CATALOGUE No.

26-213

ANNUAL



THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY

1968

Published by Authority of
The Minister of Industry, Trade and Commerce

DOMINION BUREAU OF STATISTICS

Manufacturing and Primary Industries Division

Energy and Minerals Section

February 1971 6503-544

Price: 50 cents

SELECTED PUBLICATIONS ON ENERGY AND MINERAL STATISTICS

Dominion Bureau of Statistics Ottawa, Canada

| Catalogue number | e Name of publication | Price |
|--|--|--|
| | | |
| | Annual | |
| 26-201 41-214 26-206 26-213 26-207 26-202 26-203 26-204 | General Review of the Mineral Industries | \$.7. .50 .50 .2 .2 .7 |
| 55-201 57-205 45-204 45-208 57-202 | Oil Pipe Line Transport (approx. 37 pp.) | .7 1.5 .5 |

Monthly

| | Per copy | Per year |
|--|----------|----------|
| Oil Pipeline Transport (approx 8 pp.) | . 20 | \$2.00 |
| Gas Utilities (Transport and Distribution Systems) (approx. 8 pp.) | . 20 | 2.00 |
| Crude Petroleum and Natural Gas Production (approx. 6 pp.) | . 20 | 2,00 |

A complete catalogue of publications of the Dominion Bureau of Statistics is available upon request.

TABLE OF CONTENTS

| | | Page |
|-----|--|------|
| Int | roduction | 5 |
| Tab | le | |
| 1. | Principal Statistics for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), by Province, 1961-68 | 8 |
| 2. | Marketable Production and Values for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1964-68 | 9 |
| 3. | Value of Shipments of Hydrocarbon Products for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 | 9 |
| 4. | Net Production Withdrawals and Values for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 | 9 |
| 5. | Operating Expenditures for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 | 10 |
| 6. | Capital Expenditures for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 | 11 |
| 7. | Supply and Disposition of Natural Gas, 1968 | 12 |
| 8. | Supply and Disposition of Crude Oil and Equivalent, by Source, 1968 | 13 |
| 9. | Employees, Salaries and Wages for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1961-68 | 14 |
| 10. | Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 | 15 |

SYMBOLS

The following standard symbols are used in Dominion Bureau of Statistics publications:

- .. figures not available.
- ... figures not appropriate or not applicable.
- nil or zero.
- -- amount too small to be expressed.
- P preliminary figures.
- r revised figures.

THE CRUDE PETROLEUM AND NATURAL GAS INDUSTRY

1965

In order to Indicate this too uniform screepts of the Standard Industrial Classification, who Designed and Marketing the exploration with the canadian retroitum association, was undertaken a major revision of statistics affecting the exploration and production activities of the oil and gas companies operating in Canada. All companies in the industry supplied data covering their expenditures by function, payroll and employment. In addition, in 1965 and again in 1968 nine-teen major companies were surveyed in detail on all aspects of their operations. Detailed data were collected from these nineteen companies covering salaries and wages, materials and supplies, payment to contractors and total expenditures for both current and capital operations. The data in this report were compiled using the 1968 special survey along with current 1968 data from all companies in the Oil and Gas - Exploration, Development and Production Industry (S.I.C. 064). This industry includes Petroleum and Gas Wells (S.I.C. 063) and Natural Gas Processing Plants (S.I.C. 065), as defined in the Standard Industrial Classification Manual (Catalogue No. 12-501). Oil Shale and Bituminous Sand Pits Industry (S.I.C. 066) is excluded from the principal statistics, but synthetic crude oil production is included in the commodity tables. The following are concepts and definitions which have been used in this report and which will be used in succeeding publications.

Producing activity is defined as that activity in which expenditures are made by the company for the direct operation of producing facilities. These include gas processing plants, gas gathering lines, operated by the producers and the crude oil and natural gas well, well head and flow line facilities. Gas and oil gathering lines operated by gas and oil pipe line industries are included in Industry (S.I.C. 515), and data on this industry are published annually in Gas Utilities (Catalogue No. 57-205) and 0il Pipe Line Transport (Catalogue No. 55-201).

Total activity includes the producing activity plus an extension of the data for other non-producing activities that the establishment might be engaged in. Generally speaking these are the geological and geophysical activities although some companies have other small miscellaneous activities such as real estate or other operations. By definition "total activity" relates to all operational activity but excludes such non-operational data items as rent, interest and dividends.

The basic reporting unit is the "establishment" which is defined as the smallest unit which is a separate operating entity and capable of reporting all of the basic industrial statistics:

Materials and supplies used Goods purchased for resale - as such Fuel and power consumed Number of employees and their pay Inventories Shipments or sales

In the oil and gas industry the smallest reporting unit is the provincial operations of the company, including all its oil and gas wells, processing plants and exploration activities. For example, a large company operating in Alberta, laskatchewan and Ontario would have three establishments. Companies may also have separate marketing or other establishments not coded to the Crude Petroleum and Natural Gas Industry but coded to trade, construction, etc. The employees are generally located in head offices or regional offices within a province, and the staff work out of these offices in various field locations which change as the industry discovers, evaluates and develops various oil and gas fields.

Companies included in the Crude Petroleum and Natural Gas Industry explore for and produce crude petroleum, natural gas, propane, butane, sulphur and helium, either directly from the fields or from gas processing plants. That is, the establishment boundary includes within it the facilities of the gas processing plants, the oil and gas fields, geological and geophysical exploration, and head office work for the sbove purposes as well as those carried on directly by these companies, and for such other ancillary services as are required to maintain such exploration or producing programmes. Although a company may be engaged in all phases of the industry, it may not necessarily be engaged in all phases in any one province. Refining and marketing activities of oil companies are not included in S.I.C. 064, but are coded to separate industries. It should be carefully noted that the companies engaged in geological and geophysical consulting, or as contractors, are not included in the S.I.C. 064 Crude Petroleum and Natural Gas Industry.

In our statistical publications, expenditures of the industry are segregated between those which are of a capital nature and those which are operational. The primary purpose of this report is to make available operational type data, while the basic statistics on capital expenditures are published by the Business Finance Division in Private and Public Investment in Canada, Catalogue No. 61-205. However, in order to present a complete picture in one report, statistics on capital formation are included here. Because of accounting practices in this industry, uniformity of definitions of capital and current expenditures are difficult to attain. As a result it has been necessary to define those items which are capital and those items which are current. In concert with the total cost accounting techniques and principles being developed in this industry, we have defined as capital, those expenditures for drilling (both exploratory and development), as well as the construction of oil and gas well facilities and other works of a permanent nature. In addition we treat land and land lease acquisition expenditures as capital in nature although they are not treated as "capital formation" for National Accounts purposes. Expenditures on geological and geophysical activity, field and well operations, natural gas plant operation, and other operating expenses such as land departments, taxes, royalties, etc., are, as may be expected, treated as current expenditures (see Tables 5 and 6).

Electricity

Data refers to amounts purchased and used, with costs being delivered costs at plant and/or field. Electricity produced by establishments for internal consumption is not included in electricity purchases.

Contractor and Service Payments

These expenditures consist of payments made to geological and geophysical contract companies or to other contractors company may hire for road grading, carpentry, etc. In addition, all the service costs of a company such as automobile leasing, telephone expenditures, insurance parvise costs at producing wells, consulting services, etc. are included.

Employment, Man-Hours, Salaries and Wages

Employees include salaried management, professional, technical and administrative personnal, plus production, finil, plant and related workers, which comprise both the producing and non-producing activities.

Production and related workers are reported as those receiving pay during the last pay partor is the resolution month. The numbers are somewhat affected by turnover, in that employment may be overstated when an employee changes employment in the middle of a pay period.

Man-hours of production and related workers in producing activities represent total man-hours paid (total hours at work during the calendar year plus hours not worked but nevertheless paid for, such as paid vacations, sick leave, statutory holidays, etc.). In reporting overtime hours, respondents are requested to report only hours actually at work. It should be noted that the division of hours paid into production and related workers payrolls results in average hourly earnings and does not represent hourly wage rates which are collected and published by the Department of Labour.

Salaries and Wages (Tables 1, 9 and 10) refer to gross earnings of all employees before deductions for income tax and employees' contributions to social services such as sickness, accident and unemployment insurance, pensions, etc. They include all salaries, wages and bonuses, profits shared with employees, commissions (paid to regular employees only), as well as any other allowance forming part of the worker's earnings. Payments for overtime are included. They do not include the company share of benefit plans.

In addition to salaries and wages as provided in Tables 1, 9 and 10, data are provided which allocate salaries and wages by function, by province (Table 5 and the drilling sector of Table 6). These salaries and wages include, in addition to the employee's portion of benefit plans, etc., the company's share of benefits paid, such as workmen's compensation, health plans, pension plans, etc., but exclude salaries and wages paid for capital works which are included in Table 10. The basis of allocation to province is different in the two series. Employees working in Calgary on a Saskatchewan project are charged to Saskatchewan operations; however, salaries and wages in Tables 1, 9 and 10 are those paid by the province of location of the employee (in this case Alberta).

Definitions

Production

 $\frac{\text{Gross New Production}}{\text{metering point}} - \text{All new production, excluding reproduction from field storage, as measured at the first well head metering point.}$

Net New Production - "Gross New Production" after the deduction of flaved field production. It is the production that is available for further processing, sale, storage, field uses, etc.

<u>Production Net Withdrawals - "Net New Production" plus reproduction from field storage</u>, less the amount of gas or oil that is reinjected into field pools or storage. For valuation purposes, shrinkage is deducted from the volume.

Marketable Production — The production of gas, oil, propane, butane, etc., which is produced and available for market; i.e. the production of natural gas products produced by gas processing plants after processing plant uses, losses and shrinkage, the sales of natural gas from dry gas fields after field use, losses, reinjection, etc., or the production for sale of crude oil after field use and losses, reinjection, etc., but before inventory changes.

Shipments

The quantity and value of the marketable production that has actually been shipped. The differences between shipments and marketable production are inventory changes which may occur because a company may produce and accumulate or draw down inventories.

Materials and Supplies used in Producing Activities

Data provided in Table 5 represent quantities at laid down cost to the establishment, of materials, supplies, chemicals, explosives and components consumed during the year in producing activities. In the oil and gas industry it is not practical to estimate the amount of materials that are used as fuel, since this amount represents only a small part of the total energy requirements of the industry and company accounting records do not provide this breakdown. For this reason the amount of fuel purchased and used is shown as a component of materials and supplies. The statistics represent only commodity items or physical goods (costs of services or overhead charges such as advertising, insurance, depreciation, etc. are not included) whether purchased from others or received as transfers (in the form of materials, components or semi-processed goods) from other establishments of the reporting company. Respondents were requested to report materials and supplies used, not purchased. Included are repair and maintenance supplies not chargeable to fixed assets accounts. Also included is the cost of office supplies not chargeable to fixed assets accounts and the cost of such other items of materials and supplies used as food, beverages and supplies for establishment operated cafeterias and lunch counters, first aid medical supplies, laboratory supplies, etc.

Value Added

- (a) By production activities:
 - Is defined as the value of marketable production less materials and supplies purchased, fuel and electricity consumed in the production of hydrocarbons, sulphur, etc.
- (b) By total activity:

Consists of the value added by production activities given above plus the value added by other activities and capital formation. In practice this is represented by the establishment's salary and wage component of the capitalized value of these assets less the cost of materials and supplies used in geological and geophysical operation. In the event there is a small value of production and large geological and geophysical operations it is evident a negative value added would result.

Survey Results

In 1968 the value of marketable production (including synthetic crude) of the Crude Petroleum and Natural Gas Industry amounted to \$1,375,995,000, an increase of 11.8% over 1967. Crude oil and field condensate amounted to \$936,731,000 an increase of 8.1%; natural gas \$210,289,000, an increase of 13.8%; natural gas processing plant products (that is pentanes plus, propane, butanes and sulphur) \$228,975,000, up 27.3% over 1967 values.

For reasons of confidentiality of individual company data it is not possible to provide the value of marketable production, by commodity, by province. However, Table 1 shows the total value of marketable production of all commodities at the provincial level. The value of shipment for each hydro-carbon commodity (i.e. with sulphur excluded) by province, is shown in Table 3. In 1968, Alberta maintained its dominance in terms of the value of shipments of hydrocarbon products, with \$952,168,000 or 74.9% of the national figure of \$1,270,348,000.

The total number of employees in the industry in Canada increased from 13,113 in 1967 to 13,611, but the relative percentage employed in each occupational group remained much the same. In 1968, management accounted for 5.4% of the total work force; professional categories 23.4%; specialists, technical, clerical and administrative 45.7%; field, plant and related workers 25.5%. Total salaries and wages paid during 1968 increased to \$123,412,000 from \$111,855,000 reported in 1967, up 10.3%. Alberta had 89.0% of the total employees and paid 90.1% of the total salaries and wages, due in part to a large number of companies maintaining head offices in Alberta.

Operating expenditures rose from \$626,664,000 in 1967 to \$724,895,000 in 1968, an increase of 15.7%. During the current year, royalty payments accounted for 22.7% of the total; geological and geophysical expenditures 20.8%; field and well operations 19.4%; retention costs 14.1%; natural gas processing plants 7.9%; interest expense 7.6%; all other expenditures 7.5%.

Capital expenditures increased 1.6% from \$548,850,000 in 1967 to \$557,557,000 in 1968. Exploratory and development drilling accounted for 42.4% of the total capital expenditures in 1968; natural gas processing plants 16.3%; tangible well and lease equipment 11.7%; secondary recovery facilities 3.3%; other buildings and machinery 3.0%; pipe lines and related equipment 1.9%. Land sites purchased for construction purposes and land acquisition (includes cash bonuses paid for Crown permits, reservations and leases) accounted for 21.4% of the total capital expenditures, but are not considered as part of "capital formation" for National Accounts purposes.

Value added for total activity by the industry in 1968 was \$1,312,414,000, an increase of 10.3% over 1967.

TABLE 1. Principal Statistics(1) for the Crude Petroleum and Natural Cas Industry (S.I.C. 064), by Province, 1961-A8

Basis: Revised Standard Industrial Classification and New Establishment Concept

| | | | | Pr | oducing a | tivity | | | | Т | otal acti | vity | |
|---|-----------------|------------------|-----------------------|---------------------|---------------------|------------------------------------|----------------------------|----------------------------|--------|------------------|------------------|--------------------------|-------------------------|
| Year and province | Estab- lish- | | fuction as | | Cost of | Cost of | Value of | | | ng owners | Emp1 | oyees | |
| 1 | ments | Number | Man- hours paid | Wages | elec- tricity | materials, supplies and fuel | marketable production | Value added | Number | With- drawals | Number | Salaries and wages | Value added |
| | No. | | 1000 | | | \$'000 | | | | \$'000 | | \$10 | 00 |
| 1961 | | | | | | | | | | | | | |
| Total | 632 | 3,464 | 7.334 | 18,338 | 9,903 | 15,218 | 608,801 | 583,680 | _ | _ | 11,184 | 71,179 | 598,902 |
| 1962 | | | | | | | | | | | | | |
| 1302 | | | | | | | | | | | | | |
| Total | 621 | 3,490 | 7,396 | 19,542 | 11,237 | 18,180 | 748,561 ^T | 719,144 | - | - | 11,232 | 75,325 | 730,799 |
| 1963 | | | | | | | | | | | | | |
| Total | 624 | 3,378 | 7,075 | 19,280 | 13,334 | 21,331 | 818,457 | 783,792 | - | - | 11,237 | 76,012 | 796,444 |
| 1964 | - 1 | | | | | | | | | | | | |
| | - 1 | | | | | | | | | | | | |
| Total | 640 | 3,302 | 7,236 | 18,884 | 13,531 | 22,171 | 903,573 | 867,871 | - | | 11,242 | 77,306 | 880,828 |
| 1965 | | | | | | 7 111 | | | 1 | | | | |
| Total | 675 | 3,262 | 7,050 | 19,689 | 14,080 | 23,724 | 978,135 | 940,331 | - | - | 11,817 | 84,687 | 553,409 |
| 1966 | | | HT. | | | | | | - | | | | |
| Total | 648 | 3,375 | 7,026 | 21,914 | 12,952 | 29, 159 | 1,092,535 | 1 050 626 | | | 12,378 | 05 007 | 1,050,300 |
| | | 3,313 | ,,,,, | 22,727 | 20,330 | 23,237 | 1,422,333 | 2,000,424 | | | 12,570 | 23,771 | 1,020,20 |
| | | | | | | - 1 | | | | - | | | |
| | 1.4 | -47 | | | | | | | | | | | |
| <u>1967</u> Newfoundland | | | | _ | | _ | | | | | | | |
| Prince Edward Island | = | | - | = | _ | - | | - | _ | - | _ | = | _ |
| lew Brunswick | 10 | 6 | 12 | 23 | - | 12 | 100 | 88 | = | - | 6 | 23 35 | 8 |
| Ontario Manitoba Maskatchewsn | 76 59 163 | 163 43 537 | 345 92 1,185 | 996 287 3,680 | 127 286 5,240 | 137 295 5, 568 | 8,955 13,998 220,292 | 8,691 13,417 209,484 | | | 261 66 966 | 1,902 439 7,555 | 8,82 13,46 209,25 |
| Alberta | 233 105 | 2,558 232 | 5,332 484 | 18,977 1,879 | 7,800 | 24,380 1,916 | 913, 519 71, 925 | 881,339 70,009 | _ | - | 11,274 | 97,388 4,250 | 887,609 70,75 |
| Yukon, Northwest Territories and Arctic Islands | 68 22 | 11 | 20 | 101 | - | 107 | 888 | 781 | | | 12 16 | 114 149 | 252 (382 |
| Total | 745 | 3,551 | 7,472 | 25,949 | 13,453 | 32,415 | 1,229,686 | 1,183,818 | _ | - | 13,113 | | 1,189,86 |
| | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | |
| 1968 | | | | | | | | | | | | | |
| Newfoundland | _ | = | - | _ | _ | - | = | _ | _ | _ | _ | _ | - |
| lew Brunswick | 12 | 6 | 13 | 24 | _ | 10 | 106 | 96 | = | = | 6 | 24 | 10: |
| Québec | 11 81 60 | 127 | 266 74 | 920 256 | 105 | 133 345 | 7,766 15,570 | 7,528 14,996 | = | = | 17 202 59 | 147 1,731 425 | 7,550 |
| fanitoba | 165 | 482 | 1,044 | 3,519 | 5,569 | 6,473 | 216,630 | 204,588 | - | = | 755 | 6,022 | 204,13 |
| Alberta | 115 | 2,542 | 5,513 | 20,673 | 9,070 | 28,051 | 1,039,521 | 77,486 | - | - | 12,120 | 111,149 3,277 | 77,70 |
| Yukon, Northwest Territories and Arctic Islands | 99 | 26 | 56 1 | 243 | = | 42 | 925 | 883 | 494 | - | 44 | 375 33 | 79 |
| Off Shore - East Coast | 9 3 | - | - | - 1 | = | _ | - | - | _ | _ | 28 | - | (|
| - WEST (DEST | - 3 | | | - | | | | | | | 20 | | - |
| Total | 814 | 3,467 | 7,471 | 27,765 | 14,973 | 37,284 | 1,360,252 | 1,307,995 | _ | _ | 13,611 | 123,412 | 1,312,41 |

⁽¹⁾ Excludes establishments engaged in synthetic crude oil operations.

URAS 1. implementar promotion and Unious for the Crade Parceleon and Satural day Ladestry (5.1,6,064). 1964-68

| | | 1964 | | 196: | 5 | 1966 | | 1967 | | 1968 | |
|------------------------------|---------|-------------|---------|---------------|---------|---------------|-----------|---------------|-----------|---------------|-----------|
| Products | | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| | | | \$'000 | | \$1000 | | \$1000 | | \$1000 | | \$*000 |
| Cruda oil | bbl. | 274,478,567 | 673,965 | 291,511,591 | 716,899 | 319,568,079 | 786,718 | 349,800,855 | 862,901 | 372,677,839 | 918,784 |
| Synthetic crude oil | bb1. | - | - | | - | - | - | 454 | 1,247 | 5,724,738 | 15,743 |
| Condensate and pentanes plus | bbl. | 25,264,469 | 64,127 | 27,867,535 | 71,084 | 29,345,907 | 75,804 | 30,737,226 | 78,818 | 32,962,017 | 88,494 |
| Natural gas(1) | Mcf. | 944,280,103 | 134,551 | 1,028,866,006 | 147,388 | 1,106,641,641 | 164,642 | 1,217,172,423 | 184,732 | 1,383,871,769 | 210,289 |
| Propene | bbl. | 5,761,359 | 7,269 | 9,897,945 | 12,532 | 12,355,015 | 17,446 | 14,115,609 | 23,548 | 15,544,903 | 23,870 |
| Butanes | bbl. | 5,295,774 | 7,235 | 6,376,637 | 8,379 | 7,976,268 | 10,720 | 9,018,922 | 12,727 | 9,898,288 | 13,999 |
| Sulphur 1 | ong ton | 1,460,423 | 16,426 | 1,572,691 | 21,853 | 1,706,019 | 37,189 | 2,190,278 | 66,960 | 3,030,329 | 104,816 |
| Total value | | | 903,573 | | 978,135 | | 1,092,519 | | 1,230,933 | | 1,375,995 |

⁽¹⁾ Includes value of helium.

TABLE 3. Value of Shipments of Hydrocarbon Products for the Crude Petroleum and Natural Cas Industry (S.I.C. 064), 1968

| Products | Canad | 4 | New Bruns | wick | Quebe | С | Ontari | 0 | Manito | ba | Saskatch | IEWED | Alberta | | British Co | lumbia | North | |
|-----------------------------------|---------------|-----------|-----------|-------|----------|--------|------------|--------|-----------|--------|------------|---------|---------------|----------|-------------|--------|----------|--------|
| Li on acca | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Valu |
| | | \$,000 | | 8'000 | | \$'000 | | \$1000 | | \$1000 | | \$1000 | | \$1000 | | \$'000 | | \$1000 |
| Crude oil bbl. | 372,689,361 | 918,761 | 10,214 | 14 | - | - | 1,151,481 | 3,167 | 6,209,535 | 15,561 | 91,838,932 | 206,795 | 250,580,590 | 642,241 | 22,149,945 | 50,080 | 748,664 | 90 |
| Synthetic crude oil bbl. | 5,755,555 | 15,828 | - | - | - | - | - | - | - | - | - | - | 5,755,555 | 15,828 | - | - | - | - |
| Condensate and pentanes plus bbl. | 32,998,728 | 88,616 | | - | | _ | | _ | _ | - | 315,870 | 747 | 31,631,443 | 85,492 | 1,051,415 | 2,377 | - | |
| Natural gas Mcf. | 1,383,871,769 | 209,531 | 110,928 | 95 | 137,573 | 21 | 12,065,829 | 4,599 | - | _ | 46,131,534 | 6,127 | 1,102,290,927 | 174,140 | 223,092,376 | 24,531 | 42,602 | 1 |
| Propane bbl. | 15,358,919 | 23,583 | - | - | - | - | | - | - | - | 938,001 | 1,374 | 14,096,528 | 21,715 | 324,390 | 494 | - | - |
| kutanes bbl. | 9,918,269 | 14,029 | - | - | | - | - | - | - | - | 408,515 | 694 | 9, 152, 669 | 12,752 | 357,085 | 583 | - | - |
| Total value | | 1,270,348 | | 109 | | 21 | | 7,766 | | 15,561 | | 215,737 | | 952, 168 | | 78,065 | | 92 |

TABLE 4. Net Production Withdrawals and Values for the Crude Petroleum and Natural Gas Industry (S.1.C. 064), 1968

| Products | Canad | A | New Bruns | rwick | Quebe | c | Ontari | 0 | Manito | ba | Saskatel | éwan | Albert | | British Co | lumbia | North | |
|---|---------------|-----------|-----------|--------|----------|--------|------------|--------|-----------|--------|------------|---------|---------------|---------|-------------|--------|----------|-------|
| | Quantity | Velus | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Valu |
| | | \$'000 | | \$'000 | | \$1000 | | \$'000 | | \$1000 | | \$ '000 | | 91000 | | \$1000 | | \$100 |
| Crude oil, conden- sate and pentanes | | | | | | | | | | | | | | | | | | |
| plus bbl. | 406,102,512 | 1,008,484 | 7,648 | 11 | - | - | 1,151,481 | 3,167 | 6,204,920 | 15,570 | 92,213,725 | 207,673 | 282,607,378 | 728,780 | 23,165,768 | 52,376 | 751,592 | 90 |
| Synthetic crude oil bbl. | 5,724,738 | 15,743 | - | - | - | | - | - | - | - | - | - | 5,724,738 | 15,743 | F - | - | - | - |
| Natural gas Mcf. | 1,696,679,650 | 225,849 | 112,967 | 97 | 137,573 | 21 | 12,065,829 | 4,599 | _ | - | 56,771,626 | 7,211 | 1,367,682,131 | 186,034 | 259,866,922 | 27,869 | 42,602 | 1 |
| Total value | | 1,250,076 | | 108 | | 21 | | 7,766 | | 15,570 | | 214.884 | | 930,557 | | 80,245 | | 92 |

TABLE 5. Operating Expenditures for the Crude Petroleum and Natural Gas Industry (5,1.C, 064), 1968

| | Canada | Mari- times | Quebec | Ontario | Mani toba | Saskat- chewan | Alberta | British Columbia | Yukon, Northwest Territories and Arctic Islands | Off Shore East Coast | Off Shore Hudson Bar | off Short Near Court |
|--|----------|----------------|--------|---------|-----------|-------------------|---------|---------------------|---|-------------------------|-------------------------|-------------------------|
| | | | | | | | \$1000 | 1 | | 1 | | 1 |
| | | | - 1 | | | | | | | | 1.13 | |
| Geological and geophysical operations | | | | | | | | | | | | |
| Salaries and wages | 32,164 | 35 | 210 | 399 | 95 | 2,474 | 23,025 | 1,866 | 2,849 | 683 | 293 | 235 |
| Materials and supplies | 8,894 | 5 | 11 | 64 | 3 | 786 | 5,816 | 803 | 1,092 | 289 | dife | 5 |
| Contractor and service payments | 110,019 | 763 | 408 | 1,663 | 968 | 7,936 | 58,309 | 12,186 | 20,043 | 5,843 | 1,090 | 810 |
| Totals | 151,077 | 803 | 6 29 | 2,146 | 1,066 | 11,196 | 87,150 | 14,855 | 23,984 | 6,815 | 1,383 | 1,050 |
| Field and well operations | | H | | | | | | | | | | |
| Salaries and wages | 38,580 | 37 | | 771 | 641 | 6,739 | 28,618 | 1,751 | 23 | 400 | 400- | _ |
| Materials and supplies | 20,245 | 10 | | 85 | 345 | 5,939 | 12,221 | 1,603 | 42 | _ | | _ |
| Contractor and service payments | 81,467 | - | _ | 828 | 1,283 | 20,875 | 54,863 | 3,342 | 276 | _ | _ | - |
| Totals | 140, 292 | 47 | - | 1,684 | 2,269 | 33,553 | 95,702 | 6,696 | 341 | - | - | - |
| Natural gas processing plants | 1 | | | | | | | | | | | |
| | | | | | | | | | 11.5 | | | |
| Salaries and wages | 14,531 | - | 3 | 160 | - | 543 | 12,952 | 873 | _ | | _ | |
| Materials and supplies | 17,039 | | 2 | 48 | _ | 534 | 15,830 | 625 | | | | |
| Contractor and service payments Totals | 25,424 | | 3 | 385 | _ | 2,128 | 51,123 | 1,852 3,350 | | | | _ |
| TATE TO THE TATE OF THE TATE O | | | | | | | | | | | | |
| Other including land and lease acquisition and retention | | H. | | | 4 | | | | | 1 | OI F | |
| Salaries and wages | 21,039 | 7 | 1 | 216 | 49 | 1,248 | 18,052 | 697 | 713 | 18 | 38 | - |
| Materials and supplies | 3,993 | - | - | 80 | 44 | 394 | 2,655 | 634 | 175 | 3 | 8 | |
| Contractor and service payments | 14,927 | 81 | 2 | 148 | 74 | 2,066 | 10,089 | 1,637 | 550 | 280 | | - |
| Retention(1) | 102,138 | 590 | 156 | 1,013 | 1,035 | 12,806 | 71,583 | 10,622 | 1,897 | 350 | 2,072 | 14 |
| Royalties | 164,755 | 5 | - | 441 | 1,866 | 25,903 | 125,555 | 10,945 | 40 | - | - | - |
| Taxes (excluding income tax) | 14,792 | 1 | 3 | 201 | 261 | 2,946 | 10,815 | 548 | 16 | 1 | - | - |
| Interest expense | 54,888 | - | 3 | 32 | 143 | 1,985 | 50,173 | 2,531 | 18 | 3 | - | - |
| Totals | 376,532 | 684 | 165 | 2,131 | 3,472 | 47,348 | 288,922 | 27,614 | 3,409 | 655 | 2,118 | 14 |
| Grand Totals | | | | | | | | | | | | IF91 |
| Salaries and wages | 106,314 | 79 | 214 | 1,546 | 785 | 11,004 | 82,647 | 5,187 | 3,585 | 701 | 331 | 235 |
| Materials and supplies | 50,171 | 15 | 13 | 297 | 392 | 7,653 | 36,522 | 3,665 | 1,309 | 292 | 8 | 5 |
| Contractor and sarvice payments | 216,864 | 844 | 413 | 2,711 | 2,096 | 26,359 | 136,532 | 19,017 | 20,869 | 6,123 | 1,090 | 810 |
| Electricity | 14,973 | - | - | 105 | 229 | 5,569 | 9,070 | - | - | - | - | - |
| Retention(1) | 102,138 | 590 | 156 | 1,013 | 1,035 | 12,806 | 71,583 | 10,622 | 1,897 | 350 | 2,072 | 14 |
| Royalties | 164,755 | 5 | - | 441 | 1,866 | 25,903 | 125,555 | 10,945 | 40 | - | | - |
| Taxes (excluding income tax) | 14,792 | 1 | | 201 | 261 | 2,946 | | | 16 | | | |
| Interest expense | 54,888 | | 3 | 32 | | 1,985 | | | 1 | | | |
| Totals | 724,895 | 1,534 | 802 | 6,346 | 6,807 | 94,225 | 522,897 | 52,515 | 27,734 | 7,470 | 3,501 | 1,064 |

⁽¹⁾ Includes: Bomuss paid for acquisition of freeholders' mineral rights and some work commitments required to retain rights to Crown lands together with legal fees, land department costs, and rentals.

TABLE 6. Capital Expossionres for the Grude Petroleum and Natural Cas Industry(i) (6.1.0, 064), 1968

| | Canada | Maritimes | Quebec | Ontario | Manitoba | Saskatchewan | Alberta | British Columbia | Yukon, Northwest Territories and Arctic Islands | Off Shore East Coast | Off Shore Hudson Bay | Off Shore West Coast |
|---|------------------|-----------|---------|-------------|-----------|--------------|-----------------|---------------------|---|-------------------------|-------------------------|-------------------------|
| | | | | | | | \$'000 | | | | | |
| | | | | | | | | | | | | |
| Exploratory drilling | 135,970 | 211 | 357 | 1,100 | 812 | 13,222 | 87,613 | 14,890 | 8,825 | 482 | 16 | 8,442 |
| Development drilling | 100,325 | 155 | _ | 625 | 504 | 11,484 | 73,623 | 11,149 | 2,785 | *** | - | _ |
| Total drilling | | | | | | | | | | | | |
| Salaries and wages | 11,431 39,228 | - | 5 83 | 106 185 | 23 272 | 454 3,730 | 8,105 26,080 | 1,514 | 1,181 1,389 | 15 72 | 1 2 | 27 3,137 |
| Contractor and service payments | 185,636 | 366 | 269 | 1,434 | 1,021 | 20,522 | 127,051 | 20,247 | 9,040 | 395 | 13 | 5,278 |
| Totals | 236,295 | 366 | 357 | 1,725 | 1,316 | 24,706 | 161,236 | 26,039 | 11,610 | 482 | 16 | 8,442 |
| | | | | | | | | | | | | |
| Tangible well and lease equipment | 65,206 | 59 | - | 257 | 406 | 7,102 | 51,144 | 6,034 | 202 | 2 | - | - |
| Pipe lines and related facilities | 10,679 | - | - | 170 | 5 | 720 | 9,679 | 105 | | - | | - |
| Secondary recovery and pres- sure maintenance projects | 18,257 | | - | 259 | 162 | 5,003 | 10,435 | 2,022 | 376 | | | |
| Natural gas processing plants | 91,099 | | - | 190 | | 1,760 | 86,977 | 2,172 | - | - | - | - |
| Other buildings and machinery | 16,803 | 1 | - | 159 | 36 | 532 | 13,827 | 47 | 2,174 | 27 | _ | |
| Total capital formation | 438,339 | 426 | 357 | 2,760 | 1,925 | 39,823 | 333,298 | 36,419 | 14,362 | 511 | 16 | 8,442 |
| | | | | | | | | | | | | |
| Land sites | 1,190 | - | - | 7 | 24 | 323 | 836 | - | - | | | |
| Land acquisition(2) | 118,028 | _ | | _ | 58 | 5,223 | 93,778 | 15,110 | 3,859 | _ | | _ |
| Totals | 557,557 | 426 | 357 | 2,767 | 2,007 | 45,369 | 427,912 | 51,529 | 18,221 | 511 | 16 | 8,442 |
| | | 1 1 1 | 1 | a annul nii | | 1 | | - | -ku | | | |

Does not include construction in oil sands and bituminus sand pit processing plants.
 Includes cash bonuses paid for Crown permits, reservations and leases.

TABLE 7. Supply and Disposition of Natural Gas, 1968

| | New Brunswick | Quebec | Ontario | Manitoba | Saskat- chewan | Alberta | British Columbia | N.W.T. | Canada |
|--|------------------|------------|-------------------|-------------|---------------------|-------------------------|---------------------|---------|--------------|
| | | | | | Mcf. | | | | |
| | | 1 | 4 | l l | | | 1 | | 1 |
| Supply | | | | | | | | | |
| Gross new production | 112,967 | 137,573 | 12,065,829 | _ | 68,073,749 | 1,637,706,400 | 278,948,274 | 708,728 | 1,997,753,52 |
| Less field flared and waste | _ | _ | _ | - | 11,266,377 | 58,115,234 | 11,292,881 | 666,126 | 81,340,61 |
| let new production | 112,967 | 137,573 | 12,065,829 | - | 56,807,372 | 1,579,591,166 | 267,655,393 | 42,602 | 1,916,412,90 |
| deproduced | _ | - | _ | _ | - | - | - | - | - |
| Less injected and stored | | - | | ~ | 35,746 | 211,909,035 | 7,788,471 | - | 219,733,25 |
| Net withdrawals | 112,967 | 137,573 | 12,065,829 | ***** | 56,771,626 | 1,367,682,131 | 259,866,922 | 42,602 | |
| ield disposition and uses | 2,039 | _ | _ | | 3,876,510 | 10,987,759 | 5,243,678 | | 20,109.98 |
| athering system disposition and uses | | | 944 | _ | 755,932 | 6,896,670 | 621,380 | _ | 8,273,98 |
| Processing plant disposition and uses: | | | | | 2,477,733 | 190,105,645 | 6,418,703 | - | 199.002.08 |
| Other disposition and uses | | _ | | | 2,342,206 | 70,100,789 | 24,518,788 | - | 96,961,78 |
| Other uses | _ | - | _ | - | 834,121 | 941,141 | - | _ | 1,775,26 |
| Adjustment | _ | _ | | | 353,590 | -13,640,800 | -28,003 | - | -13,315,21 |
| | | | | | | | | | |
| Total marketable gas delivered | 110,928 | 137,573 | 12,065,829 | | 46,131,534 | 1,102,290,927 | 223,092,376 | 42,602 | 1,383,871,76 |
| Imports | _ | strage | 81,449,956 | _ | - | 104,119 | | _ | 81,554,07 |
| | | | | | | | | | |
| Totals | 110,928 | 137,573 | 93,515,785 | | 46,131,534 | 1,102,395,046 | 223,092,376 | 42,602 | 1,465,425,84 |
| and the form distributor storage | | | 49,074,564 | _1 | 4,158,687 | 2,494,136 | _ | _ | 55,727,38 |
| Receipts from distributor storage | _ | | 11,032 | 399,347 | 4,130,007 | 19,231 | 61, 195 | _ | 490.8 |
| Transfers - In | - | 46,405,497 | 297,025,270 | 470,598,795 | 518,669,714 | - | 322,017,497 | _ | |
| Out | 880 | _ | 46,405,497 | 297,025,270 | 470,598,795 | 840,687,211 | - | - | |
| Net transfer | _ | 46,405,497 | 250,619,773 | 173,573,525 | 48,070,919 | -840,687,211 | 322,017,497 | - | 4 |
| Miscellaneous deliveries | - | - | - | - | - | _ | | 42.602 | 42,60 |
| Total net utility supply | 110,928 | 46,543,070 | 393,221,154 | 173,972,872 | 98,361,140 | 264,221,202 | 545,171,068 | _ | 1,521,601,43 |
| Disposition | | | | | | | | | |
| | | | | | | | | | |
| Sales: | | | | | | 10.000.151 | 00 000 000 | | 015 071 55 |
| Residential | 40,491 | 12,106,791 | 91,665,862 | 17,735,633 | 20,889,858 | 49,960,154 | 22,972,763 | - | 215,371,59 |
| Commercial | 23,635 | 5,481,490 | 57,510,124 | 12,329,188 | 11,851,895 | 42,914,003 | 13,945,539 | _ | 144,055,87 |
| Industrial | | 26,573,543 | 158,924,309 | 15,178,041 | 48,262,934 | 108,061,486 | 49,577,855 | | 406,578,16 |
| Total sales | 64,126 | 44,161,824 | 308,100,295 | 45,242,862 | 81,004,687 | 200,935,643 | 86,496,157 | - | 766,005,59 |
| | | | 1 010 100 | 100 0/1 755 | | 0/ /0/ 202 | 440 445 455 | | 604 |
| Exports | - | 1,452,024 | 4,849,189 | 120,861,788 | 27 505 | 36,636,785 6.746.888 | 440,645,435 | _ | 6,797,7 |
| Other deliveries | - | _ | 23,241 48,986,569 | _ | 27,595 4,805,242 | 3,965,864 | | | 57,757,67 |
| Delivered to distributor storage | | 2,882 | 147,926 | 1,000,194 | 555,605 | 39.754 | 1,002,885 | _ | 2,749,24 |
| Pipeline pack fluctuation | | 122,488 | 24,974,730 | 4,925,177 | 11,670,514 | 7,895,181 | 12,815,027 | - | 62,403,1 |
| Pipeline losses etc | 46,802 | 803,852 | 6,139,204 | 1,942,851 | 297,497 | 8,001,087 | 4,211,564 | _ | 21,442,85 |
| Total disposition | 110,928 | 46,543,070 | 393,221,154 | 173,972,872 | 98,361,140 | 264,221,202 | 545,171,068 | | 1,521,601,43 |

| | New Brunswick | Ontario | Manitoba | Saskat- chewan | Alberta | British Columbia | Northwest Territories | Total Canadian sources | Total Foreign sources | Total all sources |
|---|----------------------------|----------------|--|---|---|--|--------------------------|---|---|---|
| Supply | | | | | barrels of 35 | Canadian gal | lons | - | | |
| Domestic production | | | | | | | | | | |
| Crude oil | 7,648 | 1,151,481 | 6,204,920 | 91,889,243 | 259,845,867 5,724,738 9,101,760 | 22,151,353 | 862,878 | 382,113,390 5,724,738 9,213,046 | * 7 9 4 * 8 | 382,113,390 5,724,738 9,213,046 |
| Totals | 7,648 | 1,151,481 | 6,204,920 | 91,889,243 | 256,468,845 | 22,151,353 | 751,592 | 378,625,082 | | 378,625,082 |
| Condensate | - | _ | = | 324,482 | 812,332 31,050,939 | 54,163 960,252 | = | 866,495 32,335,673 | | 866,495 32,335,673 |
| Net withdrawals | 7,648 | 1,151,481 | 6,204,920 | 92,213,725 | 288,332,116 | 23,165,768 | 751,592 | 411,827,250 | | 411,827,250 |
| Imports | | | | | , . , | | | 4 0 4 | 178,415,224 | 178,415,224 |
| Total supply | 7,648 | 1,151,481 | 6,204,920 | 92,213,725 | 288,332,116 | 23,165,768 | 751,592 | 411,827,250 | 178,415,224 | 590,242,474 |
| Disposition | | | | | | | | | | |
| Deliveries to refineries Atlantic Provinces Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Northwest Territories Totals Exports to U.S.A. Petroleum Administration | | 1,151,492 | 3,943,303 189,924 - - - 4,133,227 | 51,131,653 8,013,702 3,258,285 1,094,042 - - 63,497,682 | 63,787,902 7,292,648 18,937,845 35,762,699 20,450,257 | 20,142,860 | 750,664 | 120,014,350 15,496,274 22,196,130 36,856,741 40,593,117 750,664 235,907,276 | 39,968,277 137,954,651 469,967 - - - - 178,392,895 | 39,968,277 137,954,651 120,484,317 15,496,274 22,196,130 36,856,741 40,593,117 750,664 |
| District I | - - - | - | 2,004,695 | 1,242,566 27,253,785 | 20,068,857 48,889,522 9,707,803 56,575,214 | 3,487,819 | - - - - | 21,311,423 78,148,002 9,707,803 60,063,033 | 5044 5044 5444 | 21,311,423 78,148,002 9,707,803 60,063,033 |
| Totals | - | - | 2,004,695 | 28,496,351 | 135,241,396 | 3,487,819 | | 169,230,261 | _ | 169,230,261 |
| Inventories Opening - Field and plant Transporters' Closing - Field and plant Transporters' | 8,398 - 5,769 | | 76,236 46,481 71,621 94,621 | 437,106 5,049,851 453,587 5,059,221 | 1,702,610 20,619,430 1,646,987 26,105,946 | 22,888 1,492,251 - 12,704 1,325,394 | 70,304 73,232 | 2,317,542 27,208,013 2,238,492 32,585,182 | 359,835 - 359,835 | 2,317,542 27,567,848 2,238,492 32,945,017 |
| Net change | - 2,629 | _ | 43,525 | 25,851 | 5,430,893 | - 202,449 | 2,928 | 5,298,119 | | 5,298,119 |
| Deliveries to other purchasers Pipeline fuel Field and plant use Losses and adjustments | 10,406 - 63 - 192 | - - - 11 | 23,473 | 36,410 42,442 114,989 | 200,202 209,245 420,151 598,878 | 11,461 - - 273,923 | - 2,000 | 258,479 209,245 462,656 461,214 | 22,329 | 258,479 209,245 462,656 483,543 |
| Total disposition | 7,648 | 1,151,481 | 6,204,920 | 92,213,725 | 288,332,116 | 23,165,768 | 751,592 | 411,827,250 | 178,415,224 | 590, 242, 474 |

TABLE 9. Employees, Salaries and Wages for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1961-68

Note: Basis: Revised standard industrial classification and new establishment concept

| | | | Emp lo | yees | | | Sal | laries and wag | es |
|--|----------|----------|--|----------|---------|--------|--------------------------------------|--------------------------------------|-----------|
| | Producti | | Management, sional, te and adminis | chnical | Tota | 1 | Production and related workers | Management, profes- sional, | Total |
| | Male | Female | Male | Female . | Male | Female | Manufac- turing | technical and admin- istrative | |
| | | | numb | er | | | | \$ 000 | |
| 1961 | | | | 1 | | | | | |
| Total | 3,450 | 14 | 5,937 | 1,783 | 9,387 | 1,797 | 18,338 | 52,841 | 71,179 |
| | 3,430 | | | ,,,,, | | | | | |
| 1962 | 11 110 | | | | | | | | |
| Total | 3,463 | 27 | 5,965 | 1,777 | 9,428 | 1,804 | 19,542 | 55,783 | 75,325 |
| 1963 | | | | | | | | | |
| Total | 3,344 | 34 | 6,044 | 1,815 | 9,388 | 1,849 | 19,280 | 56,732 | 76,012 |
| | | | | | | | MT . | | |
| 1964 | | | | | | | | | |
| Total | 3,274 | 28 | 6,168 | 1,772 | 9,442 | 1,800 | 18,884 | 58,422 | 77,306 |
| 1965 | | | | | | | | | |
| Total | 3,242 | 20 | 6,510 | 2,045 | 9,752 | 2,065 | 19,689 | 64,998 | 84,687 |
| | | The last | | | | | | | |
| 1966 | 0.050 | 25 | 6 020 | 2 164 | 70 100 | 2 199 | 21 014 | 74,00 | 25,997 |
| Total | 3,350 | 25 | 6,839 | 2,164 | 10,189 | 2,189 | 21,914 | 74,003 | 13,799 |
| 1967 | | | | 1 | | | | | |
| ew Brunswick | 6 | | | | 6 | 40 | 23 | _ | 10 |
| uebec | | | 4 | 2 | 4 | 2 | _ | 33 | 33 |
| ntario | 161 | 2 | 78 | 20 | 239 | 22 | 996 | 906 | 1,902 |
| anitoba | 43 | | 21 | 2 | 64 | 2 | 287 | 152 | 439 |
| askatchewan | 537 | - | 337 | 92 | 874 | 92 | 3,680 | 3,875 | 7,555 |
| lberta | 2,542 | 16 | 6,721 | 1,995 | 9,263 | 2,011 | 18,977 | 78,411 | 97,388 |
| ritish Columbia | 232 | - | 247 | 27 | 479 | 27 | 1,879 | 2,371 | 4,250 |
| Tukon, Northwest Territories, Arctic | | | | | | | | | |
| Islands, Off shore and Hudson Bay | 12 | _ | 15 | 1 | 27 | 1 | 107 | 156 | 26; |
| Total | 3,533 | 18 | 7,423 | 2,139 | 10,956 | 2,157 | 25,949 | 85,906 | 111,85 |
| | | | | | | | | | |
| 1968 | | | | | Total (| | | | |
| New Brunswick | 6 | - | - | _ | 6 | | 24 | - | 24 |
| puebec | - | _ | 12 | 5 | 12 | 5 | | 147 | 147 |
| intario | 124 | 3 | 59 | 16 | 183 | 19 | 920 | 811 | 1,73 |
| anitoba | 37 | - | 21 | 1 | 58 | 1 | 256 | 169 | 42: |
| askatchewan | 482 | - 16 | 231 | 42 | 713 | 42 | 3,519 | 2,503 | 6,02 |
| lberta | 2,526 | 16 | 7,361 | 2,217 | 9,887 | 2,233 | 20,673 | 90,476 | 111,14 |
| British Columbia | 246 | _ | 116 | 14 | 362 | 14 | 2,124 | 1,153 | 3,27 |
| fukon, Northwest Territories and Arctic Islands | 26 | ~ | 18 | - | 44 | - | 243 | 132 | 37 |
| Off Shore — East coast | 1 | | 3 26 | - 2 | 4 26 | - 2 | 5 | 28 228 | 3: 22! |
| Total | 3,448 | 19 | 7,847 | 2,297 | 11,295 | 2,316 | 27,765 | 95,647 | 123,41 |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968

| | N | lumber of en | ployees | В | | Salaries | |
|---|----------------------------------|----------------|----------|-----|----------|--------------|--|
| | Male | Fema l | le Total | | tal | and wages | |
| CANADA | | | | | | \$'000 | |
| lanagement | | | | | | | |
| Working owners and partners | | | 40.00 | | - | | |
| Management | 72 | 28 | 8 | | 736 | | |
| Totals | 7: | 28 | 8 | | 736 | 14,870 | |
| rofessional, technical and administrative | | 103.0 | | | | | |
| Geophysicists | | 38 | 5 | | 443 | | |
| Geologists Petroleum and other engineers | 1,0 | 73 | 7 | | 963 | | |
| Other professional personnel | | 96 | 16 | | 712 | | |
| Sub-totals | 3,10 | 53 | 29 | | 3, 192 | 38,17 | |
| Constablished and machinish and | 1,6 | 92 | 131 | | 1,823 | | |
| Specialists and technicians Clerical and secretarial Other administrative personnel | 1,4 | | 2,114 | | 3,585 | | |
| Totals | 7, 1 | 19 | 2,289 | | 9,408 | 80,77 | |
| Moduction, field, plant and related operations | | | | | | | |
| Field, plant and related employees | 3,4 | 48 | 19 | | 3,467 | 27,76 | |
| Total employment, salaries and wages | 11,2 | 95 | 2,316 | | 13,611 | 123,41 | |
| | Male Fe | | | | | le | |
| Nonth-end production employment statistics | | | number | | | | |
| | | 3,386 | | | 19 | | |
| January 31 February 28 | | 3,344 | | | 17 | | |
| March 31 | | 3,347 | | | 17 | | |
| May 31 | | 3,531 | | | 18 18 | | |
| June 30 | | 3,557 | | | | | |
| July 31 August 31 | | 3,619 3,591 | | | 20 19 | | |
| September 30 | | 3,438 | | | 20 | | |
| October 31 | | 3,387 | | | 20 19 | | |
| December 31 | | 3,400 | | | 20 | | |
| | Jan, 1 - | Apr. 1 - | July 1 | | Oct. 1 - | Jan. 1 - | |
| | Mar. 31 June 30 Sept. 30 Dec. 31 | | | | | 1 | |
| Production man-hour statistics - Quarterly and annual | - | | 1 | | | 100 | |
| At work and paid | 1,723 | 1,762 | 1, | 675 | 1,716 | | |
| Not worked and paid | 61 | 122 | | 274 | 138 | | |
| Totals | 1,784 | 1,884 | 1. | 949 | 1,854 | 7,47 | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| | | Number of 6 | employees | | Salaries | | |
|--|---------------------|---------------------|----------------------|---------------------|---------------------|--|--|
| | Male | Fema | ale | Total | wages | | |
| 1 8 90 19 50 1 | 4 | | | | \$'000 | | |
| NEW BRUNSWICK | | | | | | | |
| en antino de como de del del del del del del del del del | | | | | | | |
| nagement | | | 3 | | | | |
| Working owners and partners | | - | _ | - | - | | |
| Management | | | _ | 4990 | | | |
| Totals | | | 400 | 1000 | - | | |
| ofessional, technical and administrative | | | | 140 | | | |
| Geophysicists | | _ | _ | _ | - | | |
| Geologists | | - | - | - | _ | | |
| Petroleum and other engineers | | _ | - | 1997 | _ | | |
| Other professional personnel | | | | | | | |
| Sub-totals | | | _ | ы – | _ | | |
| | | | | | | | |
| Specialists and technicians | | | | | _ | | |
| Other administrative personnel | | - | - | - | 460 | | |
| Totals | | - | - | - | - | | |
| oduction, field, plant and related operations | | | | falls at | | | |
| Field, plant and related employees | | 6 | | ő | 2 | | |
| Total employment, salaries and wages | | 6 | - | 6 | 2 | | |
| The state of the s | | Male | | Female | | | |
| onth-end production employment statistics | | | number | | | | |
| | | , | | | | | |
| January 31 February 28 | | 6 | | - | | | |
| March 31 | | 6 | | - | | | |
| April 30 | | 6 | | _ | | | |
| May 31 | | 6 | | - | | | |
| | | , | | | | | |
| July 31 | | 6 | | _ | | | |
| September 30 | | 6 | | _ | | | |
| October 31 | | 6 | | _ | | | |
| November 30 | | 6 | | 1000 | | | |
| | | | | | | | |
| | Jan. 1 - Mar. 31 | Apr. 1 - June 30 | July 1 - Sept. 30 | Oct. 1 - Dec. 31 | Jan. 1 - Dec. 31 | | |
| | ·ma. Ji | Julie 10 | | | DU. 31 | | |
| roduction man-hour statistics - Quarterly and annual | | | '000 hou | rs | | | |
| | 2 | 4 | | 3 | 1 | | |
| At work and paid | 3 | | | | | | |
| At work and paid | | | - | | - | | |

18.8.8.10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.1.C. 064), 1968 - Continued

| | | Number | of employe | es | | Salaries | |
|---|---------------------|--------------|------------|----------|---------------------|---------------------|--|
| | Male | - 30 | Fema le | T | otal | wages | |
| | | | | | | \$'000 | |
| QUEBEC | | | | | | | |
| lanagement | | | | | | | |
| Working owners and partners Management | | 3 | _ | | 3 | | |
| Totals | | 3 | _ | | 3 | 5 | |
| rofessional, technical and administrative | | | | | | | |
| Geophysicists Geologists Petroleum and other engineers Other professional personnel | | 1 1 1 1 | | | - 1 1 1 | | |
| Sub-totals | | 3 | | | 3 | 4 | |
| Specialists and technicians | | 1 4 1 | 5 | | 1 9 1 | | |
| Totals | | 9 | 5 | | 14 | 9 | |
| ros ction, field, plant and related operations | | | | | | | |
| Field, plant and related employees | | _ | _ | | - | | |
| Total employment, salaries and wages | | 12 | 5 | | 17 | 14 | |
| | | Male | | Female | | | |
| onth-end production employment statistics | | | nu | nber | | | |
| January 31 February 28 March 31 April 30 May 31 June 30 | | | | | | | |
| July 31 August 31 September 30 October 31 November 30 December 31 | - | | | | | | |
| | Jan. 1 - Mar. 31 | Apr. June | | | Oct. 1 - Dec. 31 | Jan. 1 - Dec. 31 | |
| Production man-hour statistics — Quarterly and annual | | | '000 | hours | | | |
| At work and paid | - | | - | | - | 1.7 | |
| Not worked and paid | _ | | - | ← | - | - | |
| Totals | _ | | _ | | _ | | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| Joseph Hillian Street Co. | N | umber of e | mployees | yees | | | | |
|--|----------|------------|--------------|--------|--------------|--|--|--|
| | Male | Fema | Female Total | | and wages | | | |
| | | | | | \$'000 | | | |
| A STATE OF THE STA | | | | | | | | |
| ONTARIO | | | | | | | | |
| | | | | | | | | |
| anagement | | | | | | | | |
| Harbina armana and newtrage | | | _ | - | | | | |
| Working owners and partners | 1 | 3 | 2 | 15 | | | | |
| Totals | 1 | 3 | 2 | 15 | 23: | | | |
| rofessional, technical and administrative | | | | | | | | |
| | | 1 | | 1 | | | | |
| Geophysicists | | 3 | - | 3 | | | | |
| Petroleum and other engineers | | 5 | _ | 8 | | | | |
| Other professional personnel | | | | | | | | |
| Sub-totals | 1 | .7 | | 17 | 22 | | | |
| Specialists and technicians | | 7 | _ | 7 | | | | |
| Clerical and secretarial | | 5 | 14 | 19 | | | | |
| Other administrative personnel | 1 | .7 | - | 17 | | | | |
| Totals | | 6 | 14 | 60 | 57 | | | |
| roduction, field, plant and related operations | | | | 141 | | | | |
| Field, plant and related employees | 17 | 24 | 3 | 127 | 91 | | | |
| Total employment, salaries and wages | 18 | 13 | 19 | 202 | 1,73 | | | |
| | | Male | | Female | | | | |
| | | | number | umber | | | | |
| onth-end production employment statistics | | | | | | | | |
| January 31 | | 124 | | | 3 | | | |
| February 28 | | 125 | | | | | | |
| March 31 | | 123 | | | 3 | | | |
| May 31 | | 123 | | | 3 | | | |
| June 30 | | 125 | | | 3 | | | |
| July 31 | | 125 | | | } | | | |
| August 31 | | 128 | | | } l | | | |
| September 30 October 31 | | 122 | | | 3 | | | |
| November 30 | -ADB | 122 | | | 3 | | | |
| December 31 | | 120 | | | 3 | | | |
| | Jan. 1 - | Apr. 1 - | July 1 - | | | | | |
| Mar. 31 June | | | Sept. 30 | | Dec. 31 | | | |
| roduction man-hour statistics — Quarterly and annual | | | '000 hou | rs | | | | |
| At work and paid | 64 | 62 | 59 | 61 | 24 | | | |
| Not worked and paid | 3 | 4 | 8 | 5 | | | | |
| | | | | | | | | |
| Totals | 67 | 66 | 67 | 06 | 26 | | | |

MABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| | | Number of a | mployees | 3 | Salaries | | |
|---|----------------------------------|---------------------|-----------------|-------------|---------------------|--|--|
| | Male | Fema | ale Total | | wages | | |
| | | | | | \$'000 | | |
| MANITOBA | | | | | | | |
| ianagement | | | | | | | |
| Working owners and partners | | _1 | - | - 1 | | | |
| Totals | | 1 | - | 1 | 6 | | |
| Professional, technical and administrative | | 1300 | | | | | |
| Geophysicists Geologists | | | - | _ | | | |
| Petroleum and other engineers | | 3 | = | 3 1 | | | |
| Sub-totals | | 4 | - | 4 | 48 | | |
| Specialists and technicians Clerical and secretarial Other administrative personnel | | 5 6 5 | _1 | 5 7 5 | | | |
| Totals | | 20 | 1 | 21 | 164 | | |
| reduction, field, plant and related operations | | | | | | | |
| Tield, plant and related employees | | 37 | _ | 37 | 250 | | |
| Total employment, salaries and wages | | 58 | 1 | 59 | 42 | | |
| | | Male | | Female | | | |
| Month-end production employment statistics | | | numb | er | | | |
| January 31 February 28 March 31 April 30 May 31 June 30 | 35 33 33 35 35 | | | | | | |
| July 31 | 44 44 40 35 35 35 | | | | | | |
| | Jan. 1 - Mar. 31 | Apr. 1 - June 30 | July l Sept. | | Jan. 1 - Dec. 31 | | |
| roduction man-hour statistica — Quarterly and annual | | | '000 ho | ours | - | | |
| At work and paid | 17 | 17 | | 17 17 | 68 | | |
| Not worked and paid | 1 | 1 | | 3 1 | 6 | | |
| Totals | 18 | 18 | | 20 18 | 74 | | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| | 9. | iumber of e | mployees | | Salaries | | |
|--|---------------------|---------------------|---------------------|----------|---------------------|--|--|
| The second section is | Male | Fema | le | Total | and wages | | |
| | | | | | \$'000 | | |
| SASKATCHEWAN | | | | | | | |
| anagement | | | | | | | |
| | | | | | | | |
| Working owners and partners Management | 1 | .5 | 1 | 16 | | | |
| Totals | | .5 | 1 | 16 | 26: | | |
| rofessional, technical and administrative | | | | | | | |
| Geophysicists | | 3 | _ | 3 | | | |
| Geologists | | .0 | - | 10 | | | |
| Petroleum and other engineers | | 7 | | 39 | | | |
| Sub-totals | | 9 | - | 59 | 68 | | |
| | | | | | | | |
| Specialists and technicians | | 1 | 40 | 54 81 | | | |
| Other administrative personnel | | 2 | 1 | 63 | | | |
| Totals | 21 | .6 | 41 | 257 | 2,24 | | |
| roduction, field, plant and related operations | | | | | | | |
| Field, plant and related employees | 48 | | | 482 | 3,51 | | |
| Total employment, salaries and wages | 71 | .3 | 42 | 755 | 6,02 | | |
| | | Fema | le | | | | |
| | | | numbe | ber | | | |
| onth-end production employment statistics | | | 1 | | | | |
| January 31 | | 476 | | - | | | |
| February 28 | 10- | 461 465 | | | | | |
| April 30 | | 490 | | _ | | | |
| May 31 | | 527 508 | | | | | |
| July 31 | | 511 | | _ | | | |
| August 31 | | 504 | | - | | | |
| September 30 | | 482 463 | | _ | | | |
| November 30 | | 449 | | 400 | | | |
| December 31 | | 449 | | | | | |
| | Jan. 1 - Mar. 31 | Apr. 1 - June 30 | July 1 - Sept. 3 | | Jan. 1 - Dec. 31 | | |
| | | | '000 ho | urs | | | |
| roduction man-hour statistics — Quarterly and annual | 2/2 | ara | | | 1 | | |
| At work and paid | 247 | 253 | 23 | | 96 | | |
| | - 8 | 20 | 3 | 18 | 8 | | |
| Totals | 255 | 273 | 27 | 2 244 | 1,04 | | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| | | Number of | employees | | Salaries | | |
|--|------------|-------------|-----------|----------|----------|--|--|
| | Male | Fen | nale | Total | wages | | |
| | | | | | \$'000 | | |
| ALBERTA | | | | | | | |
| Charles A.P.S | | | | | | | |
| danagement | J., 18 | | | | | | |
| Working owners and partners | | _ | | - | | | |
| Management | | 687 | 5 | 692 | | | |
| Totals | | 587 | 5 | 692 | 14,195 | | |
| Professional, technical and administrative | | | | | | | |
| Geophysicists | 1 | 434 | 5 | 439 | | | |
| Geologists | | 940 | 7 | 947 | | | |
| Petroleum and other engineers | ! | 998 | 16 | 999 | | | |
| | | | | | | | |
| Sub-totals | 3,1 | 045 | 29 | 3,074 | 36,795 | | |
| Specialists and technicians | 1.5 | 580 | 131 | 1,711 | | | |
| Clerical and secretarial | 1,3 | 391 | 2,038 | 3,429 | | | |
| Other administrative personnel | | 558 | 14 | 672 | | | |
| Totals | 6,0 | 674 | 2,212 | 8,886 | 76,28 | | |
| reduction, field, plant and related operations | | | | | | | |
| Mald, plant and related employees | 2, | 526 | 16 | 2,542 | 20,67 | | |
| Total employment, salaries and wages | 9,1 | 887 | 2,233 | 12,120 | 111,14 | | |
| | | Male | | Female | | | |
| fonth-end production employment statistics | | | numbe | r | | | |
| January 31 | | 0.106 | 1 | 1.0 | | | |
| February 28 | 100 | 2,486 | | 16 14 | | | |
| March 31 | -5270 | 2,457 | | 14 | | | |
| May 31 | | 2,492 2,589 | | 14 15 | | | |
| June 30 | | 2,623 | 100 | 15 | | | |
| July 31 | | 2,656 | | 17 | | | |
| August 31 | | 2,621 | A. 1 | 16 | | | |
| September 30 October 31 | | 2,506 | | 17 17 | | | |
| November 30 | | 2,477 | | 16 | | | |
| December 31 | | 2,480 | | 17 | | | |
| | Jan. 1 - | Apr. 1 - | July 1 | | Jan. 1 - | | |
| | Mar. 31 | June 30 | Sept. 3 | | Dec. 31 | | |
| roduction man-hour statistics — Quarterly and annual | '000 hours | | | | | | |
| At work and paid | 1 045 | 1 | | | | | |
| | 1,269 | 1,300 | 1,24 | | 5,076 | | |
| Not worked and paid | 44 | 91 | 20 | 5 97 | 437 | | |
| Totals | 1,313 | 1,391 | 1,44 | 7 1,362 | 5,513 | | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| The state of the first of the f | N | Number of employees | | | Salarian and | |
|--|----------|---------------------|----------------------|---------------------|---------------------|--|
| | Male | Fema | le | Total | wage | |
| | | | | | \$'000 | |
| BRITISH COLUMBIA | | | | | | |
| | | | | | | |
| anagement | | | | | | |
| Working owners and partners | | 7 | _ | 7 | | |
| Totals | | 7 | _ | 7 | 90 | |
| rofessional, technical and administrative | | | | 4.6 | | |
| Geophysicists | | 2 | | | | |
| Geologists Petroleum and other engineers | 1 | 14 | - | 14 | | |
| Other professional personnel | | 8 | | | 251 | |
| Sub-totals | | 24 | - | 24 | 255 | |
| Specialists and technicians | | 18 | | 18 | | |
| Clerical and secretarial Other administrative personnel | | 23 43 | 14 | 37 43 | | |
| Totals | 10 | 09 | 14 | 123 | 1,060 | |
| roduction, field, plant and related operations | | | | | | |
| Field, plant and related employees | 2- | 46 | _ | 246 | 2,12 | |
| Total employment, salaries and wages | 3 | 62 | 14 | 376 | 3,27 | |
| 72.72 | | Fema | le | | | |
| | | | number | | | |
| Month-end production employment statistics | | | | | | |
| January 31 February 28 | | 254 254 | | _ | | |
| March 31 | | 256 239 | | | | |
| May 31 | | 250 255 | | _ | | |
| June 30 | | | | | | |
| July 31 | | 251 250 | | | | |
| September 30 | | 233 235 | | _ | | |
| November 30 | 236 | | | | | |
| | Jan. 1 - | Apr. 1 - | July 1 - Sept. 30 | Oct. 1 - Dec. 31 | Jan. 1 - Dec. 31 | |
| | Mar, 31 | 220. 34 | | | | |
| Production man-hour statistics - Quarterly and annual | | | '000 hou | 10 | 1 | |
| At work and paid | 120 | 125 | 104 | 118 | 46 | |
| | 5 | 6 | 17 | 9 | 3 | |
| Not worked and paid | | | | | - | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Inudstry (S.I.C. 064), 1968 - Continued

| | | Number of | employees | | Salaries | | |
|--|----------------------|-----------|-----------|--------------|--------------|--|--|
| | Male | Fem | ale | Total | and wages | | |
| THE RESERVE OF THE PARTY OF THE | | | | | \$'000 | | |
| YUKON, NORTHWEST TERRITORIES AND ARCTIC ISLANDS | | | | | | | |
| TOTAL MONTH TOTAL SAND ANCIE ISLANDS | | | | The state of | | | |
| anagement | | | | - | | | |
| Working owners and partners | | 1 | _ | 1 | | | |
| Totals | | 1 | - | 1 | | | |
| rofessional, technical and administrative | | | | | | | |
| Geophysiciats | | | | | | | |
| Geologists | = 1- | 1 4 | | | | | |
| Petroleum and other engineers | - | | - | - | | | |
| Other professional personnel | | 1 | - | 1 | | | |
| Sub-totala | | 1 | - | 1 | 1 | | |
| Specialsits and technicians | 1 | 4 | _ | 14 | | | |
| Clerical and secretarial Other administrative personnel | | 2 | _ | - 2 | | | |
| Totals | 1 | 7 | - | 17 | 12 | | |
| of mation, field, plant and related operations | | | | | | | |
| Field, plant and related employees | 2 | 6 | _ | 26 | 24: | | |
| Total employment, salaries and wages | 4 | 4 | - | 44 | 37 | | |
| | | Male | | Female | | | |
| | | | numbe | umber | | | |
| onth-end production employment statistics | | | | | | | |
| January 31 February 28 | | 6 | | _ | | | |
| March 31 | 61 | 6 | - 10 | _ | | | |
| April 30 | | 1 | | | | | |
| May 31 | | _1 | | _ | | | |
| | | | | | | | |
| July 31 | 100 | 25 35 | | | | | |
| September 30 | | 45 | | _ | | | |
| October 31 November 30 | 160 | 55 65 | | - | | | |
| December 31 | | 75 | | | | | |
| | Jan. 1 - | Apr. 1 - | July 1 - | | Jan. 1 - | | |
| | Mar. 31 June 30 Sept | | | Dec. 31 | Dec. 31 | | |
| oduction man-hour statistics — Quarterly and annual | | | '000 ho | ırs | | | |
| At work and paid | 3 | 1 | 1 | 4 26 | 4 | | |
| Not worked and paid | | _ | 1 | 4 8 | 1: | | |
| | | | | | | | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Continued

| | 1 | Number of e | mployees | | Salaries |
|---|---------------------|---------------------|----------------------|---------------------|---------------------|
| | Male | Fema | le T | otal | and wages |
| | | | | | \$1000 |
| | | | | | |
| OFF SHORE EAST COAST | | | | | |
| nagement | | | | | |
| Working owners and partners | | - | - | - | |
| Management | - | | | _ | |
| Totals | | | | | |
| ofessional, technical and administrative | | | | 17.7 | |
| Geophysicists | | - | - | _ | |
| Geologists | | | - | | |
| Other professional personal | | | | | |
| Sub-totals | | | | | |
| Specialists and technicans | | 3 | _ | _3 | |
| Other administrative personnel | | - | - | - | |
| Totals | | 3 | - | 3 | |
| oduction, field, plant and related operations | | 1 | | | |
| Field, plant and related employees | | 1 | _ | 1 | |
| Total employment, salaries and wages | | 4 | - | 4 | |
| | | Fema. | le | | |
| onth-end production employment statistics | | | number | | |
| January 31 | | _ | | | |
| February 28 | | _ | | _ | |
| April 30 | | - 1 | 100 | _ | |
| June 30 | | 1 | | - | |
| July 31 | | 1 2 | | - 77 | |
| September 30October 31 | | 2 | | _ | |
| November 30 December 31 | | | | = | |
| | | | | | |
| | Jan. 1 - Mar. 31 | Apr. 1 - June 30 | July 1 - Sept. 30 | Oct. 1 - Dec. 31 | Jan. 1 - Dec. 31 |
| -duction are how shortleting - Quarterly and some? | | | '000 hours | 3 | |
| oduction man-hour statistics — Quarterly and annual At work and paid | | | | | |
| Not worked and paid | | - | _ | | 0 |
| Totals | _ | | 1 | _ | |

TABLE 10. Payroll, Employment and Man-hours for the Crude Petroleum and Natural Gas Industry (S.I.C. 064), 1968 - Concluded

| | 1 | lumber of en | nployees | | Salaries | | |
|---|--------------|--------------|----------|--------|----------|--|--|
| | Male | Female | | Total | wages | | |
| | | | | | \$'000 | | |
| | | | | | | | |
| OFF SHORE WEST COAST | | | | 500 E | | | |
| anagement | | | | | | | |
| | | | | 77 | | | |
| Working owners and partners | - 1 | | _ | 1 | | | |
| Totals | | | - | 1 | 2 | | |
| | | | | | | | |
| rofessional, technical and administrative | | | | | | | |
| Geophysicists | _ | | 949 | | | | |
| Geologists | _ | | | - | | | |
| Petroleum and other engineers | 10 | | - | 10 | | | |
| Other professional personal | | | | | 1.0 | | |
| Sub-totals | 10 | , | _ | 10 | 12 | | |
| Special take and hashnin lane | | | | 9 | | | |
| Specialists and technicians | | | 2 | 3 | | | |
| Other administrative personnel | | 5 | - | 5 | | | |
| Totals | 2: | 5 | 2 | 27 | 20 | | |
| roduction, Field, plant and related operations | | | | | | | |
| Field, plant and related employees | - | | - | - 00 | | | |
| Total employment, salaries and wages | 20 | 6 | 2 | 28 | 22 | | |
| | | Male | | Fem | ale | | |
| | | | number | aber | | | |
| onth-end production employment statistics | | | | | | | |
| January 31 February 28 | | - | | _ | | | |
| March 31 | | - | | _ | | | |
| April 30 | | _ | | | | | |
| June 30 | | - | | | | | |
| July 31 | | - | | New | | | |
| August 31 | | 1 | | _ | | | |
| October 31 | | | | _ | | | |
| November 30 December 31 | | | 13 | - | | | |
| | Jan. l | Apr. 1 | July | Oct. 1 | Jan. 1 | | |
| | - Mar. 31 | June 30 | Sept. | - | - | | |
| | | 0 - ME 30 | '000 hou | | | | |
| Production man-hour statistics — Quarterly and annual | | | | | | | |
| Not worked and paid | _ | - | | | | | |
| | | | | | | | |
| Totals | _ | | | | | | |





