	2.601	-	-	1	13.819	-	-	14	79.054	5.647	-	-	45.200	3.757	48.957	1.579,3	208,1	4	-
APRIL	7.27	7	5	24.041	-	-	-	-	-	-	-	-	5	24.041	4.808	-	-	34.421	8.679	43.100	1.436,7	197,6	-	-
MAY	12.40	17	16	73.807	-	-	-	-	1	13.373	-	-	17	87.180	5.128	-	-	70.430	6.505	76.935	2.481,8	200,1	16	7
JUNE	13.10	19	16	64.943	3	3.780	-	-	3	22.900	-	-	22	91.623	4.165	-	-	81.386	4.954	86.340	2.878,0	219,6	16	1
JULY	14.19	22	22	67.356	-	-	1	756	1	320	1	225	25	68.657	2.746	-	-	67.301	7.024	74.325	2.397,6	169,0	12	-
AUGUST	11.92	20	12	32.264	-	-	1	17.425	2	13.026	-	-	15	62.715	4.181	-	-	67.789	1.431	69.220	2.232,9	187,3	12	-
SEPTEMBER	12.06	13	16	84.464	-	-	-	-	1	5.200	-	-	17	89.664	5.274	-	-	66.387	7.492	73.879	2.462,6	204,2	15	-
OCTOBER	12.06	16	10	32.000	-	-	-	-	4	9.602	-	-	14	41.602	2.972	-	-	60.910	7.584	68.494	2.209,5	183,2	7	-
NOVEMBER	14.20	14	12	64.000	-	-	2	30.669	-	-	-	-	14	94.669	6.762	-	-	57.526	5.538	63.066	2.102,2	148,0	11	-
DECEMBER	14.30	13	13	45.781	1	4.875	1	12.500	1	7.920	-	-	16	71.076	4.442	-	-	69.746	4.500	74.246	2. 95.0	167,5	7	-
TOTAL 1975	145.56	182	158	660.835	7	12.516	6	88.890	17	111.841	1	225	189	895.307	4.525	-	-	772.279	67.389	839.668	2.300,4	190,1	116	13
TOTAL 1974	143.00	219	190	745.104	1	5.150	4	48.722	14	62.080	3	17.280	212	879.336	4.148	-	-	766.787	143.192	909.980	2.493,1	209,5	174	28
INCREASE 1975-1974	2.56	-37	-32	-84.269	6	7.366	2	39.168	3	48.761	-2	-17.055	-23	-24.029	377	-	-	5.492	-75.823	-70.331	-192,7	-19,4	-58	-15
AVERAGES 1975	12.1	15. 2	13.2	4.182.5	0.6	1 .788,0	0.5	11.648,3	1.4	6.578,9	0.1	255	18.8	4.525,4	-	-	-	64.357	5.614	69.971	-	-	9. 7	1.1
AVERAGES 1974	11.9	18.3	15.8	3.921.6	0.1	5.150 ,0	0.3	12.430.5	1.2	4.434,3	0.3	5.76.0	17.7	4.147.8	-	-	-	63.899	11.933	75.832	-	-	14. 5	2.3

APPENDIX 11 A

LAND AND MARINE FOOTAGE DRILLED, 1975

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
LAND	34,691	31,728	16,066	12,847	25,230	33,285	25,947	31,825	35,560	27,377	18,555	27,688	320,799
MARINE	46,966	47,703	32,891	30,253	51,705	53,055	48,378	37,395	38,319	41,117	44,510	46,558	518,850
TOTAL	81,657	79,431	48,957	43,100	76,935	86,340	74,325	69,220	73,879	68,494	63,065	74,246	839,649
DAILY AVERAGE FEET	2,634.1	2,836.8	1,579.3	1,436.7	2,481.8	2,878.0	2,397.6	2,232.9	2,462.6	2,209.5	2,102.2	2,395.0	2,300.4
DAILY AVERAGE RIG	184.6	232.5	208.1	197.6	200.1	219.7	169.0	187.3	204.2	183.2	148.0	167.5	190.1
MARINE % TOTAL	57.5	60.1	67.2	70.2	67.2	61.4	65.1	54.0	51.8	60.0	70.6	62.7	61.8

APPENDIX III

Analysis of Monthly Production for the year ending 31st December 1975

MONTH	FLOWING				GAS/AIR LIFT				PUMPING				PLUNGER LIFT				OTHER METHODS				SALT WATER				No. of Wells Produced	No. of Idle Wells	No. of Wells Abd.	No. of Wells drilling at month end	Total No. of Wells Started	Daily Average per Producing Well	Total Oil Production	BREAKDOWN OF TOTAL PRODUCTION						Average B.O.P.D	CNPS		
																																CROWN			PRIVATE					
	No. of Wells	Quantity bbls.	% of Total Oil	Daily Av. per Well bbls.	No. of Wells	Quantity bbls.	% of Total Oil	Daily Av. per Well bbls.	No. of Wells	Quantity bbls.	% of Total Oil	Daily Av. per Well bbls.	No. of Wells	Quantity bbls.	% of Total Oil	Daily Av. per Well bbls.	No. of Wells	Quantity bbls.	% of Total Oil	Daily Av. per Well bbls.	No. of Wells	Quantity bbls.	% of Total Oil	Daily Av. per Well bbls.								Daily Av. per well	No. of Wells	Quantity Produced bbls.	Daily Av. per well	No. of wells	Quantity Produced bbls.				
JANUARY	463	4,431,076	70.1	308.7	758	876,410	13.8	37.3	1,660	1,003,756	15.9	19.5	29	10,943	0.2	12.2	3	23	-	0.2	1,655	1,576,282	19.9	30.7	2,913	7,503	4	13	10,433	70.0	6,322,208	83.6	2,341	6,068,477	14.3	572	253,731	203,942	4,270	65	4,335
FEBRUARY	439	4,206,282	70.6	342.2	697	818,215	13.8	41.9	1,616	918,183	15.4	20.3	29	11,873	0.2	14.6	4	62	-	.5	1,577	1,348,722	18.4	30.5	2,785	7,651	1	11	10,448	76.3	5,954,615	92.5	2,215	5,738,466	13.5	570	216,149	212,665	3,713	48	3,761
MARCH	425	4,803,543	76.3	364.6	617	679,268	10.8	35.5	1,541	804,594	12.8	16.8	32	10,983	8.1	11.1	4	28	-	8.2	1,417	1,061,329	14.4	24.1	2,619	7,824	1	10	10,454	77.6	6,298,416	94.4	2,093	6,123,208	10.7	526	175,208	203,175	3,631	50	3,681
APRIL	376	4,805,216	79.5	426.0	338	586,523	9.7	57.8	1,178	644,523	10.6	18.2	35	10,170	0.2	9.7	2	26	-	0.4	1,025	837,121	12.1	27.2	1,929	8,521	1	12	10,463	104.5	6,046,458	133.7	1,471	5,903,197	10.4	458	143,261	201,548	5,585	80	5,665
MAY	435	4,930,692	72.7	365.6	640	840,421	12.4	42.3	1,644	998,287	14.7	19.6	31	9,426	0.2	9.8	3	33	-	0.3	1,481	1,433,997	21.1	31.2	2,753	7,715	2	10	10,480	79.4	6,778,859	94.9	2,227	6,558,380	13.5	526	220,479	218,673	5,585	113	5,698
JUNE	431	4,858,290	72.4	375.7	679	871,036	13.0	42.7	1,650	969,056	14.5	19.6	23	6,254	0.1	9.0	4	43	-	0.3	1,514	1,375,194	20.5	30.3	2,787	7,701	3	8	10,499	80.2	6,704,679	96.8	2,298	6,585,229	12.1	548	199,450	223,489	5,338	108	5,446
PRODUCTION TOTAL 1st Jan - 30th June	428	28,035,099	73.6	361.9	622	4,671,873	12.3	41.5	1,548	5,338,399	14.0	19.8	30	59,649	0.1	11.0	3	215	-	0.4	1,445	7,632,645	20.0	29.2	2,631	-	-	-	10,499	80.0	38,105,235	97.1	2,098	36,896,957	12.5	533	1,208,278	210,526	28,122	464	28,586
JULY	438	5,023,633	72.9	370.0	701	833,891	12.1	38.4	1,731	1,024,605	14.9	19.1	19	6,609	0.1	11.2	4	44	-	0.3	1,503	1,697,236	18.9	34.5	2,893	7,615	4	11	10,523	76.8	6,888,782	92.8	2,317	6,668,831	12.3	576	219,951	222,219	5,518	121	5,639
AUGUST	444	4,932,500	71.7	358.3	715	886,471	12.9	40.0	1,734	1,049,640	15.3	19.5	16	4,283	0.1	8.6	4	38	-	0.2	1,540	1,564,860	18.5	32.8	2,913	7,617	3	10	10,543	76.1	6,872,924	91.0	2,351	6,633,050	13.7	562	239,874	221,707	5,774	107	5,881
SEPTEMBER	440	4,671,953	71.3	353.9	704	839,873	12.8	39.7	1,743	1,034,664	15.8	19.8	16	4,420	0.1	9.2	2	19	-	0.3	1,512	1,387,486	17.5	30.6	2,905	7,637	1	13	10,556	75.2	6,550,929	90.0	2,341	6,325,459	13.3	564	225,470	218,364	5,384	102	5,486
OCTOBER	471	5,005,231	73.0	342.8	725	859,953	12.5	38.2	1,760	986,196	14.4	18.1	14	3,538	0.1	8.1	4	52	-	0.4	1,558	1,427,370	17.2	29.5	2,974	7,580	4	14	10,572	74.3	6,854,970	89.5	2,386	6,618,225	13.0	588	236,745	221,128	5,629	142	5,771
NOVEMBER	438	4,761,365	72.5	362.3	713	822,349	12.5	38.4	1,754	977,351	14.9	18.6	9	2,966	0.1	11.0	2	4	-	0.1	1,467	1,394,180	16.6	29.6	2,916	7,656	2	12	10,586	75.0	6,564,035	90.8	2,326	6,334,002	13.0	588	230,033	218,801	4,764	113	4,877
DECEMBER	445	4,923,396	72.6	356.9	716	897,924	13.2	42.0	1,738	961,332	14.2	17.8	5	1,378	-	8.9	4	33	-	0.2	1,464	1,354,829	16.6	30.0	2,908	7,678	2	11	10,599	75.2	6,784,063	91.3	2,310	6,541,524	13.1	588	242,539	218,841	4,683	115	4,798
PRODUCTION TOTAL 1st July - 31st Dec	447	29,318,078	72.3	356.4	713	5,140,461	12.7	39.2	1,743	6,033,788	14.9	18.8	13	23,194	0.1	9.7	3	182	-	0.3	1,506	8,646,161	17.6	31.2	2,919	-	-	-	10,599	75.4	40,515,703	91.0	2,336	39,121,091	13.0	583	1,394,612	220,194	31,752	700	32,452
YEAR'S PRODUCTION TOTAL	438	57,353,177	72.9	358.7	668	9,812,334	12.5	40.2	1,647	11,372,187	14.5	18.9	21	82,843	0.1	10.8	3	397	-	0.3	1,476	16,277,806	17.1	30.2	2,777	-	-	-	10,599	77.6	78,620,938	93.8	2,219	76,018,048	12.8	558	2,602,890	215,400	58,874	1,164	61,038
DAILY AVERAGES	-	157,132	-	-	-	26,883	-	-	-	31,157	-	-	-	2,301	-	-	-	1	-	-	-	44,587	-	-	-	-	-	-	-	-	215,400	-	-	208,268	-	-	7,131	-	164	3	167
AVERAGES DURING YEAR	438	-	-	358.7	668	-	-	40.2	1,647	-	-	18.9	21	-	-	10.8	3	-	-	0.3	-	-	-	30.2	2,777	-	-	-	-	77.6	-	93.8	2,219	-	12.8	558	-	-	-	-	-

APPENDIX III A

Analysis of Production by Operating Companies 1975

	FLOWING				GAS LIFT				PUMPING				PLUNGER LIFT				SALT WATER				Av. No. of Well Produced	Daily Av. Per Pro-ducing Wells	TOTAL OIL Produced bbls	Coy's Prod'n As % of Total Prod'n	OIL RIGHTS		OIL RIGHTS	
	No. of Wells	Quantity bbls	% of Total Oil	Daily Av.Per Well	No. of Wells	Quantity bbls	% of Total Oil	Daily Av. Per Well bbls	No of Wells	Quantity bbls	% of Total Oil	Daily Av. Per Well bbls	No of Wells	Quantity bbls	% of Total Oil	Daily Av. Per Well bbls	No of Wells	Quantity bbls	% of Total oil	Daily Av. per Well bbls					Crown Prod'n bbls	% of Total	Private Prod'n bbls	% of Total
TRINIDAD TESORO PETROLEUM COMPANY LTD.	110	887,554	13.7	22.1	287	1,394,324	21.4	18.5	762	4,134,955	63.6	14.9	21	82,815	1.3	10.8	546	1,400,618	17.7	7.0	1180	16.2	6,499,648	8.3	5,048,938	77.7	1,450,710	22.3
TEXACO TRINIDAD INC.	83	1,060,164	15.7	35.0	348	2,512,299	37.1	19.8	490	3,192,937	47.2	17.9	-	-	-	-	497	5,482,264	44.8	30.2	921	20.1	6,765,400	8.6	5,990,395	88.5	775,005	11.5
TRINTOC	63	465,977	21.0	20.3	19	132,611	6.0	19.1	264	1,620,922	73.0	16.8	-	-	-	-	184	893,939	28.7	13.3	346	17.6	2,219,510	2.8	1,947,871	87.8	271,639	12.2
PREMIER CONSOLIDATED OILFIELDS LTD.	4	7,591	5.6	5.2	1	1,105	0.8	3.8	93	126,615	93.6	3.7	2	28	-	8.84	40	62,778	31.7	4.3	100	3.7	135,339	0.2	30,659	22.7	104,680	77.3
TRINIDAD NORTHERN AREAS	119	10,352,402	59.2	238.3	90	4,845,215	27.7	147.5	39	2,297,155	13.1	161.4	-	-	-	-	186	4,404,985	28.4	66.6	248	183.3	17,494,772	22.2	17,494,772	100.0	-	-
AMOCO TRINIDAD OIL CO.	59	44,579,489	98.8	2070.1	3	926,780	2.8	846.4	-	-	-	-	-	-	-	-	25	3,843,222	8.8	415.5	62	2818.9	45,506,269	57.9	45,506,269	100.0	-	-
TOTAL	438	57,353,177	72.9	358.7	668	9,812,334	12.5	40.2	1648	11,372,584	14.5	18.9	23	82,843	0.1	9.9	1478	16,277,886	17.2	30.2	2777	77.6	78,620,938	100.0	76,018,047	96.7	2,602,891	3.3
TOTAL 1974	498	45,079,034	66.2	248.0	748	10,317,328	15.1	37.8	1793	12,579,472	18.5	20.2	32	188,984	0.2	13.7	1722	18,851,179	28.0	28.7	2981	62.6	68,135,818	100.0	65,978,140	95.5	3,057,678	4.5

NATURAL GASOLENE CHPS PRODUCTION

COMPANY	CROWN OIL RIGHTS bbls	PRIVATE OIL RIGHTS bbls	TOTAL bbls
T'DAD - TESORO PETROLEUM Co. LTD	59,874	1,167	61,038
TOTAL 1974	48,802	1,802	50,304

APPENDIX III B

DAILY AVERAGE PRODUCTION BY MONTHS FOR ALL COMPANIES - 1975

(ALL QUANTITIES IN BARRELS)

COMPANY	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL CRUDE	TOTAL B.O.P.D.
T.T.P.C.L.	624,698	564,248	556,202	503,252	533,392	510,509	516,401	515,122	521,581	553,680	544,755	555,807	6,499,648	
B.O.P.D.	20,152	20,152	17,942	16,775	17,206	17,017	16,668	16,617	17,386	17,861	18,159	17,929		17,807
TRINTOC	188,461	173,795	183,513	181,066	188,621	184,136	186,071	184,287	180,698	196,394	187,483	184,985	2,219,510	
B.O.P.D.	6,079	6,207	5,920	6,036	6,085	6,138	6,003	5,945	6,023	6,335	6,249	5,967		6,081
* T.T.I.	689,765	560,313	227,080	78,179	636,679	653,832	656,233	678,749	646,425	658,377	638,017	641,751	6,765,400	
B.O.P.D.	22,250	20,011	7,325	2,606	20,538	21,794	21,169	21,895	21,548	21,238	21,267	20,702		18,535
P.C.O.L.	12,044	11,177	8,545	8,399	11,789	11,461	12,283	13,307	11,457	11,791	11,386	11,700	135,339	
B.O.P.D.	389	399	276	280	380	382	396	429	382	380	380	377		371
T.N.A.	1,591,883	1,430,299	1,484,927	1,348,008	1,497,981	1,466,662	1,514,759	1,526,925	1,480,905	1,420,921	1,329,569	1,401,933	17,494,772	
B.O.P.D.	51,351	51,082	47,901	44,934	48,322	48,889	48,863	49,256	49,363	45,836	44,319	45,224		47,931
AMOCO	3,215,357	3,214,782	3,838,148	3,927,554	3,910,397	3,878,079	4,003,035	3,954,534	3,709,863	4,013,807	3,852,825	3,987,887	45,506,269	
B.O.P.D.	103,721	114,814	123,811	130,918	126,142	129,269	129,130	127,565	123,662	129,478	128,427	128,642		124,675
TOTAL 1975	6,322,208	5,954,615	6,298,416	6,046,458	6,778,858	6,704,679	6,888,782	6,872,924	6,550,929	6,854,970	6,564,035	6,784,063	78,620,938	
B.O.P.D.	203,942	212,665	203,175	201,549	218,673	223,489	222,219	221,707	218,364	221,128	218,801	218,841		215,400
TOTAL 1974	5,530,868	5,047,817	5,612,383	5,442,680	5,722,291	5,451,031	5,713,623	5,572,515	5,728,623	6,206,643	5,954,514	6,153,630	68,135,818	
B.O.P.D.	178,415	180,251	181,045	181,423	184,590	181,701	184,310	179,759	190,954	200,214	198,484	198,504		186,673

* Tricentrol Limited taken over by Texaco on the 1st January 1975. Its production is now included under Texaco Trinidad Inc.

APPENDIX III C

MARINE OFFSHORE AND LAND PRODUCTION 1975

(All Quantities in Barrels)

TYPE OF WELL	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JANUARY - JUNE SUB-TOTALS		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		JULY - DECEMBER SUB-TOTALS		GRAND TOTAL	
	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	Av.No.Of Wells	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	WELLS	PRODUCTION	Av.No.Of Wells	PRODUCTION	WELLS	PRODUCTION
MARINE																														
T.N.A. S.E.R.G.L.	238	1,571,563	237	1,414,405	231	1,474,175	225	1,337,905	238	1,486,929	236	1,456,079	234	8,741,056	237	1,493,123	238	1,506,982	245	1,465,008	244	1,405,179	231	1,314,338	228	1,382,057	237	8,566,687	235	17,307,743
TEXACO ABM	53	35,837	45	29,293	42	8,223	3	9,425	39	43,920	50	42,617	58	169,319	54	40,390	52	37,623	59	41,519	63	43,369	59	39,639	62	39,983	58	242,523	48	411,842
ALM	1	2,135	1	1,107	1	2,612	1	4,255	1	5,159	1	4,129	1	19,397	1	3,676	1	3,146	1	3,270	-	-	1	3,889	1	4,388	1	18,368	1	37,765
COOVA MARINE	2	9,078	2	8,100	-	-	-	-	-	-	2	3,600	1	20,778	2	6,977	2	6,800	1	5,200	-	-	2	5,167	2	5,112	1	29,256	1	50,034
TEXACO NORTH MARINE	-	-	-	-	-	-	-	-	-	-	1	173	-	173	-	-	-	-	-	-	-	-	1-	233	1	532	-	765	-	938
SKELLY	15	42,406	16	36,876	15	17,907	-	-	-	-	-	-	8	97,189	-	-	-	-	-	-	15	32,223	13	42,256	12	39,377	7	113,856	8	211,045
G. WELLS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GULF CO	54	3,215,357	58	3,214,782	61	3,838,149	59	3,927,554	60	3,910,397	62	3,878,079	59	21,984,318	63	4,003,035	63	3,954,534	65	3,709,863	63	4,013,807	67	3,852,825	67	3,987,887	65	23,521,951	62	45,506,269
SUB-TOTAL	363	4,876,376	359	4,704,563	350	5,341,066	288	5,279,143	338	5,446,405	352	5,384,677	342	31,032,230	357	5,547,201	356	5,509,084	371	5,224,860	385	5,494,578	374	5,158,347	373	5,459,336	369	32,493,406	355	63,525,636
DEVELOPED FROM ABOVE																											13		11	
T.N.A. FOS	13	20,320	12	15,894	8	10,752	8	10,103	8	11,052	9	10,583	10	78,704	14	21,636	13	19,943	13	15,897	13	15,742	13	15,231	14	19,876		108,325		187,029
TEXACO AS	41	13,834	24	10,061	21	2,361	2	2,367	21	11,344	19	14,313	21	54,280	23	12,769	22	14,594	20	9,768	23	10,442	17	8,841	20	9,634	21	66,848	21	120,328
ALS	3	2,053	3	1,341	3	535	-	-	-	-	-	-	1	4,429	1	449	-	-	-	-	1	1,335	1	1,403	1	829	1	4,016	1	8,445
TEXACO M. WELLS(11551/53)	5	1.197	6	1,289	5	1,844	5	1,185	8	1,103	6	697	6	7,315	5	502	5	346	4	636	5	466	4	440	5	416	5	2,806	6	28,121
SUB-TOTAL	62	37,404	45	29,085	37	15,492	15	13,655	37	23,499	34	25,593	38	144,728	43	35,356	40	34,883	37	26,301	42	27,985	35	25,915	40	30,755	40	181,195	39	325,523
MARINE AND DEVIATED	425	4,913,780	404	4,733,648	387	5,356,558	303	5,292,798	375	5,469,904	386	5,410,270	380	31,176,958	400	5,582,557	396	5,543,967	408	5,251,161	427	5,522,563	409	5,284,262	413	5,490,091	409	32,674,601	394	63,851,559
LAND	2,488	1,408,428	2,381	1,220,967	2,232	941,858	1,626	753,660	2,378	1,308,955	2,401	1,294,409	2251	6,928,277	2,493	1,306,225	2,517	1,328,957	2,497	1,299,768	2,547	1,332,407	2,507	1,279,773	2,495	1,293,972	2509	7,841,102	2380	14,769,379
TOTAL	2,913	6,322,208	2,785	5,954,615	2,619	6,298,416	1,929	6,046,458	2,753	6,778,859	2,787	6,704,679	2631	38,105,235	2,893	6,888,782	2,913	6,872,924	2,905	6,550,929	2,974	6,854,970	2,916	6,564,035	2,908	6,784,063	2918	40,515,703	2774	78,620,938

Appendix IV

Production and Disposal of Natural Gas - 1975

(All figures of Gas Production in MSCF)

(M= 1,000 standard cubic feet)

Half-Yearly Totals	Crude Oil Production (bbls)	Average G.O.R. Cu.ft/bbls	Natural Gas Production	NATURAL GAS DISPOSAL									NATURAL GAS RECOVERY			Inter Oil Company Sales	Used for the Manufacture of Petrochemicals
				Sales to Other Companies	Replaced into Formation	Converted into C.H.P.S.	USED AS FUEL		VENTED TO ATMOSPHERE		Total	Pipeline losses Unaccounted for	Net Collected	Natural Gas Treated	Average Plant Recovery (16/MCF)	Natural Gasolene Produced (bbls)		
							In Fields	In Refineries	After Utilisation	Without Utilisation								
January	6,322,208	1,706	10,787,709	2,675,978	215,444	3,965	567,220	1,635,050	565,387	4,310,999	4,876,306	95,974	717,772	303,038	.508	4,335	2,174,437	657,089
February	5,954,615	1,644	9,790,512	2,566,278	149,988	3,404	521,634	1,322,828	632,116	3,742,761	4,374,877	132,794	718,717	262,382	.581	3,761	2,169,042	619,022
March	6,298,416	1,547	9,744,760	2,180,280	187,923	3,862	360,527	851,841	530,158	5,008,096	5,530,254	50,852	579,221	212,221	.607	3,681	1,484,369	368,194
April	6,046,458	1,540	9,311,794	1,874,655	103,340	5,945	255,135	722,385	575,803	5,263,953	5,839,756	58,041	452,537	347,679	.570	5,665	1,011,900	267,522
May	6,778,859	1,510	10,238,777	2,391,257	159,846	5,811	493,141	1,058,565	588,301	4,800,160	5,380,461	109,879	639,817	371,346	.537	5,698	1,554,185	433,916
June	6,704,679	1,536	10,298,660	2,441,901	185,165	5,263	521,592	1,467,858	623,609	4,318,137	4,941,746	98,668	636,467	353,053	.539	5,446	2,127,046	503,230
Half-Yearly Total	38,105,235	1,579	60,172,212	14,130,349	1,001,706	28,250	2,719,249	7,058,519	3,587,294	27,436,106	30,943,400	546,208	3,744,531	1,849,657	.540	28,586	10,520,979	2,848,973
July	6,888,782	1,554	10,702,843	3,049,403	175,065	4,805	507,404	1,358,859	580,579	4,305,292	4,885,871	88,988	640,448	427,615	.495	5,619	2,110,353	767,477
August	6,872,924	1,601	11,007,581	2,870,763	180,516	6,170	539,662	1,436,292	518,204	4,746,408	5,256,612	94,751	622,815	426,418	.480	5,854	2,159,260	670,292
September	6,550,929	1,580	10,351,879	2,568,183	136,505	5,372	565,151	1,462,581	440,538	4,153,948	4,594,486	197,103	822,498	401,184	.478	5,486	2,003,267 $	464,493
October	6,854,970	1,650	11,310,323	3,051,975	173,198	5,767	580,578	1,382,869	568,963	4,635,533	5,204,496	166,614	744,826	475,819	.424	5,771	2,278,319	705,232
November	6,564,035	1,708	11,211,482	2,880,227	180,850	4,963	527,066	1,510,845	558,747	4,591,828	5,150,575	118,292	846,664	406,116	.420	4,877	2,154,928	616,742
December	6,784,063	1,721	11,677,872	3,151,504	169,889	4,891	560,509	1,553,716	717,348	4,697,335	5,414,675	140,463	682,225	411,375	.408	4,798	2,253,689	770,470
Half-Yearly Total	40,515,703	1,635	66,261,980	17,572,855	1,016,023	31,968	3,280,370	8,705,162	3,376,371	27,130,344	30,506,715	798,211	4,359,476	2,548,447	.445	32,405	12,959,816	3,994,706
Year Total	78,620,938	1,608	126,434,192	31,702,404	2,017,729	60,218	5,999,619	15,763,681	6,883,665	54,566,450	61,450,115	1,336,419	8,104,007	4,398,104	.485	60,991	23,480,795	6,843,679
% Disposal for Year	-	-	-	25.1	1.6	0.1	4.8	12.5	5.5	43.2	48.7	1.1	6.4	3.5	-	0.1	18.6	5.4

Appendix V

Destination of Exports of Crude and Refined Products from Trinidad & Tobago - 1975
(all quantities in bbls)

Country	Totals	% of Total Exports	Crude Petroleum Exported	L.P.G.	Aviation Turbine Fuel	Aviation Gasolene	Motor Gasolene	Kerosines	Gas and Diesel Oils	Fuel Oils	Lubes and Greases	Asphaltic Products	Other Refined and Petrochemicals
North America													
Canada	804,903	1.025	1,112,244	-						720,831	84,072	-	-
U.S.A.	45,317,576	57.740	46,083,222	-	823,805	121,361	6,525,508	2,467,261	4,762,771	30,376,417	20,936	-	219,517
Total N.A.	46,122,479	58.765	47,195,466	-	823,805	121,361	6,525,508	2,467,261	4,762,771	31,097,248	105,008	-	219,517
Central America													
Costa Rica	97,467	0.124	-	-	-	42,992	-	31,097	-	-		-	23,378 (1)
Guatemala	881,963	1.124	-	-	-	31,727	361,659	188,247	295,351				4,979 (1)
Honduras	29,387	0.038	-	-	-	6,500							22,887 (1)
Mexico	245,587	0.313							245,587				
Other C.A. [2]	81,952	0.104		6,421		23,086	5,161	870	11,595		28,825		5,994 (1)
Total C.A.	1,336,356	1.703		6,421		104,305	366,820	220,214	552,533		28,825		57,238
South America													
Brazil	138,451	0.176									138,451		
French Guiana	335,000	0.428		3,594			73,253	5,186	253,867				
Guyana	2,167,448	2.762		25,047	52,156	19,095	357,878	126,118	931,654	654,520		998	
Peru	100,879	0.129								100,879			
Suriname	2,718,013	3.463			65,835	5,200	218,397	36,571	864,551	1,517,262		16,518	1,679 (1)
Other S.A. [3]	14,428	0.018				3,000							11,428 (1)
Total S.A.	5,475,019	6.976		28,551	117,991	27,295	641,528	167,875	2,050,062	2,272,661	138,451	17,506	13,107
West Indian Islands													
British [4]	4,811,586	6.130		63,096	271,746	21,691	604,179	387,729	348,305	3,061,074		8,136	45,630 (1)
French [5]	190,450	0.243		4,281	20,507		75,182	2,750	72,812	3,527		482	10,909 (1)
Netherland [6]	1,252,134	1.595					1,053,284	994	2,700	193,450			1,706
Puerto Rico	2,841,871	3.621	689,683				2,319,557	522,314					
Virgin Is.	1,098,504	1.399	888,844	1,736		15,783	142,213	4,399	97,190	829,183			
Other W.I. Islands [7]	14,738	0.019				14,738							
Total W.I. Islands	10,201,283	12.997	1,578,527	69,113	292,253	52,212	4,194,415	918,186	521,007	4,087,234		8,618	58,245
Europe													
Belgium	3,082	0.004											3,082
Denmark	345,208	0.440							345,208				
France	343,748	0.438			80,191					263,557			
Federal Rep. of Germany	151,801	0.193					151,801						
Italy	499,900	0.637								227,844			272,056
Ireland	92,441	0.118					92,441						
Netherlands	787,435	1.003			263,280		113,395		190,885				219,875
Norway	50,646	0.065			50,646								
Portugal	156,348	0.199			156,348								
Spain	415,599	0.530			415,599								
United Kingdom	1,126,595	1.435			383,693		580,793		146,652				15,367
Total Europe	3,980,713	5.072			1,357,757		938,430		682,745	491,401			510,380
Others													
Africa [8]	1,657,878	2.112					727,203	210,188	468,648	157,585	86,157		8,105 (1)
Canary Islands	799,723	1.019							534,321	181,525	83,877		
Gilue	98,285	0.115								98,285			
Japan	5,126	0.007											5,126
Phillipines	8,997	0.011									8,997		
High Seas *	813,681	1.037			158,145		78,984	(1948)	142,716	366,478			68,314
	3,375,690	4.301			158,145		807,187	216,240	1,137,677	795,865	179,031		81,545
Total Caracas	78,491,540	89.814		104,085	2,749,951	305,173	13,473,888	3,989,776	9,706,795	38,744,409	451,315	26,124	940,032
FOREIGN BUNKERS	7,994,589	10.186			336,240	1,618	221,365	-	1,105,617	6,319,779	9,814	9	147
TOTAL EXPORTS	78,486,129	100.000	48,773,993	104,085	3,086,191	306,791	13,695,245	3,989,776	10,812,412	45,064,188	461,129	26,133	940,179

* Countries not detailed

1. Total Exports of "Other Refined Products was 128,561 bbl. Africa (8105) B.W.I. (45,630) Colombia (5000)
   Costa Rica (23378) F.W.I. (10,909) Honduras (22,887) Guatemala (4879) Panama (5994) Suriname (1679)
2. Other Central America - Canal Zone (38,641) El Salvadore (28,825) Nicaragua (20,071) Panama (12,415)
3. Other South America - Colombia (8,000) Venezuela (6,428)
4. British - Antigua, Anguilla, Bahamas, Barbados, Bermuda, Dominica, Grand Cayman, Grenada, Jamaica, Montserrat, St. Kitts, St. Lucia, and St. Vincent.
5. French - Guadeloupe, Martinique, St. Barths, St. Maarten
6. Netherland - Aruba, Curacao, Saba
7. Other - Dominican Republic (14,738)
8. Africa - Gambia, Republic of Guinea, Ivory Coast, Nigeria, Republic of Senegal, Sierra Leone, Togo West Africa.

APPENDIX VI

Movement of Refinery Products - 1975

(Quantities in Barrels)

Inventory Name	Opening Inventory	Production	Imports	Other Receipts	Total	Purchases from other Petroleum Markets	Sales to other Petroleum Markets	LOCAL CONSUMPTION			EXPORTS			Gains Losses	Closing Inventory	Totals
								Own Use	Retailer	Local Banker	Total	Cargoes	Foreign Bankers			
Liquified Gases	18,228	331,716	12,305	-	362,249	124,751	229,419	535	128,967	-	129,502	102,047	-	5,608	20,424	257,581
Aviation Gasolenes	36,330	189,029	26,888	-	252,247	50,482	53,159	-	1,641	26,307	27,948	203,670	1,618	53	16,281	249,570
Motor Gasolenes	1,956,228	13,957,866	19,837	-	15,933,931	2,259,212	2,250,354	10,222	1,744,180	-	1,754,402	12,435,368	221,365	(5,021)	1,536,675	15,942,789
Domestic Gasolenes	0	(15)	-	-	(15)	3,783	-	1	3,497	-	3,498	-	-	82	188	3,768
Aviation Turbine Fuels	360,349	3,956,507	12,739	-	4,329,595	530,708	879,552	55	122,655	200,254	322,964	2,707,953	336,240	(110)	613,704	3,980,751
Kerosine	241,645	3,878,621	71,106	-	4,191,372	423,396	210,416	1,484	246,567	97	248,148	3,781,043	-	(785)	375,946	4,404,352
White Spirit	3,376	17,899	-	-	21,275	15,477	15,940	1,519	12,935	494	14,948	2,784	-	76	3,004	20,812
Vapourizing Oil	3	(3)	-	-	0	-	-	-	-	-	-	-	-	-	-	0
Gas Oil	1,288,829	10,090,036	-	35,617	11,414,482	1,287,802	1,332,978	57,001	592,674	62,104	711,779	9,008,743	619,529	11,643	1,817,612	11,369,306
Marine Diesel	70,927	661,511	-	43,368	775,806	605,828	622,324	-	29,148	3,354	32,502	132,480	486,088	30,692	77,548	759,310
Fuel Oils	3,016,224	47,538,171	1,311,216	446,812	52,312,423	4,126,219	3,974,249	1,019,099	242,835	3,458	1,265,392	41,305,461	6,319,779	154,566	3,419,175	52,464,393
Lubes and Greases	241,870	517,077	75,749	-	834,696	45,967	61,842	9,977	54,042	782	64,801	611,789	9,814	140	132,277	818,821
Asphaltic Products	16,234	154,940	72	-	171,246	98,913	114,918	187	100,396	-	100,583	9	26,124	3,093	13,432	143,741
Unfinished Oils	3,360,888	(86,714)	-	-	3,274,174	-	-	3,033	-	-	3,033	-	-	-	3,271,141	3,274,174
Petro Chemicals	259,290	667,521	-	-	926,811	4,174	6,201	25	4,762	-	4,787	810,908	-	-	109,089	924,784
Other finished Products	1,116	116	3,415	-	5,186	638	1,670	651	1,139	-	1,790	29	147	8	2,180	4,154
Total	10,872,076	81,874,278	1,533,327	525,797	94,805,478	9,565,350	9,753,022	1,103,789	3,285,438	296,850	4,686,077	71,102,284	8,020,704	200,065	10,608,676	94,617,806

Appendix VII

Movement of Crude and C.N.P.S. Year Ended 31st December, 1975
(All quantities in barrels)

Month	Production	Imports	Decrease in Inventories	Totals	Purchases and Exchanges from other Companies	Sales and exchanges to other companies	Own Use	To Refinery	Exports	Gains and Losses	Total
January	6,357,388	7,594,932	(543,698)	13,408,622	2,574,454	2,574,454	10,281	9,482,102	3,808,320	107,919	13,408,622
February	5,955,250	1,944,204	(543,190)	7,356,264	2,250,194	2,250,194	12,030	4,632,250	2,633,505	78,479	7,356,264
March	6,314,295	-	183,260	6,497,555	2,415,870	2,415,870	5,609	2,014,130	4,454,691	23,125	6,497,555
April	6,057,102	593,714	(703,705)	5,947,111	2,182,315	2,182,315	9,064	2,004,507	3,903,539	30,001	5,947,111
May	6,792,953	3,980,918	(1,576,944)	9,196,927	2,286,211	2,286,211	11,762	5,116,112	4,072,726	(3,673)	9,196,927
June	6,719,332	5,003,394	1,254,017	12,976,743	1,994,260	1,994,260	11,602	8,619,660	4,327,973	17,508	12,976,743
July	6,903,523	610,049	3,842,230	11,355,802	2,203,808	2,203,808	13,418	6,870,389	4,472,375	(380)	11,355,802
August	6,885,977	7,274,088	(245,673)	13,914,392	2,165,759	2,165,759	9,467	10,165,184	3,607,189	132,553	13,914,392
September	6,564,421	7,971,488	722,586	15,258,415	2,124,490	2,124,490	8,437	10,240,758	5,000,615	8,605	15,258,415
October	6,852,416	6,796,589	(1,993,073)	11,655,932	1,983,237	1,983,237	4,209	7,996,311	3,681,091	(25,679)	11,655,932
November	6,585,508	5,086,083	1,873,888	13,545,479	2,024,072	2,024,072	4,151	8,720,065	4,790,927	30,336	13,545,479
December	6,795,882	8,083,533	(980,209)	13,899,206	2,070,594	2,070,594	1,433	9,798,850	4,021,042	77,881	13,899,206
Total	78,784,047	54,938,912	1,209,489	135,012,448	26,275,264	26,275,264	101,463	85,660,318	48,773,993	476,674	135,012,448

Appendix VIII

Summary of Crude Oil Assessed for Crown Royalty with Prices and Analysis - 1975

(for half-yearly Assessment Periods ending 30th June and 31st December)

1 Barrel = 34,9726 I.G.

Company	Net Royalty Production Barrels	Royalty 10% Assessed bbls	Value $	Average Price $/BBL $ ¢	Sub-Division of (Royalty) Crude into Products as per R.L.E.) Analysis: Light Fractions Quantity bbls	Light Fractions Percentage	Tetraethyl Lead to blend to 70/72 Oct. Gas N/S	GAS OIL 53-57 DI bbls	GAS OIL 48-52 DI bbls	GAS OIL 43-47 DI bbls	GAS OIL #6, 2 Fuel bbls	GAS OIL Total Gas Oils bbls	GAS OIL Percentage	FUEL OIL Quantity bbls	FUEL OIL Percentage	Crude Oil Weighted Av. Gravity A.P.I.
Trinidad Tesoro Petroleum Co. Ltd.	2,493,625	249,363	4,604,237	18.46	26,487	10.63	1,014,716	12	15	382	63,818	64,219	25.75	158,647	63.62	22.0
TESORO GALEOTA	97,189	*12,149	239,188	19.69	1,672	13.76					5,912	5,912	48.66	4,565	37.58	
Premier Consolidated Oilfields Ltd.	13,940	1,394	26,202	18.80	217	15.57	36,960		81		348	429	30.77	748	53.66	26.0
Estate of Timothy Roodal	231	23	422	18.35			--				7	7	30.44	16	69.56	
Trinidad and Tobago Oil Co Ltd. (TRINTOC)	964,789	96,479	1,792,679	18.58	16,122	16.71	4,911,770	10,466	6,186		1,753	18,405	19.08	61,952	64.21	25.0
Trinidad Northern Areas	8,819,760	881,976	16,144,883	18.31	127,935	14.51	45,814,424		119,361			119,361	13.53	634,680	71.96	
Texaco Trinidad Inc.	2,509,121	250,912	4,712,770	18.78	33,422	13.32	9,213,817	28,729	8,829	1,652	41,462	80,472	32.07	137,018	54.61	24.8
Amoco Trinidad Oil Co.	21,984,318	*2,748,040	50,664,166	18.44	264,218	9.62	7,645,874			2,248,821		2,248,821	81.80	235,801	8.58	29.0
Total and Averages	36,882,973	4,240,336	78,184,549	18.44	470,083	11.08	64,637,269	39,287	134,472	2,248,855	113,292	2,536,826	59.83	1,233,427	29.09	
Trinidad Tesoro Petroleum Co Ltd.	2,333,668	233,367	5,130,975	21.99	21.774	9.33	108,386		892	1	59,574	60,467	25.91	151,126	64.76	22.0
TESORO GALEOTA	113,856	* 14,232	316,988	22.27	2,044	14.36					6,959	6,959	48.90	5,229	36.74	
Premier Consolidated Oilfields Ltd.	16,341	1,634	37,739	23.09	291	17.81	40,804		136		337	473	28.95	870	53.24	26.0
Estate of Timothy Roodal	150	15	316	21.06			--				5	5	33.33	10	66.67	
Trinidad and Tobago Oil Co. Ltd	980,913	98,091	2,152,663	21.94	13,827	14.10	3,808,057	10,654		6,518	1,487	18,659	19.02	65,605	66.88	25.0
Trinidad Northern Areas	8,675,012	867,501	18,611,186	21.45	124,368	14.34	41,694,968		114,428			114,428	13.19	628,705	72.47	
Texaco Trinidad Inc.	3,459,613	345,961	7,986,934	23.10	46,632	13.48	8,840,256	22,519	31,627	2,238	60,542	116,926	33.80	182,403	52.72	24.0
Amoco Trinidad Oil Co.	23,521,951	*2,940,244	70,272,413	23.90	333,794	11.35	18,477,453		2,191,020			2,191,020	74.52	415,430	14.13	29.0
Total and Averages	39,101,504	4,581,845	104,509,214	23.21	542,730	12.06	72,969,914	33,173	2,338,103	8,757	128,904	2,508,937	55.74	1,449,378	32.20	
YEAR Totals and Averages	75,984,477	8,741,381	182,693,761	20.89	1,012,813	11.59	137,607,183	72,380	2,472,575	2,258,612	242,196	5,045,763	57.72	2,682,805	30.69	

* Amoco and Tesoro Galeota at 12½%

Appendix IX - Royalty Assessment

The Royalty assessed on the crude oil natural gasoline and Natural Gas produced on Crown Oil Mining Leases for each half yearly period during 1973, 1974 and 1975 is shown in the following Table :-

Source of Revenue	Assessment for Half Yearly Periods ending 31.12.75 $	30.6.75 $	31.12.74 $	30.6.74 $	31.12.73 $	30.6.73 $
Royalty on Natural Gas	-	-	344,319	340,562	392,315	376,707
Royalty on Natural Gasoline	98,783.	65,196.	61,298	77,507	50,559	32,944
Minimum Rent not off set by Royalty on Crude Oil	729,609.	691,230.	700,000	694,182	642,190	60,828
Royalty on Crude Oil	104,509,214.	78,188,547	77,908,663	82,925,691	51,554,400	23,288,672
Half yearly Total	105,337,606.	78,940,981	79,014,280	84,037,942	52,639,464	24,302,151
Yearly Totals	184,278,587.		163,052,222		76,941,615	

The volumes upon which the above assessments were made are as follows:-

Substance assessed for Royalty	Unit	HALF YEARLY PERIOD ENDING 31.12.75	30. 6.75	31.12.74	30. 6.74	31.12.73	30. 6.73
Natural Gas	M.C.F.	-	-	22,954,570	22,704,111	26,154,364	25,113,764
Natural Gasoline	I.G.	1,062,258	936,357	888,687	736,768	911,070	1,026,245
Crude Oil-Gross	bbl	-	-	-	-	33,352,539	29,450,942
Crude Oil Used free of Royalty	bbl	-	-	-	-	1,806	19,862
Crude Oil Net		39,101,504	36,882,973	37,952,750	34,547,680	33,334,478	29,431,080
Crude Oil Average Royalty Value	$T.T.	23.21	18.44	24.00	20.53	15.47	7.91

The data used to evaluate crude oil for Crown Royalty Assessment for each of the last six half-yearly periods together with the Royalty rates on Casing Head Petroleum Spirit for each of these periods are shown in the following table.

Product	Average Price in T&T Currency per Barrel of 34.9726 I.G. for 1/2 year ended 31.12.75	30. 6.75	31.12.74	30. 6.74	31.12.73	30. 6.73
Bunker C Grade Fuel	20.761120	19.028500	18.482983	21.004570	8.168334	5.361321
No. 2. Fuel	29.697390	21.988631	24.429001	27.372046	24.560059	11.029704
43 - 47 D.I. Gas OIL	29.841642	22.144760	24.728796	28.057668	24.766937	11.191000
48 - 52 D.I. Gas oil	29.994418	22.324758	24.910518	28.512642	24.030350	11.191000
53 - 57 D.I. Gas oil	30.166127	22.365852	25.092224	28.945430	25.138383	11.293373
70 - 72 Oct M. Leaded Motor Gas	32.325305	23.868382	23.602606	35.192451	18.075708	11.395673
Average Middle rate for sight Draft on NY T.T. Currency for U.S. $100	2.309624	2.043065	2.058335	2.060895	1.982765	1.949955
Value of Tetra - Ethyl Lead in T&T cents per millimetre	0.922148	0.833021	0.717342	0.539675	0.448242	0.434732
Royalty in T.T cents per gallon on natural Gasoline (CHPS)	9.283591	6.897037	6.889893	10.565791	5.683385	3.220988

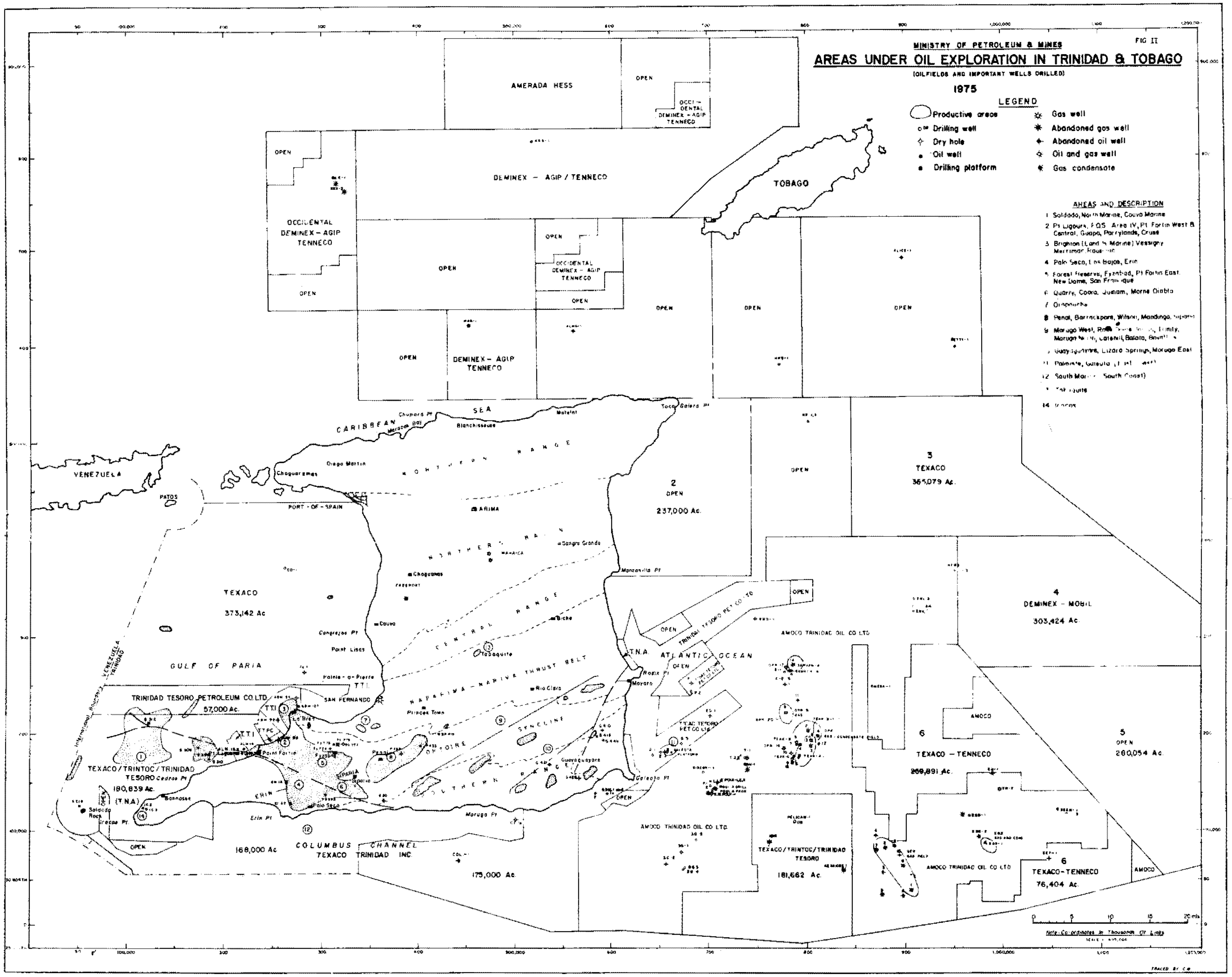
The half yearly volume of products to which the above prices for 1975 were applied respectively in calculating royalty on Crude Oil will be found in Appendix VIII.

APPENDIX X

The following table shows for the years 1973, 1974 and 1975 the quantity of Asphalt extracted from the Pitch Lake Lake and the quantities of derived products which were exported and consumed locally.

NATURAL ASPHALT	1973	1974	TONS 1975
Extracted by the Ministry of Works for Local use.	37,980	23,723	31,631
Extracted by the Trinidad Lake Asphalt Company.	69,820	57,851	47,812
TOTAL:	107,800	81,574	79,443
Derived Products Manufactured by the Company			
Exported: Crude Asphalt	-	-	-
Dried Asphalt	51,869	42,893	36,251
Cement Asphalt	480	566	832
TOTAL:	52,349	43,459	37,083
Local Sales			
Crude Asphalt	393	146	80
Dried Asphalt	142	255	218
Cement Asphalt	101	899	33
TOTAL:	636	1,300	331

Note: The above tabulations: 1 long ton = 2,240 lbs.


MINISTRY OF PETROLEUM & MINES
FIG II
AREAS UNDER OIL EXPLORATION IN TRINIDAD & TOBAGO
(OILFIELDS AND IMPORTANT WELLS DRILLED)
1975
LEGEND
Productive areas
Drilling well
Dry hole
Oil well
Drilling platform
Gas well
Abandoned gas well
Abandoned oil well
Oil and gas well
Gas condensate
AREAS AND DESCRIPTION
1 Soldado, North Marine, Couva Marine
2 Pt Ligoure, F.O.S. Area IV, Pt Fortin West & Central, Guapo, Parrylands, Cruse
3 Brighton (Land & Marine) Vessigny
4 Palo Seco, Los Bajos, Erin
5 Forest Reserve, Fyzabad, Pt Fortin East, New Dome
6 Quarry, Coora, Morne Diablo
8 Penal, Barrackpore, Wilson, Mandingo
10 Guayaguayare, Lizard Springs, Moruga East
12 South Marine (South Coast)
AMERADA HESS
OPEN
OCCIDENTAL DEMINEX – AGIP TENNECO
DEMINEX – AGIP / TENNECO
DEMINEX – AGIP TENNECO
TOBAGO
CARIBBEAN SEA
VENEZUELA
PATOS
PORT – OF – SPAIN
ARIMA
NORTHERN RANGE
CENTRAL RANGE
TEXACO
373,142 Ac.
GULF OF PARIA
TRINIDAD TESORO PETROLEUM CO. LTD.
57,000 Ac.
TEXACO / TRINTOC / TRINIDAD TESORO
180,639 Ac.
SAN FERNANDO
COLUMBUS CHANNEL
TEXACO TRINIDAD INC
168,000 Ac.
175,000 Ac.
2
OPEN
237,000 Ac.
3
TEXACO
365,079 Ac.
4
DEMINEX – MOBIL
303,424 Ac.
ATLANTIC OCEAN
AMOCO TRINIDAD OIL CO LTD
6
TEXACO – TENNECO
209,891 Ac.
5
OPEN
280,054 Ac.
TEXACO / TRINTOC / TRINIDAD TESORO
181,662 Ac.
6
TEXACO – TENNECO
76,404 Ac.
AMOCO
Note: Co-ordinates in Thousands of Links

MINISTRY OF PETROLEUM AND MINES

CRUDE OIL PRODUCTION RATE BY MONTHS JULY 1972 - DECEMBER 1975

(BARRELS PER DAY)

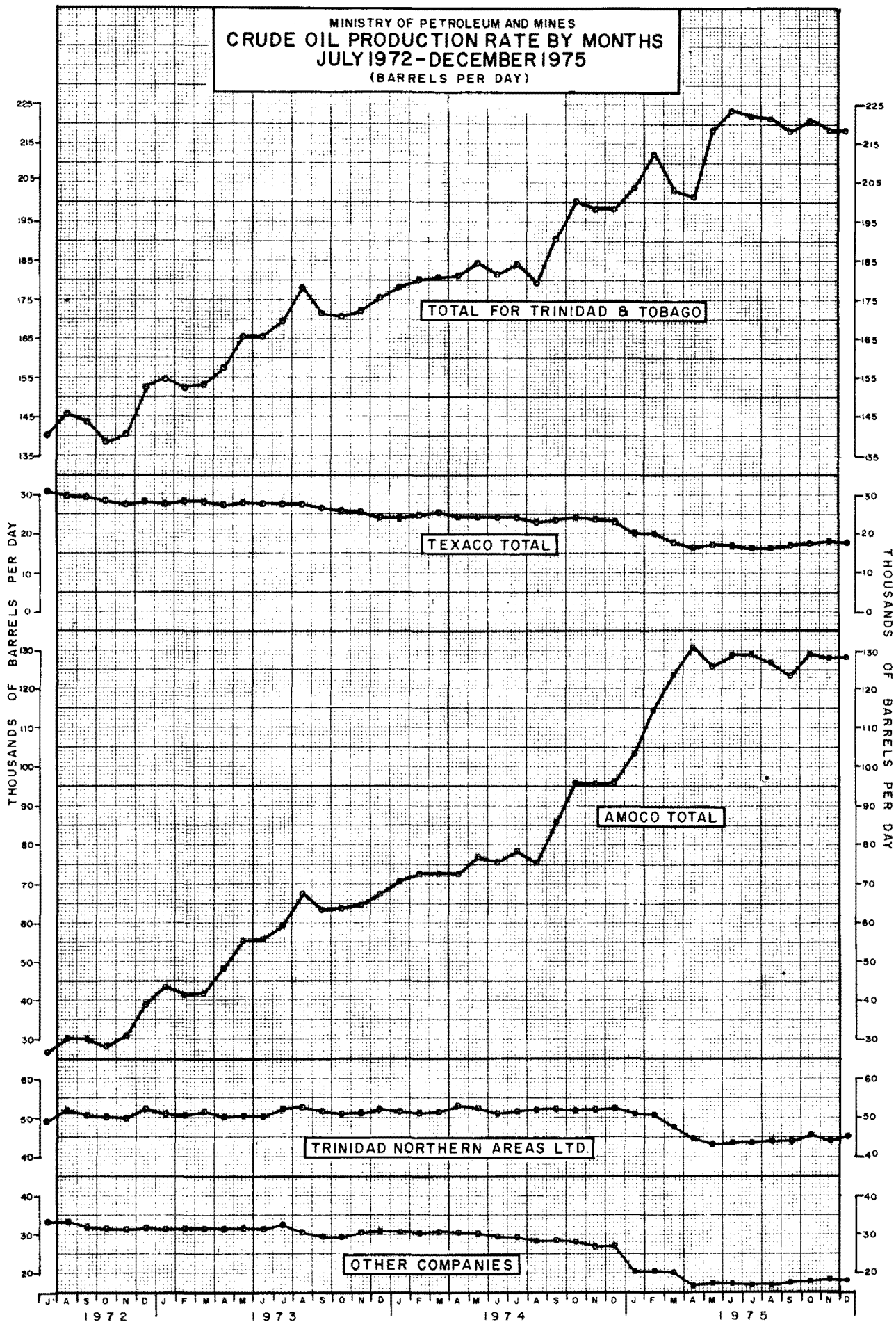


FIG.

MINISTRY OF PETROLEUM AND MINES

TRINIDAD AND TOBAGO CRUDE OIL PRODUCTION, 1975

DAILY AVERAGE BY MONTHS

COMPLETIONS, RECOMPLETIONS AND OTHER WELLS

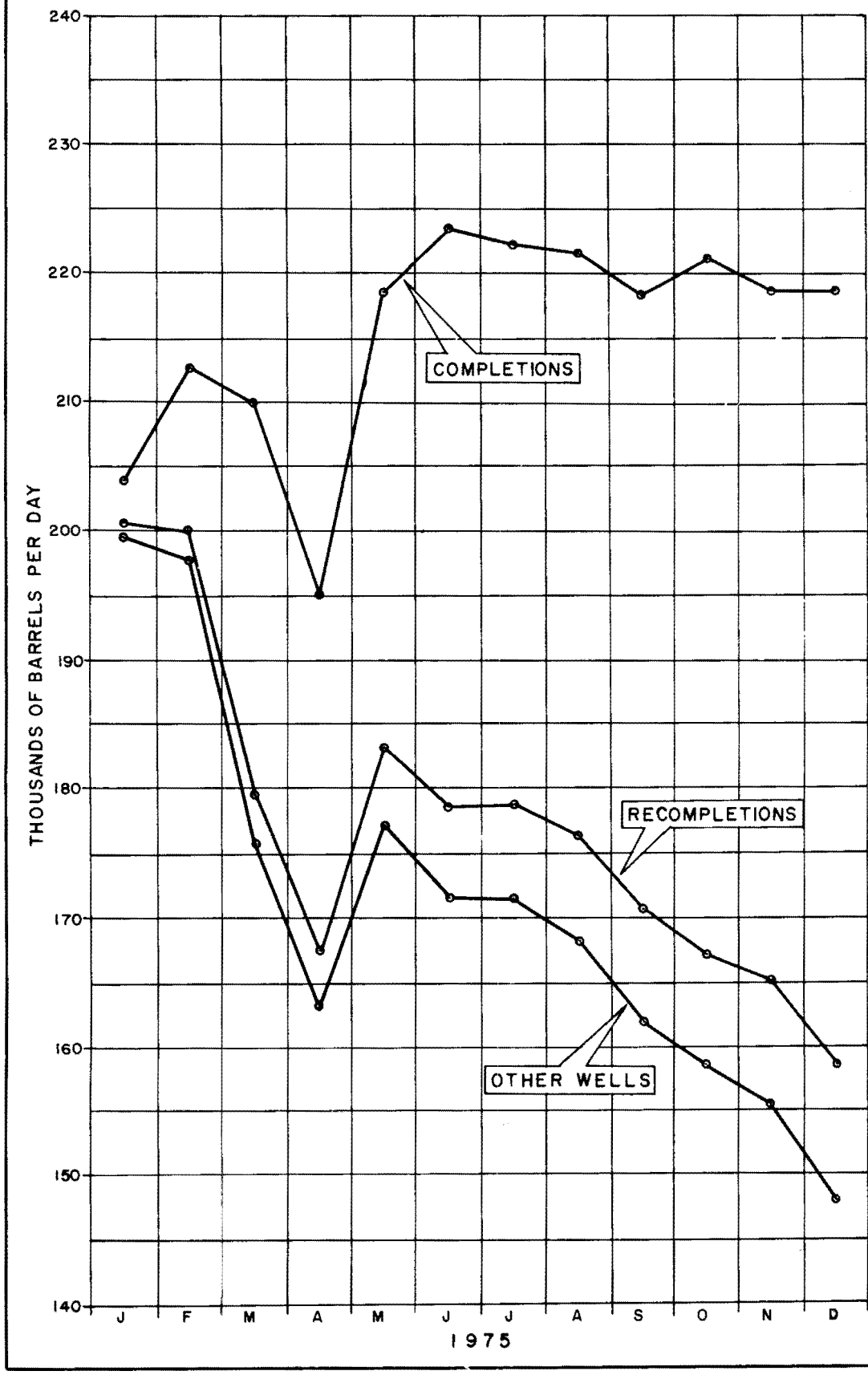
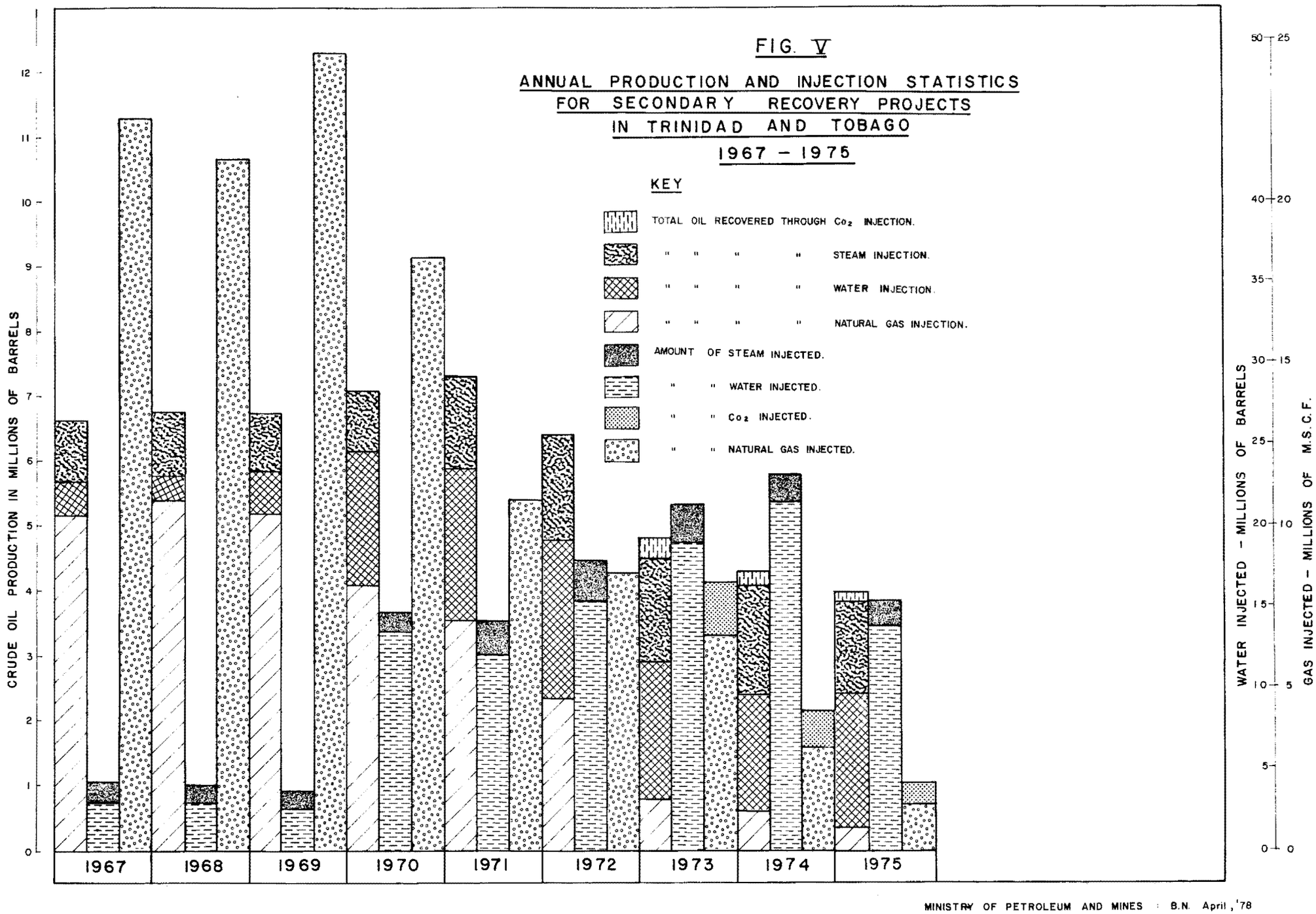


FIG. V

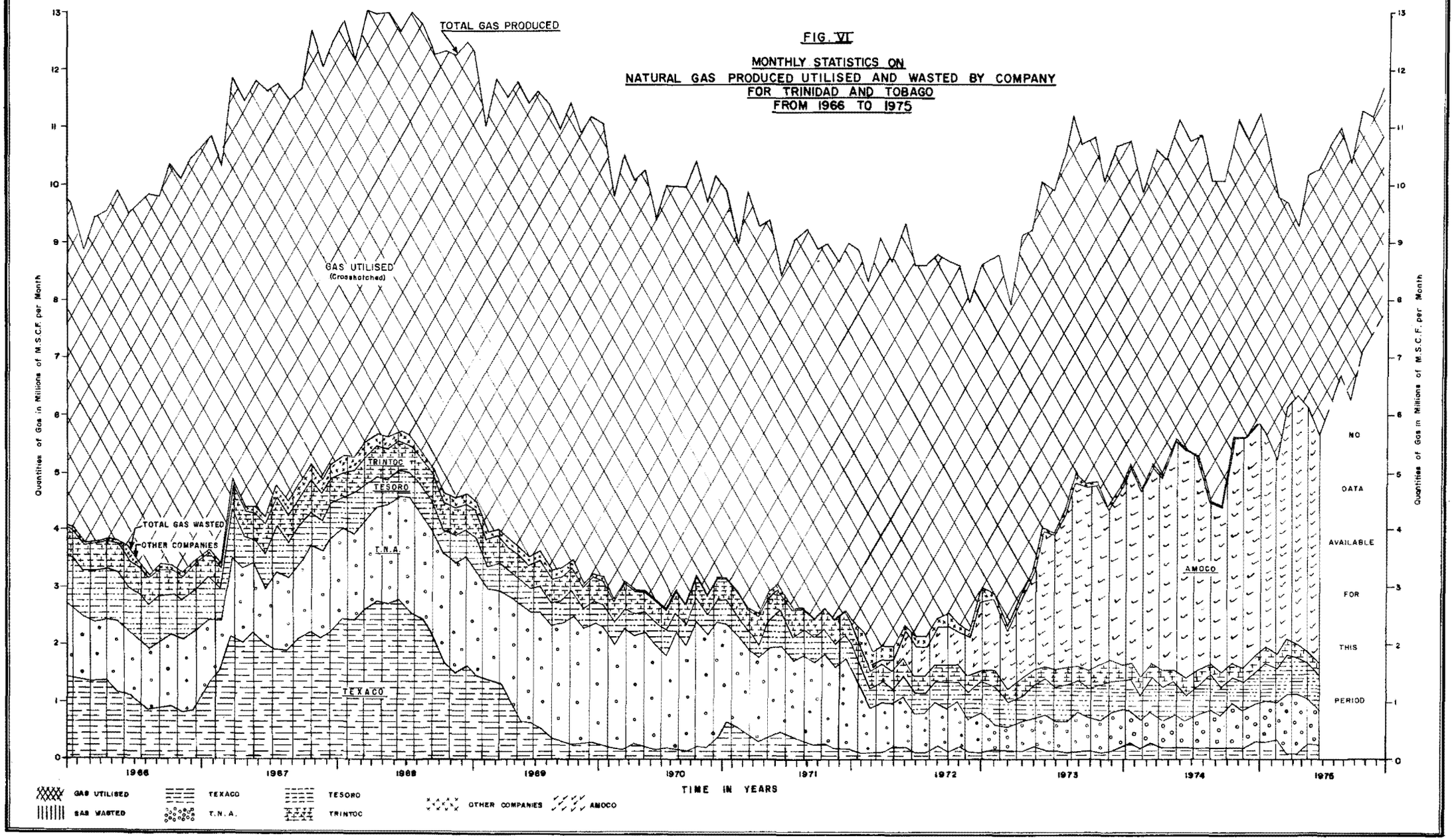
ANNUAL PRODUCTION AND INJECTION STATISTICS FOR SECONDARY RECOVERY PROJECTS IN TRINIDAD AND TOBAGO 1967 – 1975



MINISTRY OF PETROLEUM AND MINES : B.N. April, '78

FIG. VI

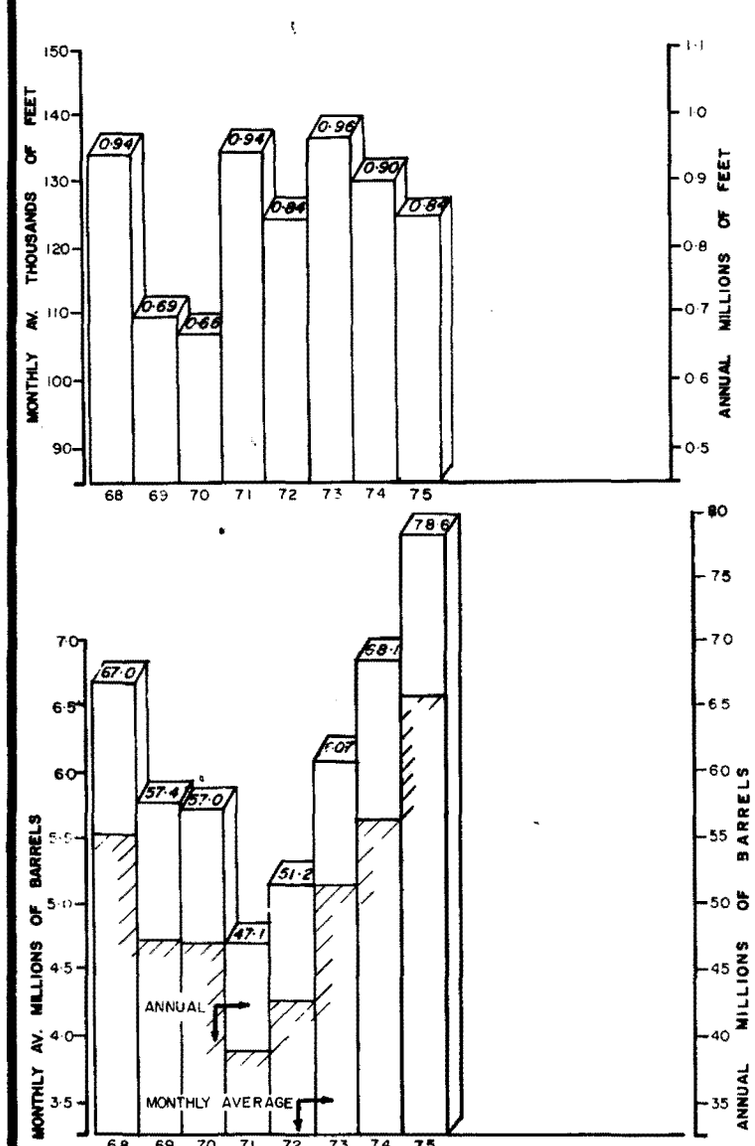
MONTHLY STATISTICS ON
NATURAL GAS PRODUCED UTILISED AND WASTED BY COMPANY
FOR TRINIDAD AND TOBAGO
FROM 1966 TO 1975



STATISTICS ON THE PETROLEUM INDUSTRY OF TRINIDAD & TOBAGO

FIG. VII

DRILLING



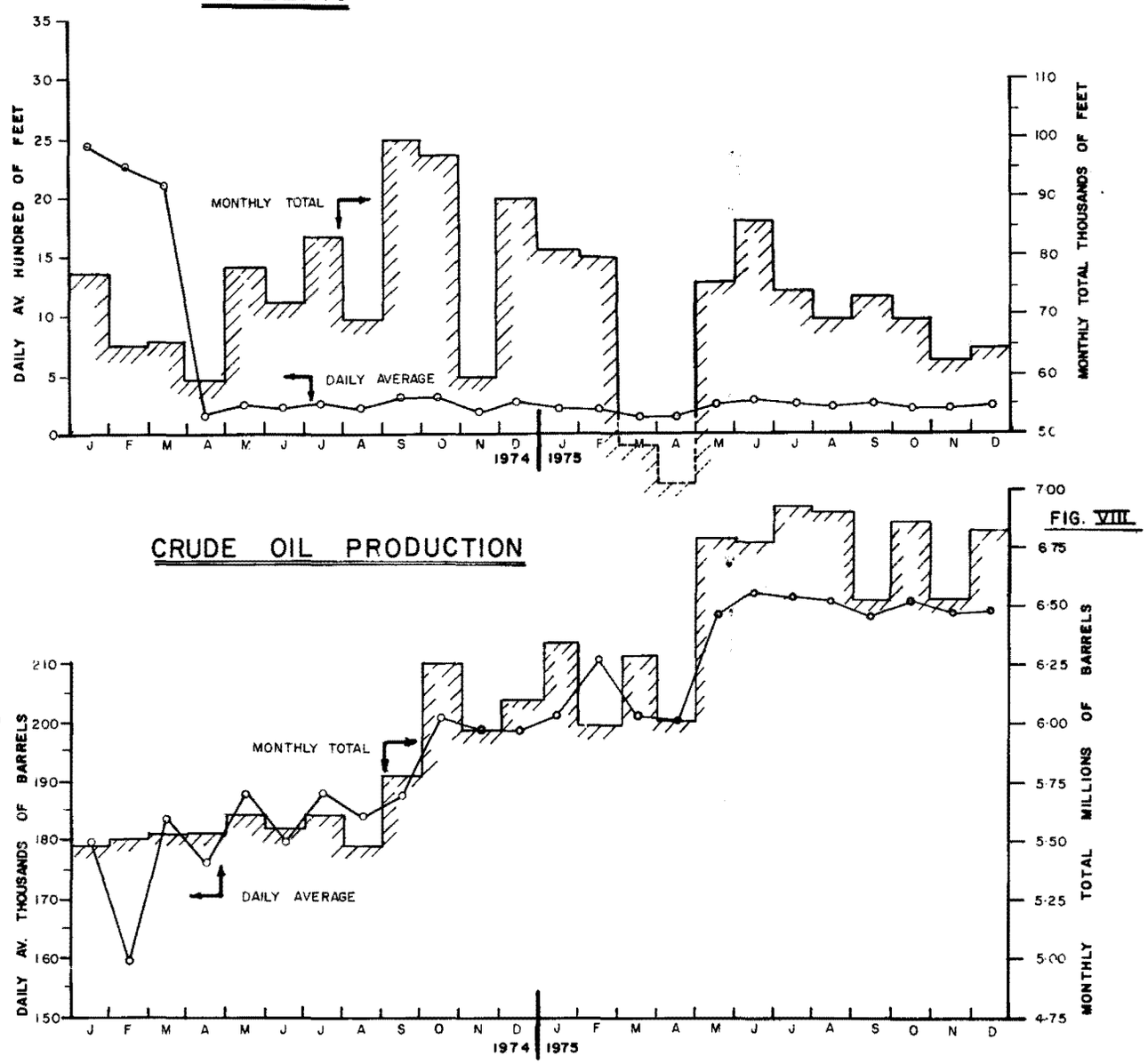


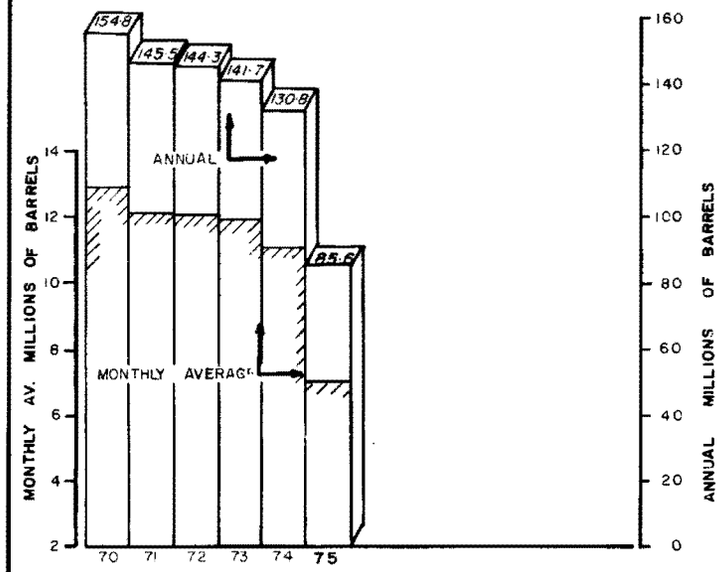
FIG. VIII

CRUDE OIL PRODUCTION

FIG. IX

STATISTICS ON THE PETROLEUM INDUSTRY OF TRINIDAD AND TOBAGO

REFINERY THROUGHPUT



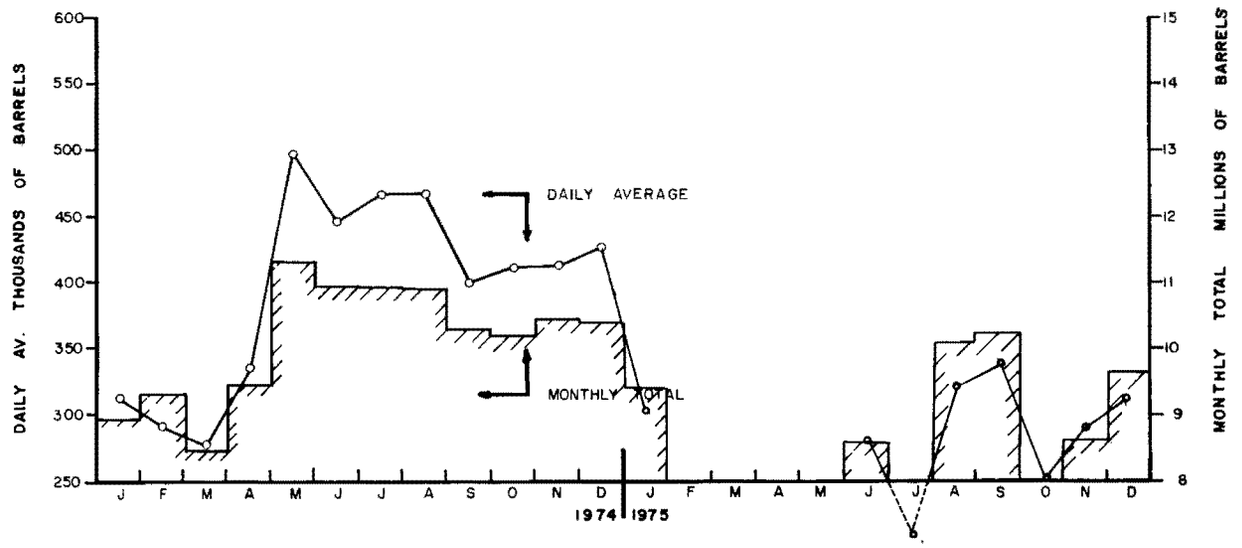
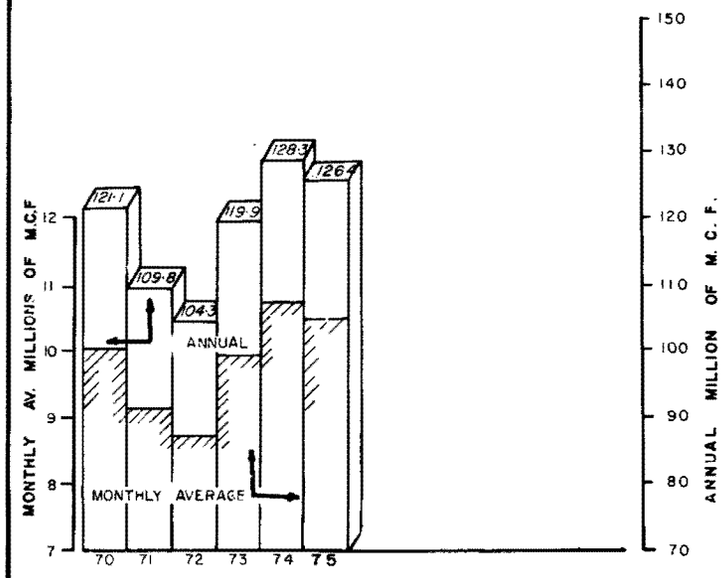
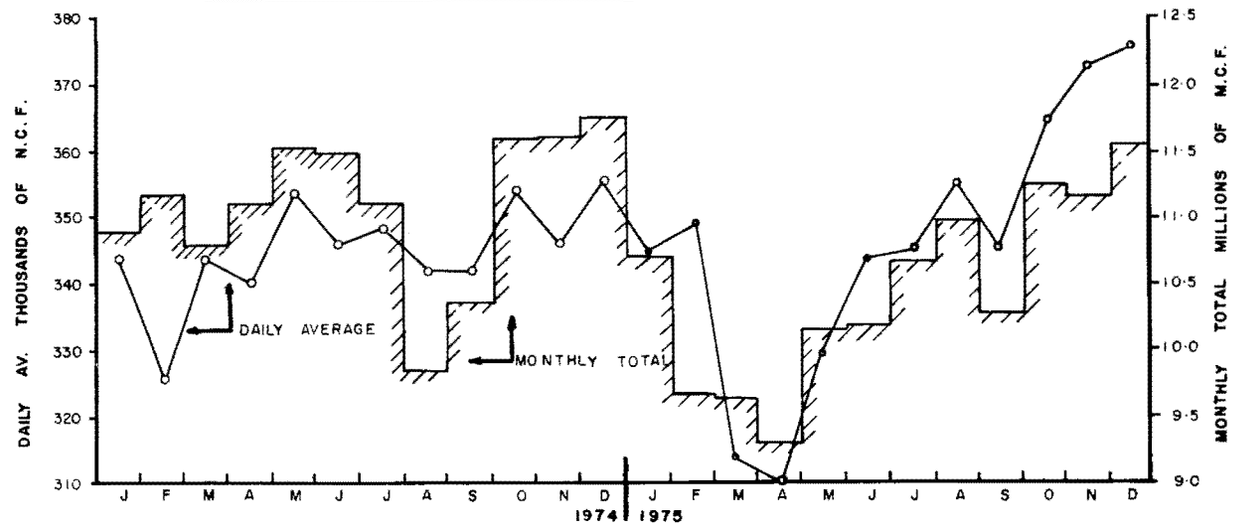


FIG. X

NATURAL GAS PRODUCTION

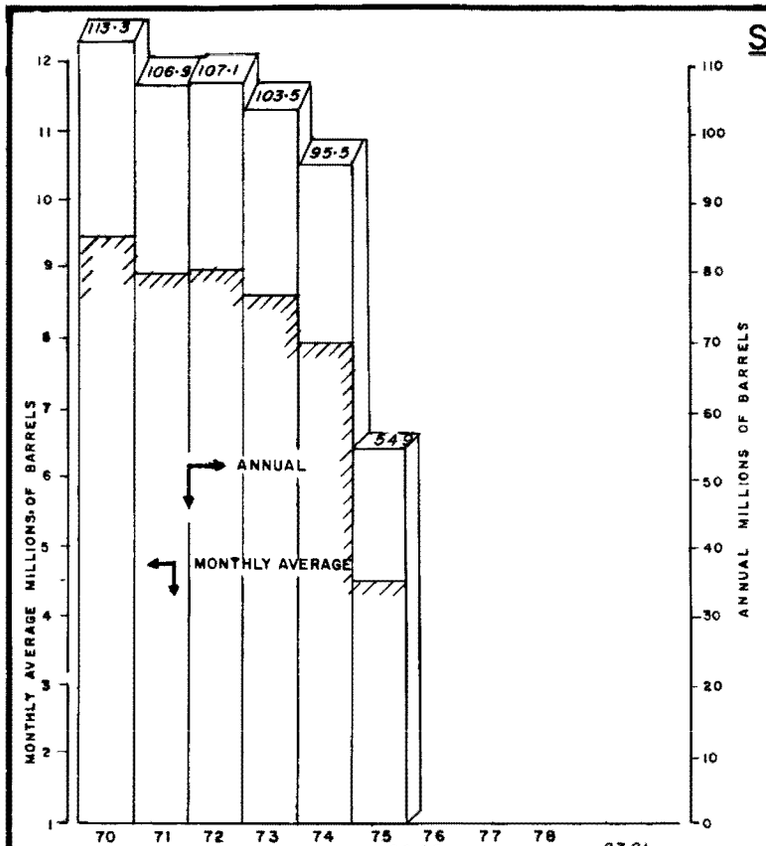




STATISTICS ON THE PETROLEUM INDUSTRY OF TRINIDAD & TOBAGO

FIG: XI

CRUDE OIL IMPORTS



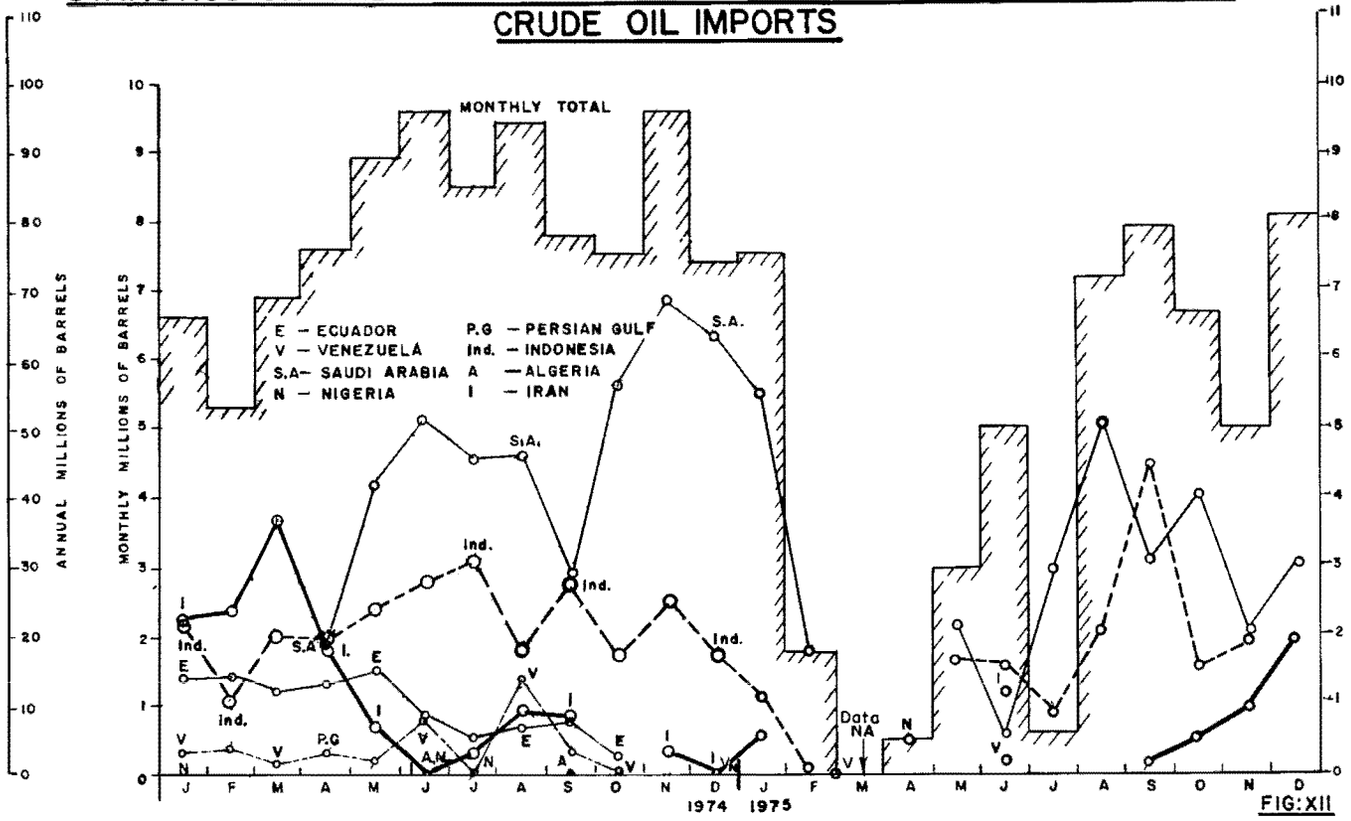
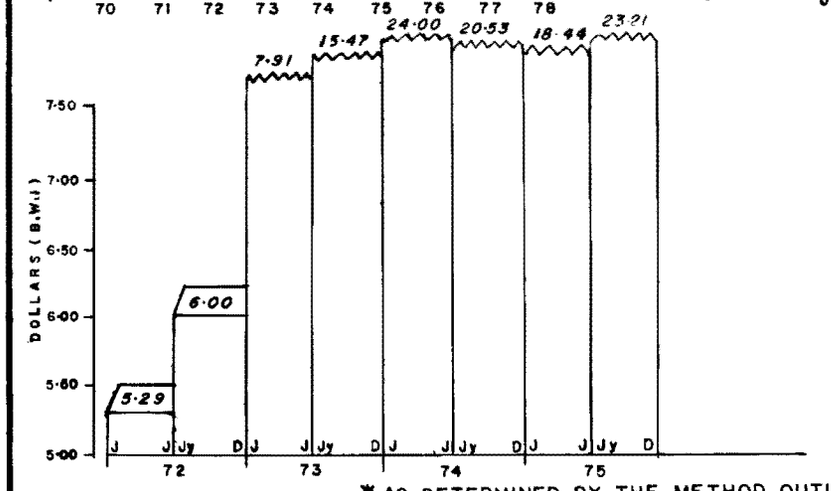


FIG: XII

AVERAGE VALUE* (For Royalty Evaluation) OF A BARREL OF CRUDE OIL



*AS DETERMINED BY THE METHOD OUTLINED IN THE LAND (OIL MINING) (AMENDMENT) REGULATIONS. 1953.