MINUTE ITEM 48
This Calendar Item No. 48
was submitted for information only, no action thereon being necessary.

INFORMATIVE
CALENDAR ITEM

A 57, 58

S 29

48

12/13/88
W 17094
Naughton

FIRST FOUR MONTHS REPORT 1988-89 PLAN OF DEVELOPMENT AND OPERATIONS AND BUDGET, LONG BEACH UNIT, WILMINGTON OIL FIELD, LOS ANGELES COUNTY.

On October 31, 1988, the end of the first four months of the 1988-89 fiscal year for the Long Beach Unit Plan of Development and Operations and Budget, the adjusted budget was $136,364,000 including administrative overhead costs. This amount consisted of the $132,970,000 approved by the Commission on April 12, 1988 (Minute Item 52) plus $3,394,000 carried over into 1988-89 to fund uncompleted 1987-88 projects still in progress on June 30, 1988.

During the first four months, two requests from the Unit Operator (City of Long Beach) to transfer funds totalling $410,000 between line item accounts within the existing budget were approved. One plan supplement was approved to provide emergency repairs to a floating dock for crew boat landing on Pier J. The cost of this project, estimated to be $28,000, was funded within the existing approved budget.

Expenditures during the first four months amounted to $34,912,008 or 25.6 percent of the total budget. By the end of the first five months, one third of the Budgeted funds will have been expended. A plot of Unit expenditures through the first four months is shown on Exhibit 1.

Oil production amounted to 6.437 million barrels and gas production was 1,204,221 million cubic feet. A plot of Unit oil rates is shown on Exhibit 2. At an average value of $10.81 per barrel of oil and $1.88 per thousand cubic feet of gas, the total value of Long Beach Unit production during the first four months was $71.848 million. This was slightly lower than the $72.047 million projected when the Unit budget was approved in

(ADDED 12/12/88 - pgs. 257-257.28)

April 1988. At that time anticipated prices for Long Beach Unit production during the first four months were expected to average $11.00 per barrel of oil and $2.25 per thousand cubic feet of gas. A plot of Unit oil prices is shown on Exhibit 3. The lower prices were offset by higher oil rates. Net income from Unit operations during the first four months amounted to $37.199 million. This is approximately $5.2 million more than predicted at the beginning of the budget year, and is due mainly to the fact that expenditures in the first four months were $5.3 million lower than projected. With the oil price for Unit oil at $9.25 per barrel in November, the gross income for the first five months will be below the Budget estimates. Net income will be higher than estimated due to lower expenditures than estimated. The relationship between oil prices and revenue to costs are shown on Exhibits 3 and 4. Oil prices should improve in second half of the year.

Significant accomplishments in each budget program during the first four months were:

A. DRILLING AND DEVELOPMENT PROGRAM

Two drilling rigs were active during the first four months. Three new producing wells were drilled and four idle wells were redrilled, three producers and one injector. This work added approximately 600 barrels of oil per day to Unit production. One injection well was recompleted to an upper subzone. One injection well, idle since January 1988, was permanently abandoned because of poor mechanical condition. Drilling activity was in the Ranger, Terminal 90 North, Upper Terminal and Lower Terminal Zones.

Recent day to day operating problems in the drilling and redrilling of wells prevented the anticipated return from the Drilling and Development Program expenditures. Two new wells and one redrilled well were not capable of producing after completion and an expenditure of over $1.7 million.

The adjusted budget for the Drilling and Development Program was $12,339,000 of which $4,609,619 (37.4%) were expended by October 1, 1988. A plot of monthly expenditures is shown on attached Exhibit 5.

B. OIL AND GAS PRODUCTION PROGRAM

The Unit produced 6.437 million barrels of oil and 1,204,221 million cubic feet of gas during the first four months. Average rates were 52,333 barrels of oil and 9,790

thousand cubic feet of gas per day versus projected rates of 51,823 B/D oil and 9,847 MCF/D gas. The program expenditures plotted as $ per barrel of oil are shown on Exhibit 6. The principal function of the program is to produce gross fluid. The gross production was over 58 million barrels during the period, averaging 472,688 B/D for the first four months. The gross rates and program expenditures plotted as $ per barrel gross fluid are shown on Exhibit 7. The continuing decline in active producing wells is shown on Exhibit 8; the future trend will be established by oil prices.

Major non-routine projects in progress include the construction of two 30,000 barrel oil storage tanks at the Pier J-6 site, replacement of deteriorated electrical solenoid cables to well cellars on Islands Grissom and Freeman, remanufacture of high voltage switchgear circuit breakers on all islands and replacement of the auxiliary motor control center which operates the decorative waterfall on Island Grissom.

The adjusted budget for the Oil and Gas Production Program was $62,132,000 of which $15,917,280 (25.6%) were expended at the end of the first four months. A plot of monthly expenditures is shown on attached Exhibit 9.

C. ENHANCED RECOVERY AND STIMULATION PROGRAM

No funds were budgeted for 1988-89 and no activity took place in this program.

D. WATER INJECTION PROGRAM

A total of 62.312 million barrels of water were injected during the first four months. The average rate was 506,604 barrels per day which was one percent lower than the 511,250 B/D projected. Gross produced fluids amounted to 58.140 million barrels so the injection/production fluids volume ratio averaged 107 percent for the four months period. A plot of water injection rates and program expenditures as $ per barrel of water injected are shown on Exhibit 10.

Major non-routine projects in progress included the purchase of three high efficiency water injection pump motors and the installation of covers on all skim basins for compliance with regional air quality regulations.

The adjusted budget for the Water injection Program amounted $26,582,000 of which $7,066,676 (26.6%) were expended at the end of the first four months. A plot of monthly expenditures is shown on attached Exhibit 11.

E. MANAGEMENT PROGRAM

The major portion of this program consists of expenditures for salaries, benefits and expenses of the field contractor' management and administrative personnel, engineering and consultant services, data processing equipment purchases and operating costs, office expenses including rental, supplies and services, and the Unit Operator's billable costs. Other significant items include Unit equity expense, special management projects, townlot participation administration and special studies related to Unit waste management and disposal. A plot of the Management Program expenditures as $ per barrel of oil is shown on Exhibit 12.

Projects in progress during the first four months included the purchase of computer equipment and software for reservoir modeling studies and the purchase and installation of a computerized maintenance system for the field contractor. Also, the Unit made a first phase settlement for site clean up at a waste disposal site previously used by the field contractor for Unit waste disposal. This was provided for in the First Modification.

The adjusted budget provided $18,843,000 for the Management Program of which $5,364,105 (28.5%) were expended during the first four months. A plot of monthly expenditures is shown on Exhibit 13.

F. TAXES, PERMITS AND LAND RENTAL PROGRAM

Budget funds for the Taxes, Permits and Land Rental Program is 1988-89 amount to $16,468,000 of which $1,954,325 (11.9%) were expended. The major cash outflow in this program occurs with tax payments in December and April of the budget year. Expenditures for the fiscal year in this program are currently projected to be about 85% of the amount budgeted. That would leave a surplus of over $2 million. The surplus is expected to accrue mainly from a decrease in mining rights taxes. The current market value of the Long Beach Unit at tax assessment date was significantly lower than the Proposition 13 value because of the decline of over $2 per barrel in crude oil prices

from the previous year. A 1.5 percent increase in the discount rate for 1988-89 also had a material impact on the decrease in mining rights taxes. A plot of program expenditures is shown on Exhibit 14.

A summary of Long Beach Unit 1988-89 Plan and Budget activity during the first four months ending October 1, 1988 (in thousands of dollars) is:

	Program	Adjusted Budget	Expenditures to 10/31/88
A.	Drilling and Development	$ 12,339	$ 4,609.6 (37.4%)
B.	Oil and Gas Production	62,132	15,917.3 (25.6%)
C.	Enhanced Recovery and Stimulation	-0-	-0-
D.	Water Injection	26,582	7,066.7 (26.6%)
E.	Management	18,843	5,364.1 (28.5%)
F.	Taxes, Permits and Land Rentals	16,468	1,954.3 (11.9%)
	Totals	$136,364	$34,912.0 (25.6%)

The 1988-89 Plan and Budget provides for electrical energy billings of $25,318,000 for the plan year. This amount is based on predicted use of 410,610,000 kilowatt hours (kwhs) at an average rate charge of 6.120 cents/kwh. Actual billings for the first four months amounted to $7,912,263 for 131,057,400 kwhs usage, for an average rate charge of 6.037 cents per kwh. The lower than predicted rate resulted from decreased Southern California Edison rates which were as low as 3.714 cents per kwh in the June billing. Three budget line item activities are major users of electrical energy. They are Hydraulic Lift Surface, Submersible Lift Surface and Water Injection System. Together, these three items account for about 80 percent of the Unit's total electrical energy costs. Plots of monthly expenditures in these items are shown on attached Exhibits 15, 16 and 17. Exhibit 18 shows a comparison between total Unit fluids (gross production plus water injection) and electrical

energy consumed on the islands and Pier J. Exhibit 19 compares total islands fluids with electrical energy consumed on the islands and Exhibit 20 shows the same islands energy consumption compared with the islands gross produced fluids and injected water. Exhibit 21 shows total island fluids and island energy consumption in kwh per barrel of total fluids handled. Exhibit 22 shows a plot of electrical energy unit costs in cents per kwh to October 1, 1988 and includes a projection of such costs for the remainder of the 1988-89 budget year. Exhibit 23 is a plot of the total expenditures of the Oil and Gas Production, Water Injection and Management programs as a $ per barrel of oil cost.

AB 884: N/A.

EXHIBITS:

1. Total Budget Expenditures.
2. Oil Production Rate.
3. Oil Price and Costs.
4. Oil Revenue and Costs.
5. Drilling and Development Program Expenditures (Program A).
6. Program B Costs $ Per Barrel Oil.
7. Program B Costs $ Per Barrel Gross fluid.
8. Producing Well Count.
9. Oil and Gas Production Program Expenditures (Program B).
10. Program D Costs $ Per Barrel Injected Water.
11. Water Injection Program Expenditures (Program D).
12. Program E Costs $ Per Barrel Oil.
13. Management Program Expenditures (Program E).
14. Taxes, Permit and Land Rental Program Expenditures (Program F).
15. Hydraulic Lift - Surface Expenditures.

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16. Submersible Lift - Surface Expenditures.

17. Water Injection System Expenditures.

18. Comparison of Total Fluids and Energy Consumed (L.B. Unit Total).

19. Comparison of Total fluids and Energy Consumed (L.B. Unit Islands).

20. Comparison of Gross Production, Water Injection and Energy Consumed (L.B. Unit Islands).

21. Electrical Energy Use Kwh Per Barrel of Total Fluids Produced and Injected (L.B. Unit Islands).

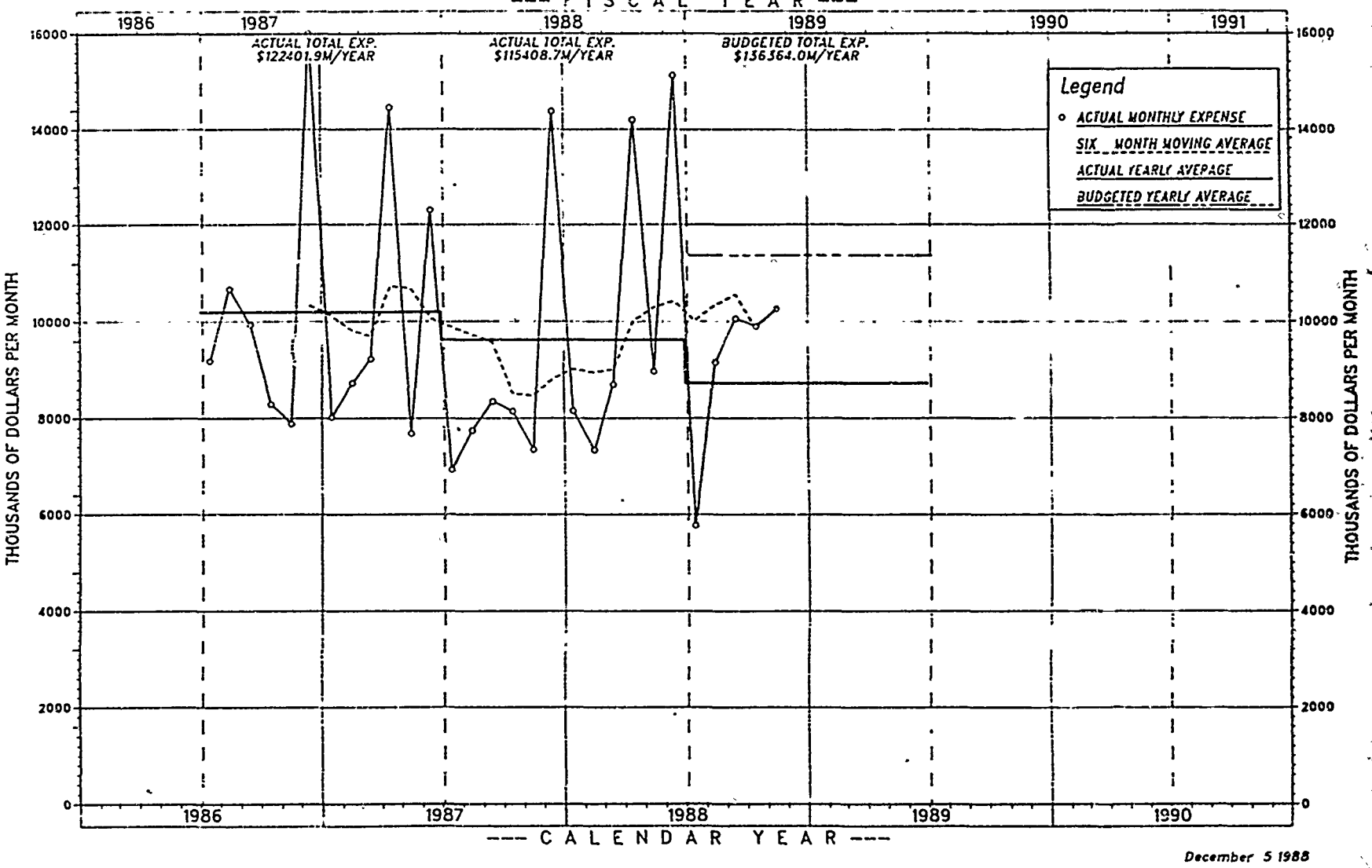
22. Electrical Energy Costs.

23. Program B, D & E Costs Per Barrel Oil.

L O N G B E A C H U N I T

EXHIBIT 1

TOTAL BUDGET -- INCLUDING ADMIN. OVERHEAD



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LONG BEACH UNIT
OIL PRODUCTION RATE

EXHIBIT 2

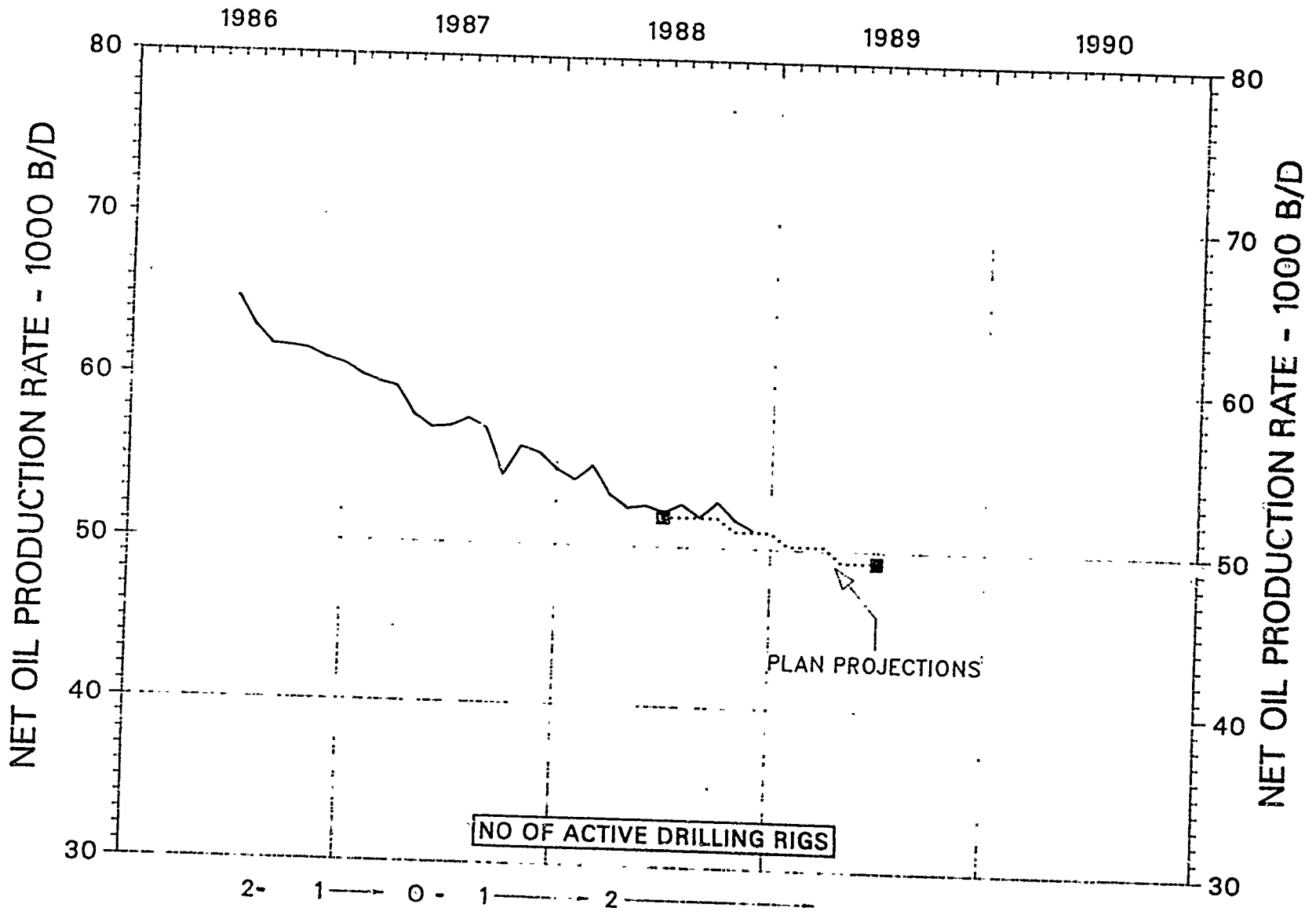

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EXHIBIT 3

LONG BEACH UNIT

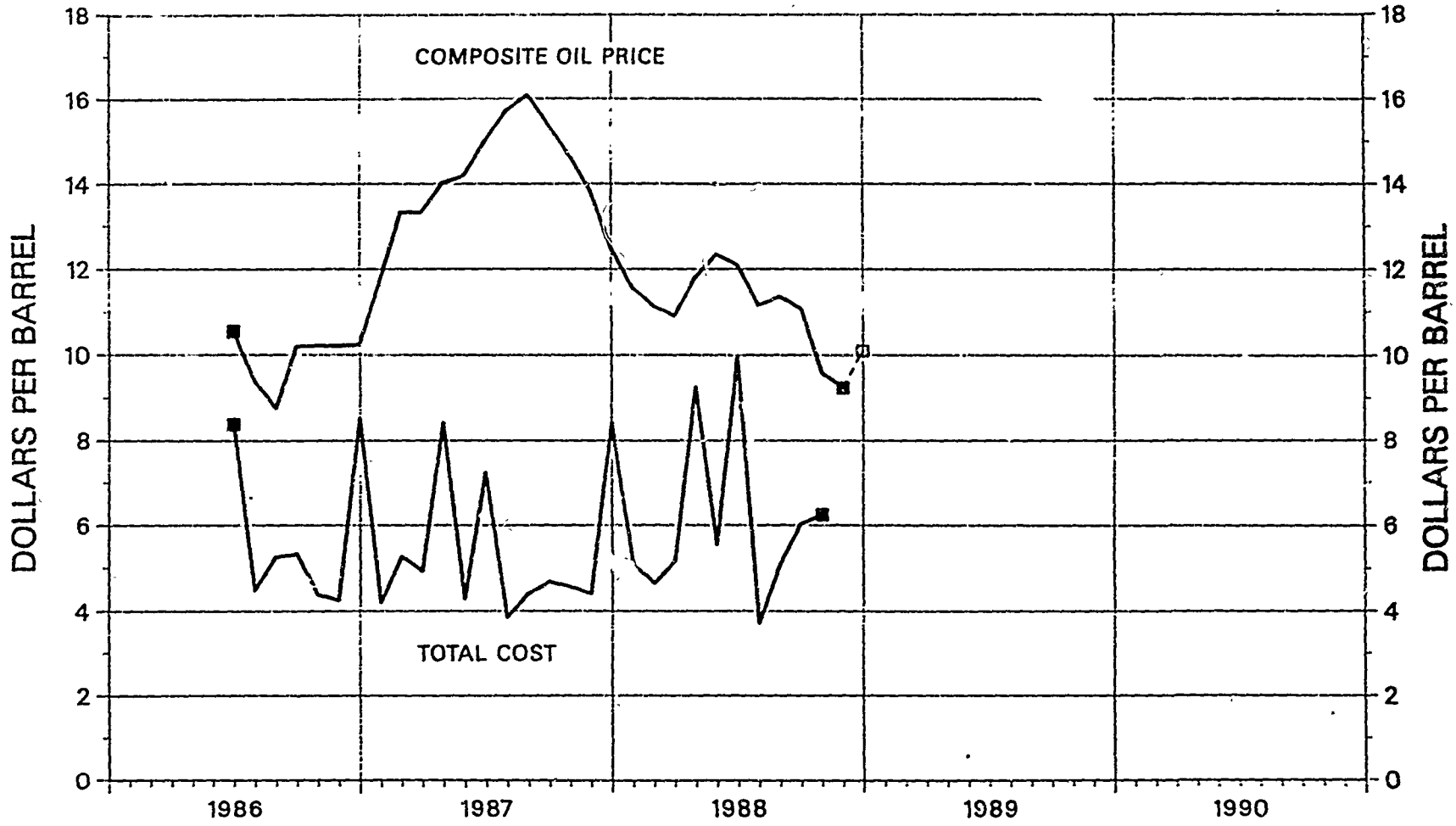

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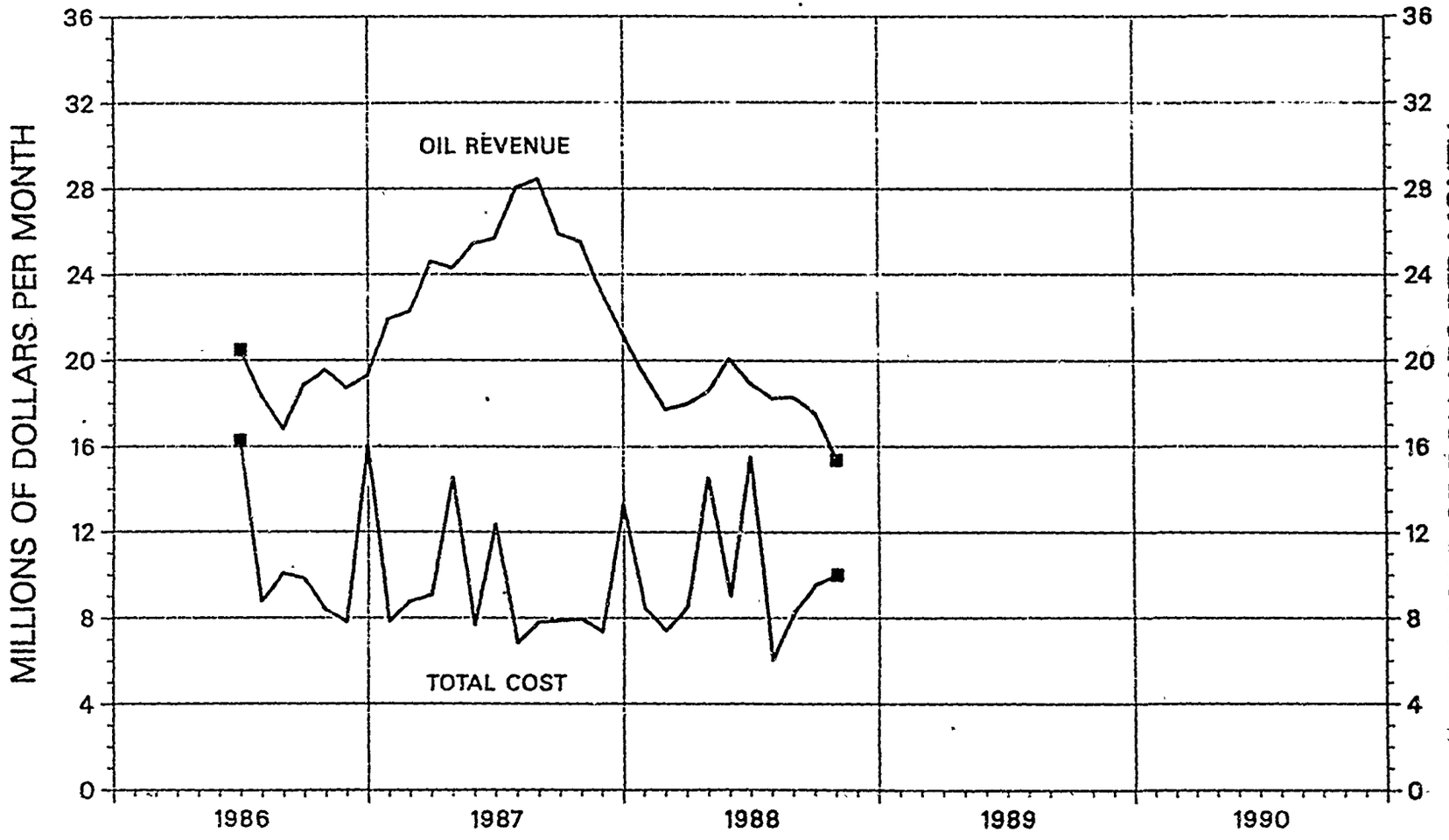
EXHIBIT 4

LONG BEACH UNIT



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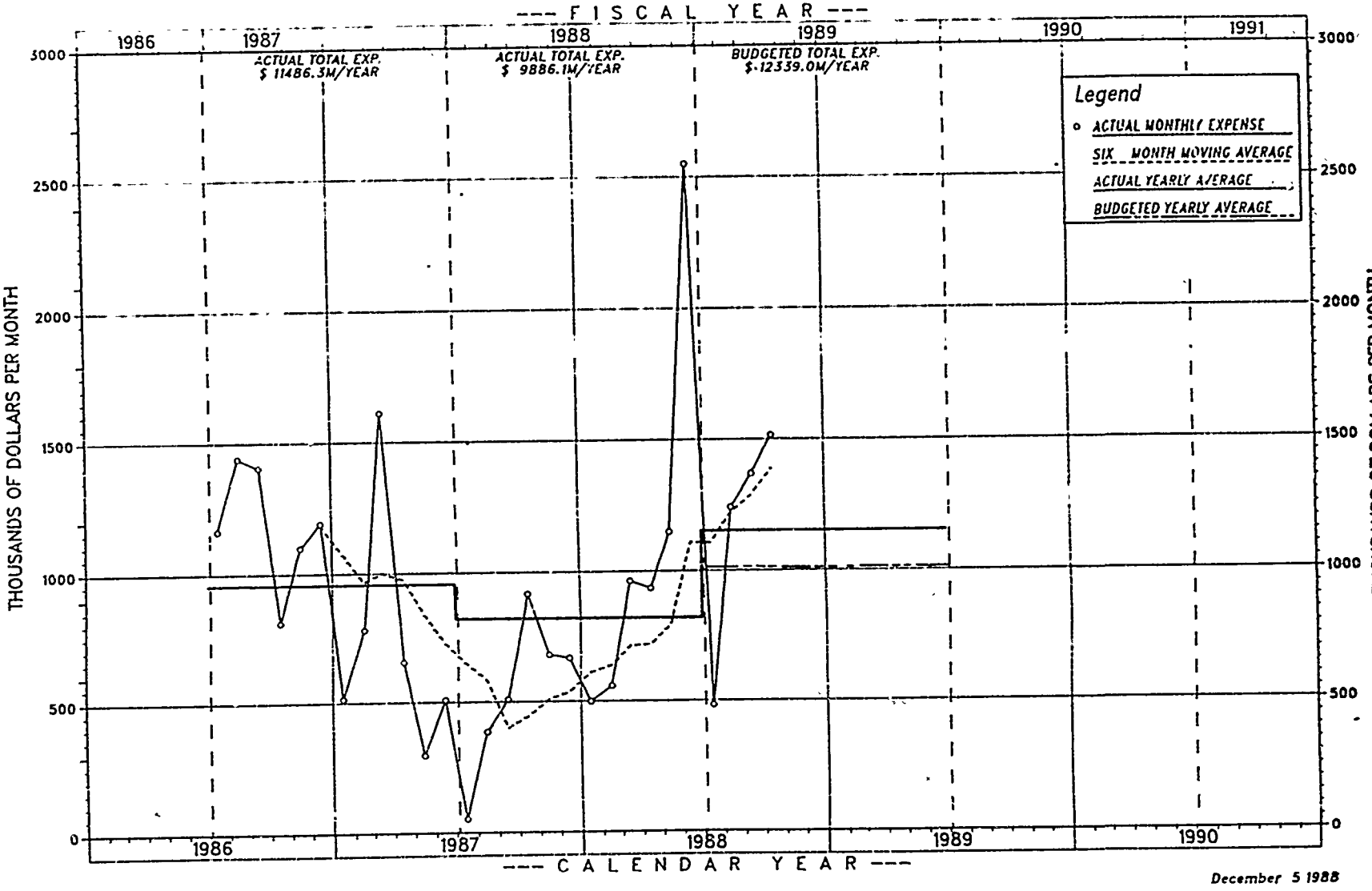
LONG BEACH UNIT
DRILLING & DEVELOPMENT PROGRAM
TOTAL

EXHIBIT 5



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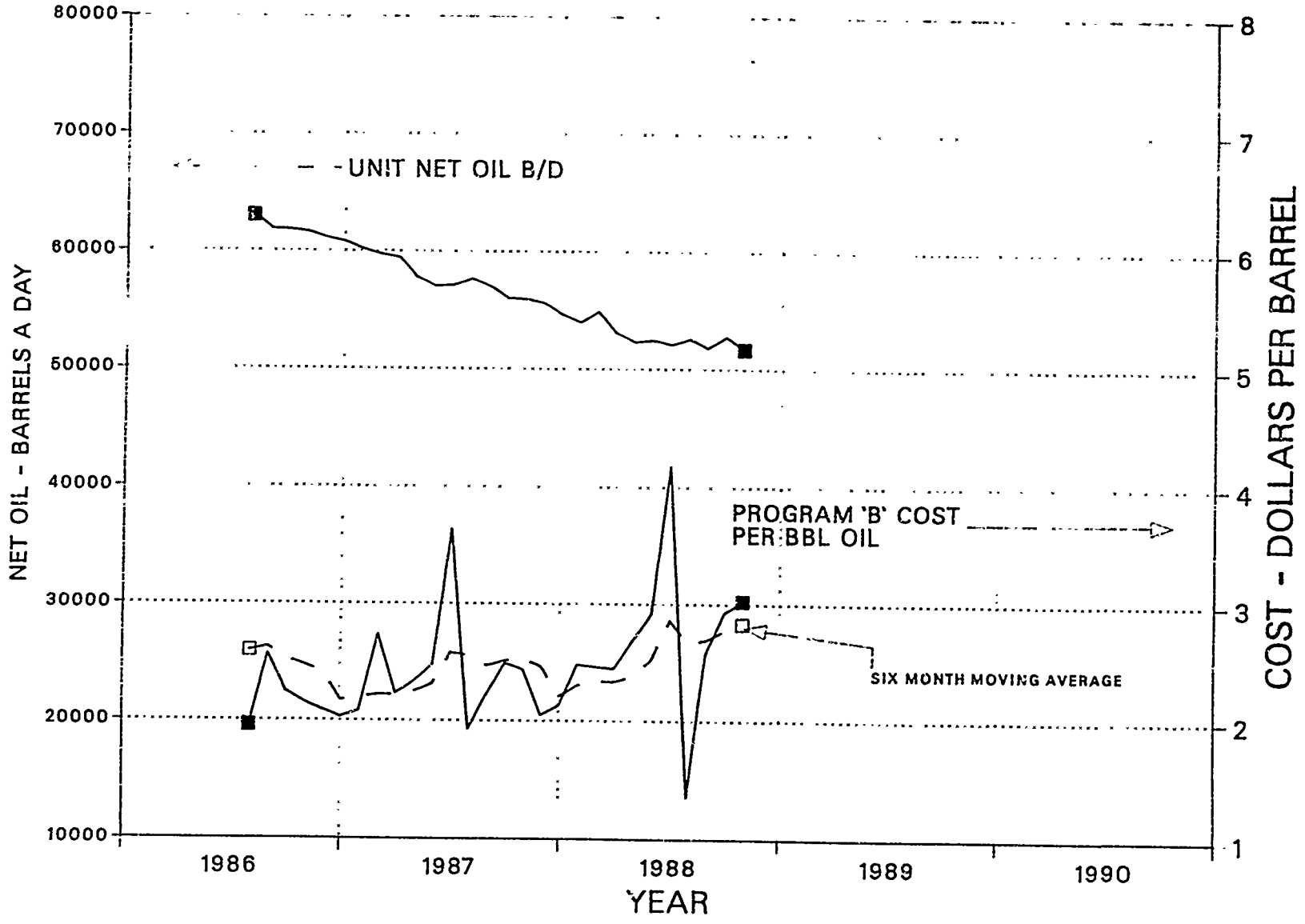
OIL & GAS PRODUCTION PROGRAM COSTS
EXPRESSED AS $/BBL OIL

EXHIBIT 6

LONG BEACH UNIT



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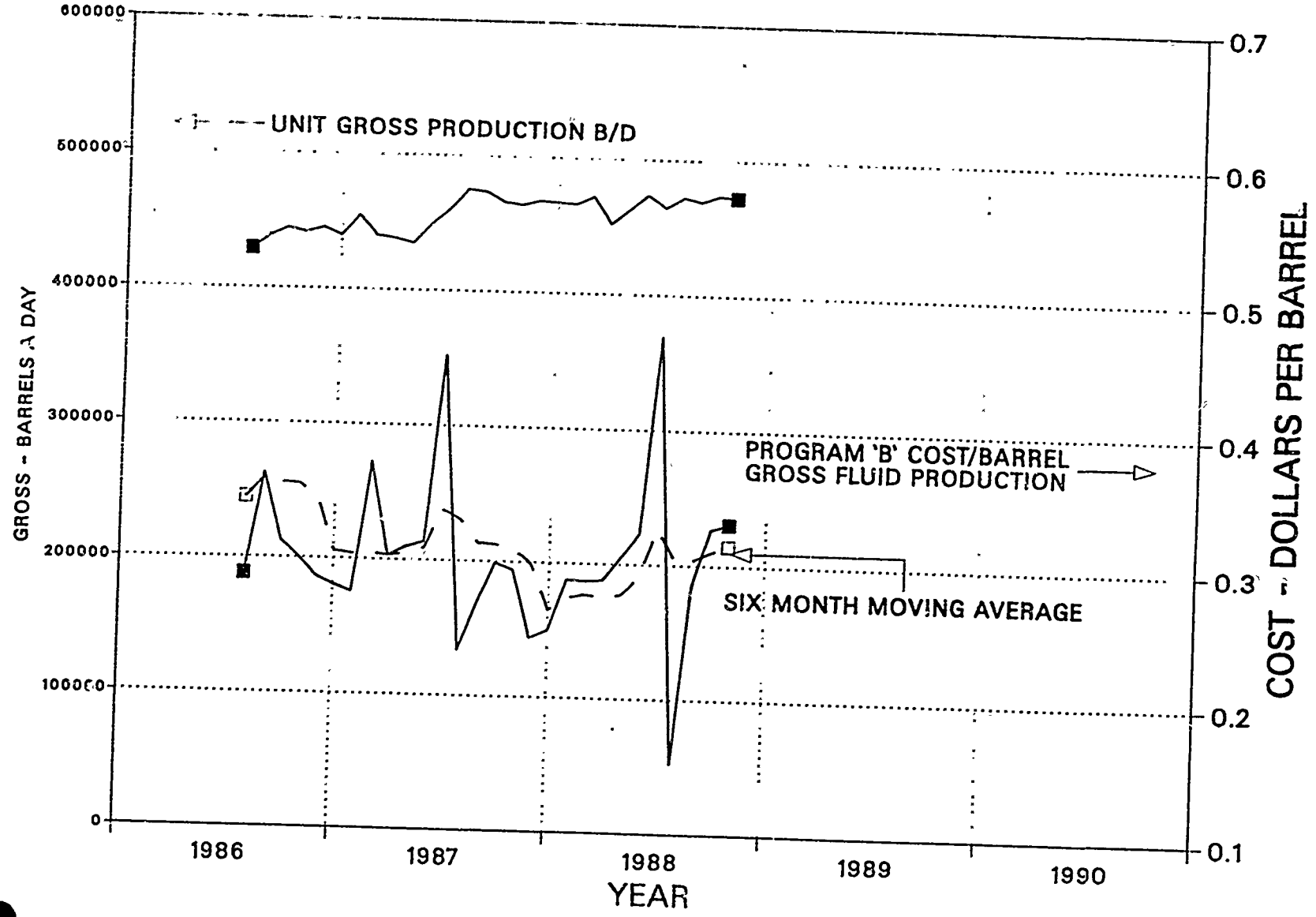
OIL & GA PRODUCTION PROGRAM COSTS EXPRESSED AS $/BBL GROSS FLUID

EXHIBIT 7

LONG BEACH UNIT



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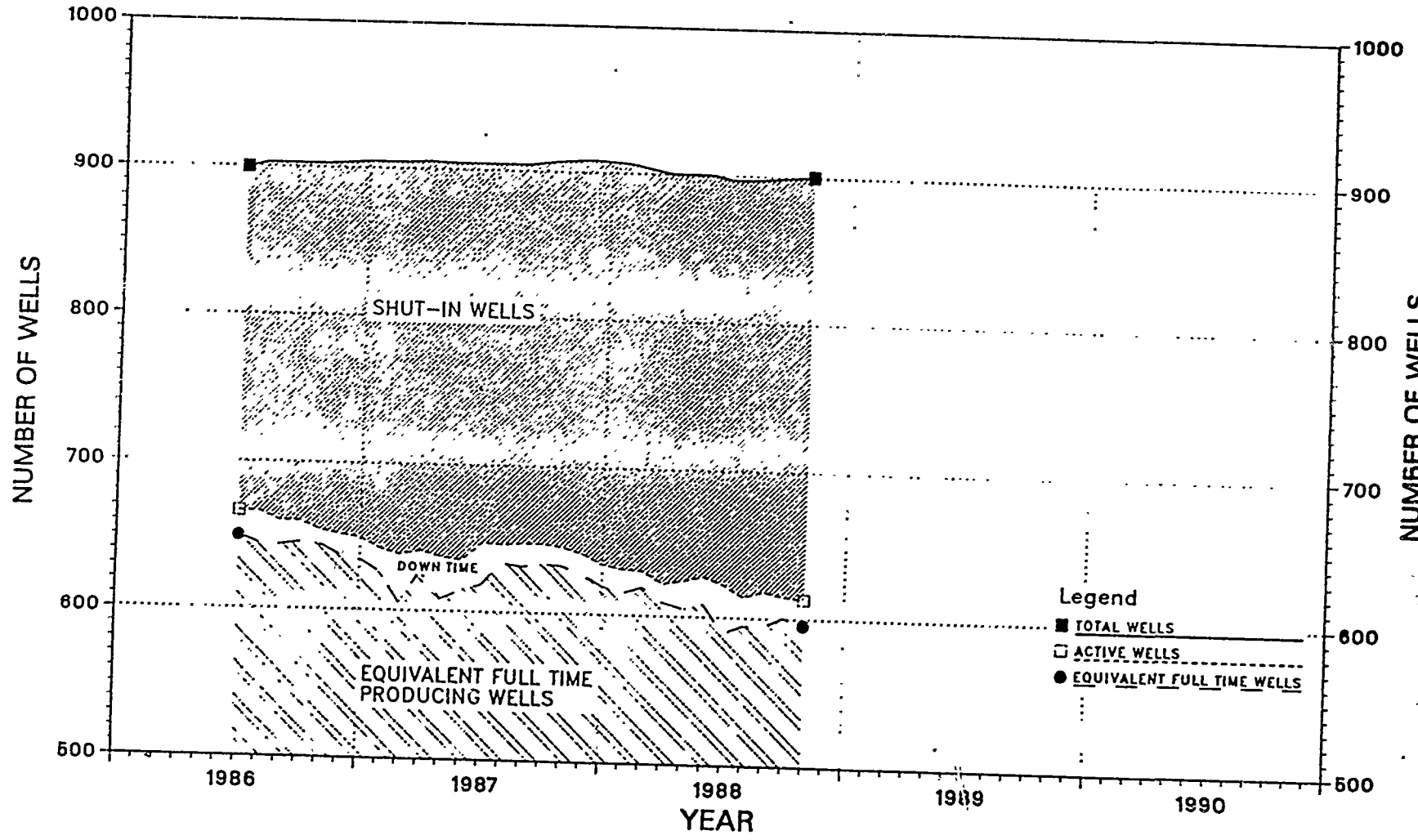
LONG BEACH UNIT
PRODUCING WELLS

EXHIBIT 8



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LONG BEACH UNIT

OIL & GAS PRODUCTION PROGRAM — TOTAL

EXHIBIT 9

PROGRAM B

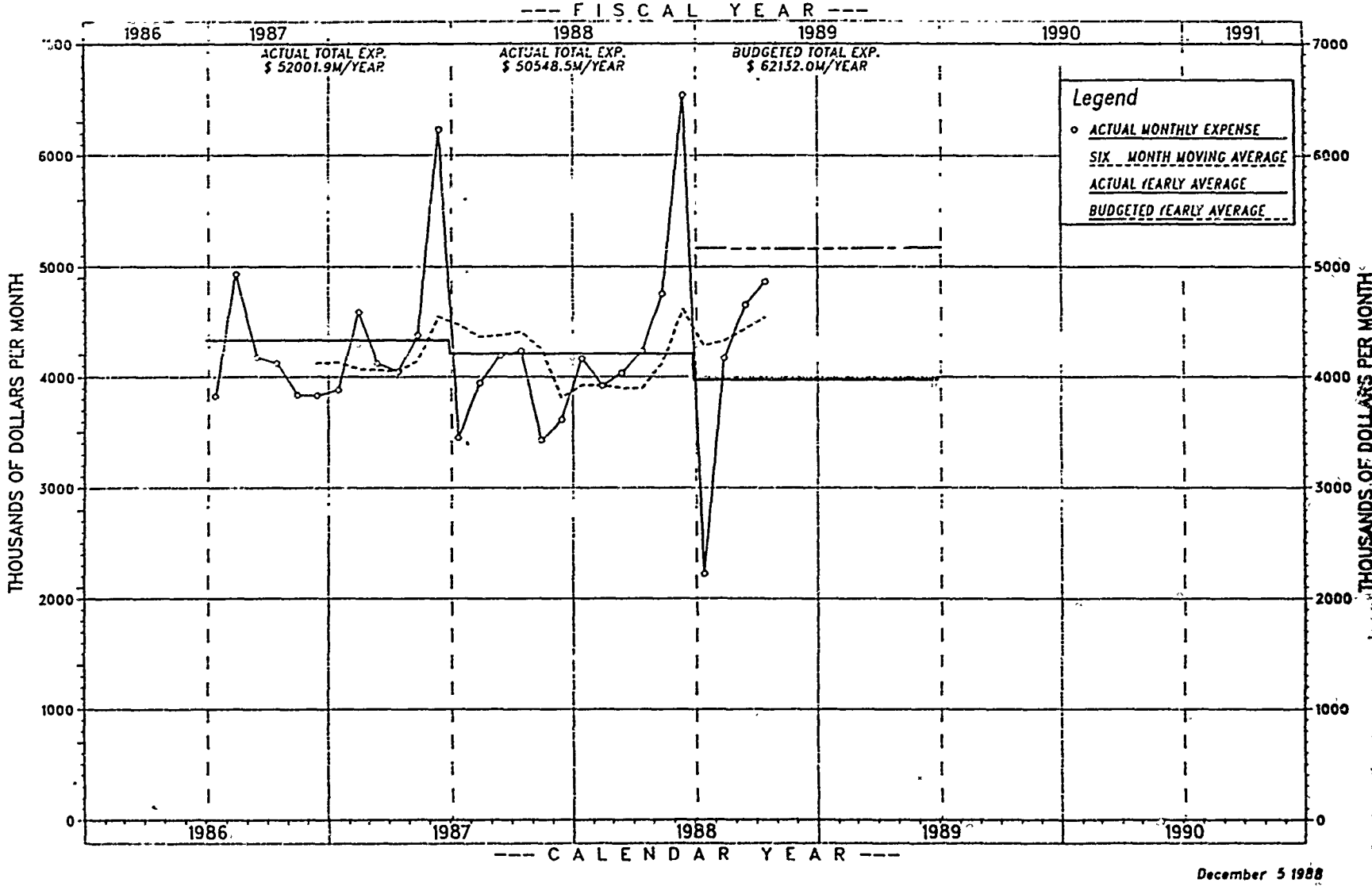

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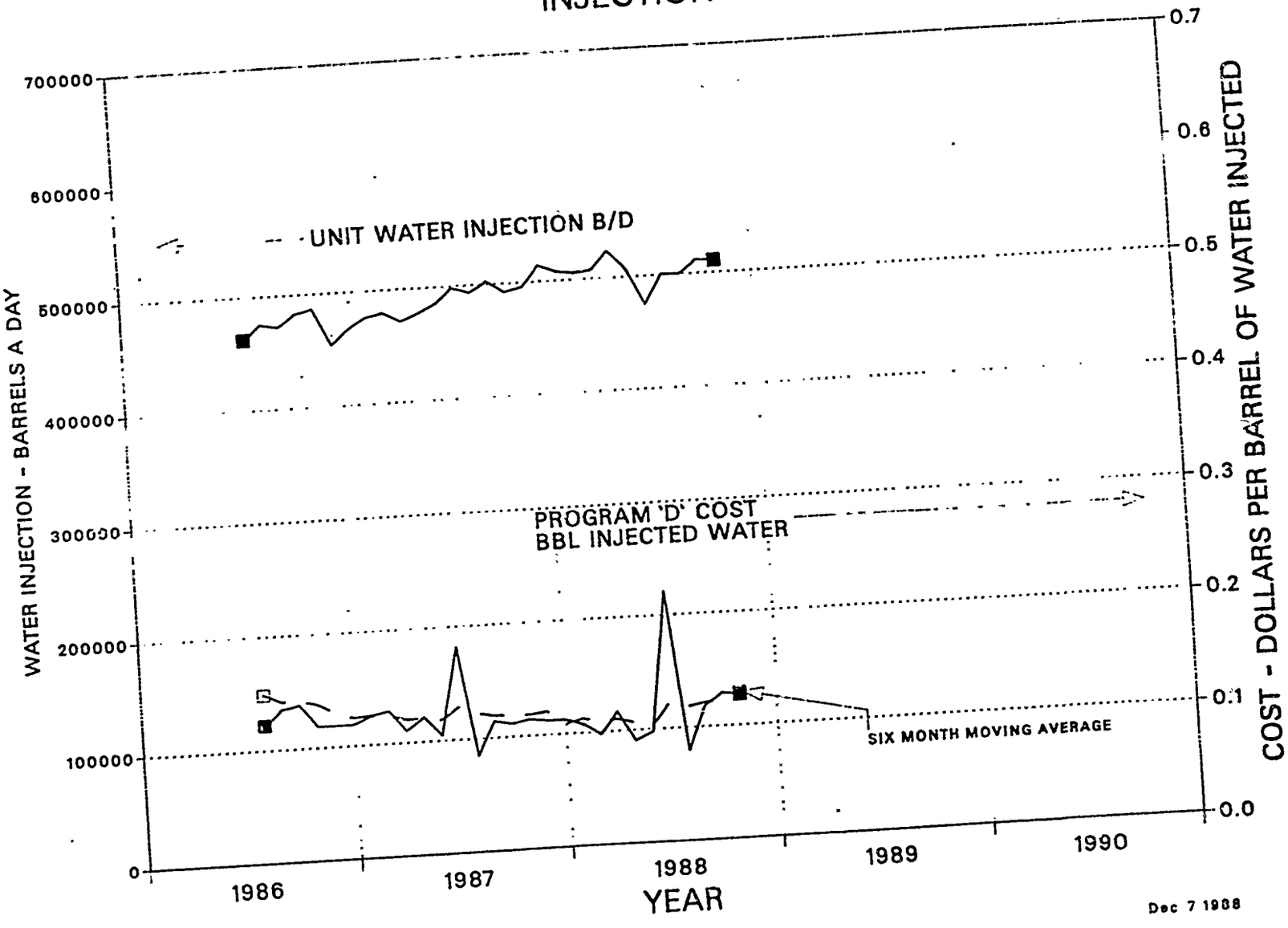
EXHIBIT 10

LONG BEACH UNIT

WATER INJECTION PROGRAM COSTS EXPRESSED AS $/BBL OF INJECTED WATER INJECTION



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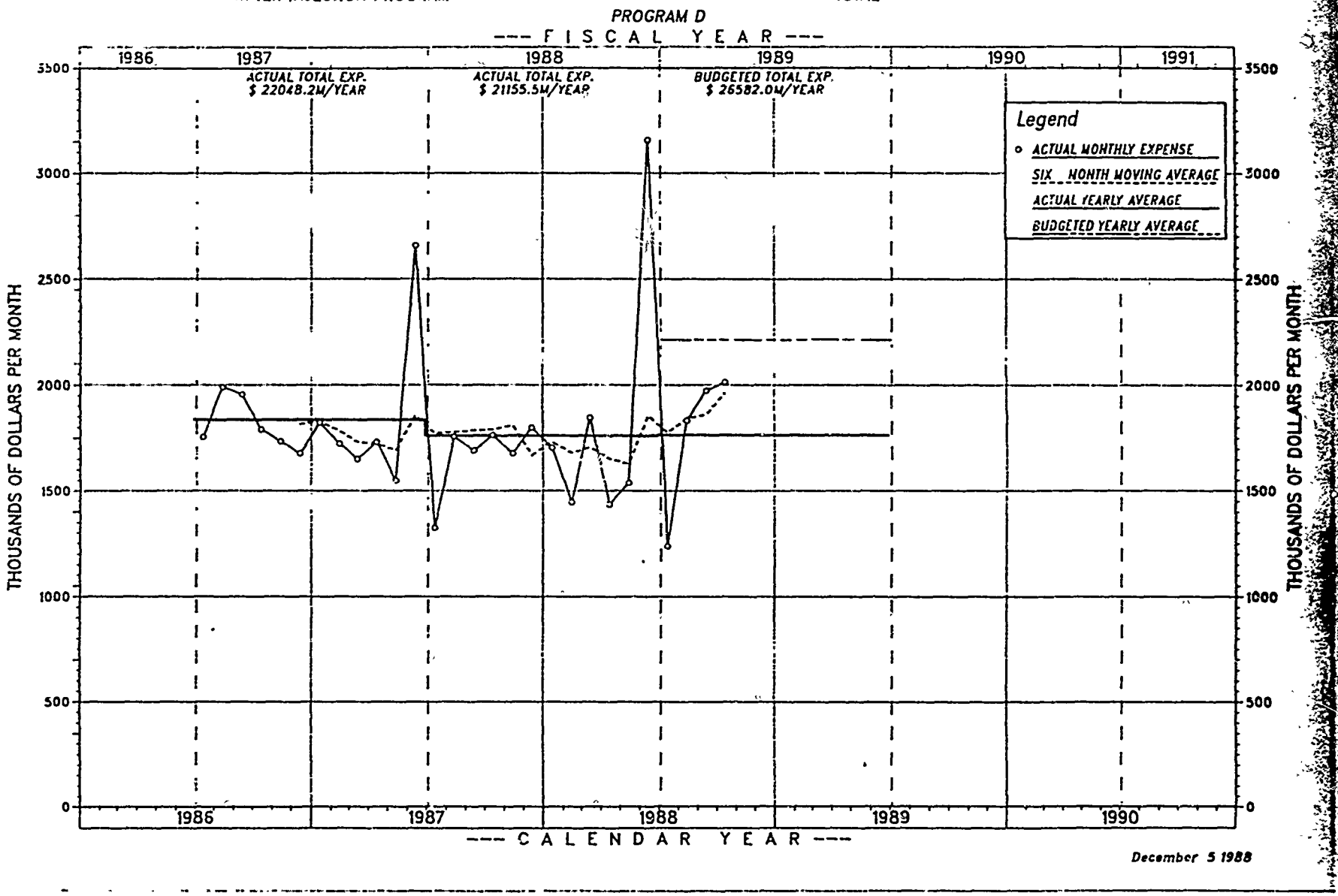
L O N G B E A C H U N I T

WATER INJECTION PROGRAM — TOTAL

EXHIBIT 11

PROGRAM D



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MANAGEMENT PROGRAM COSTS
EXPRESSED AS $/BBL. OIL

EXHIBIT 12

LONG BEACH UNIT

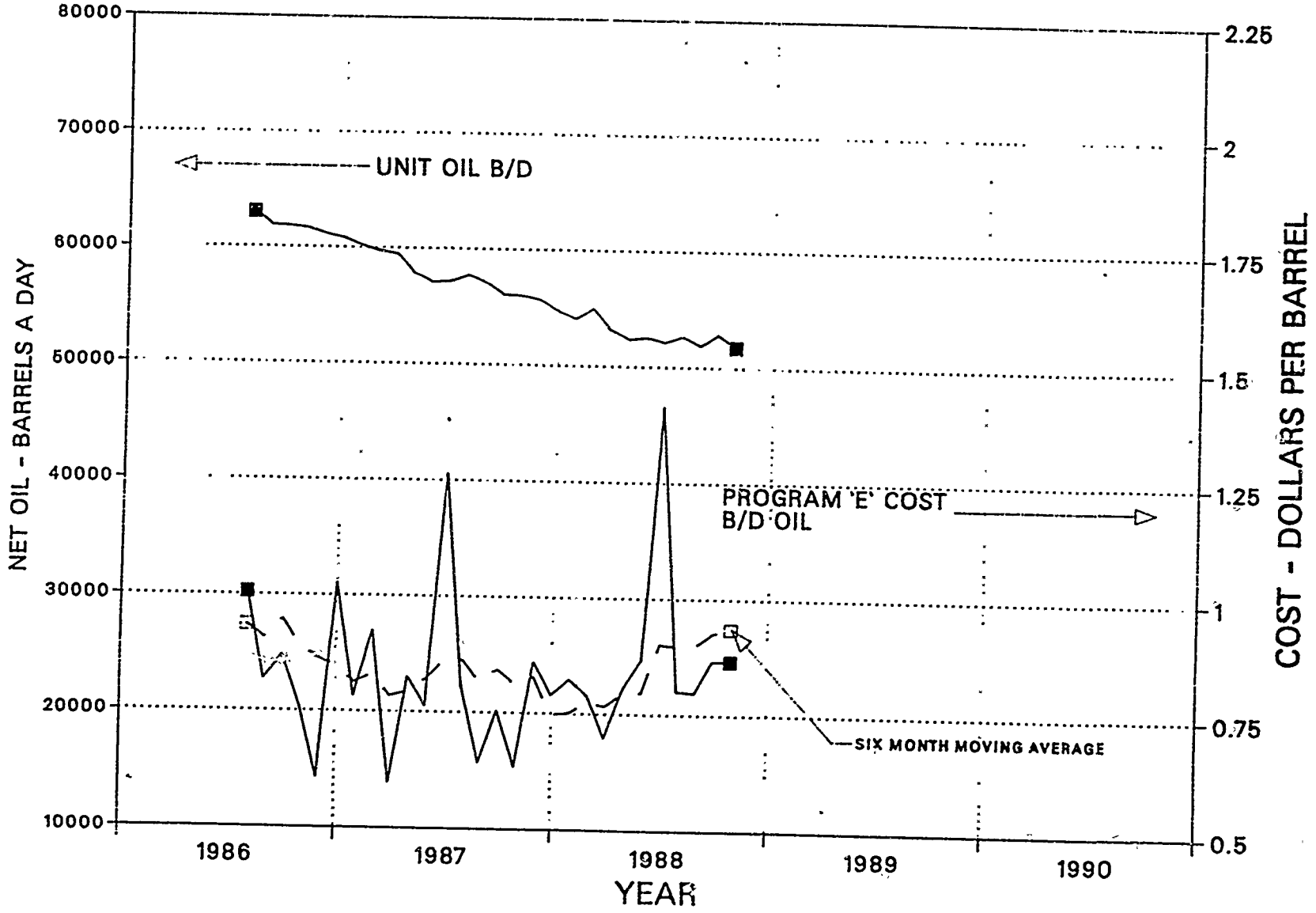

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EXHIBIT 13

LONG BEACH UNIT

MANAGEMENT PROGRAM — TOTAL

PROGRAM E

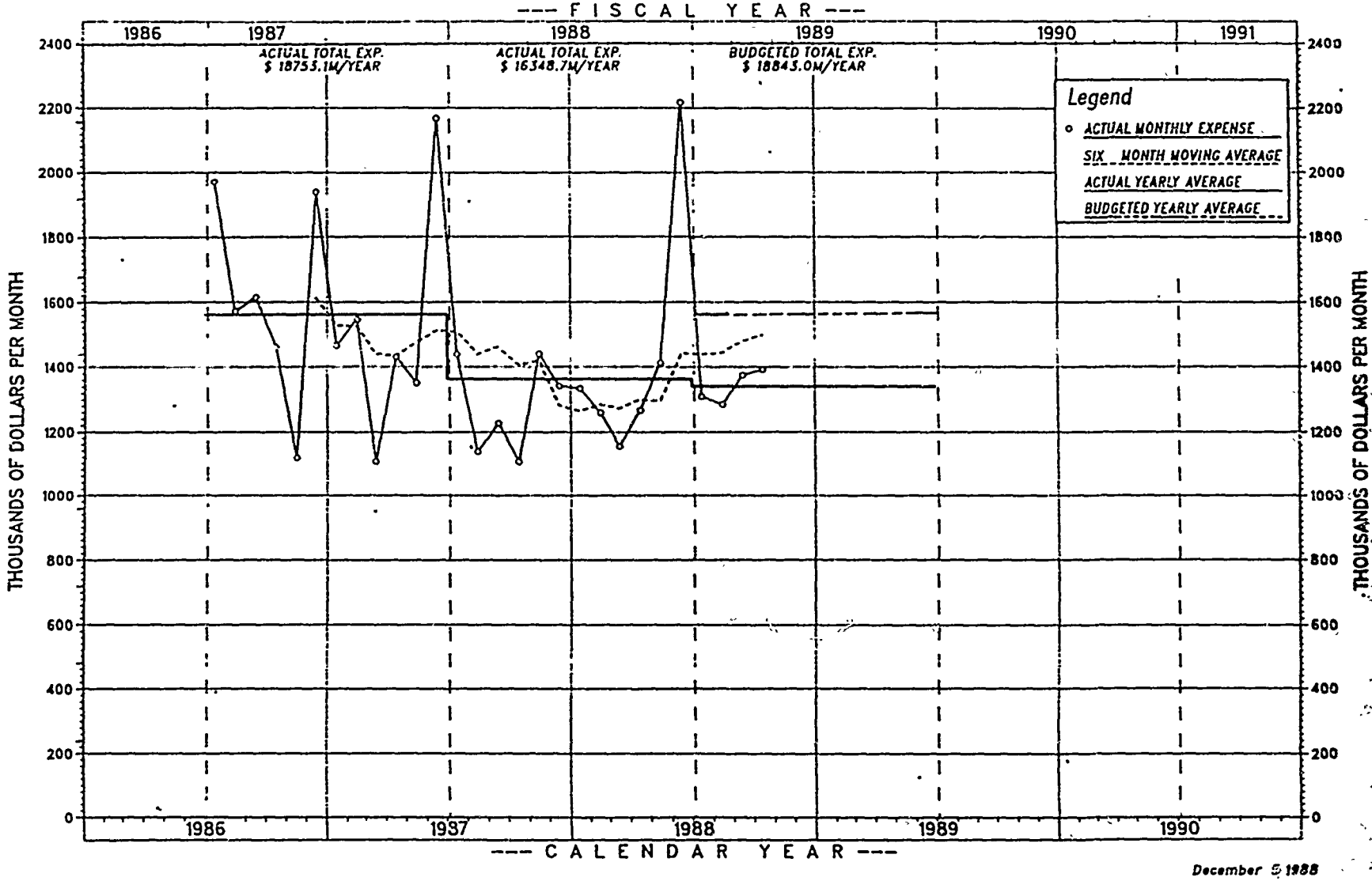

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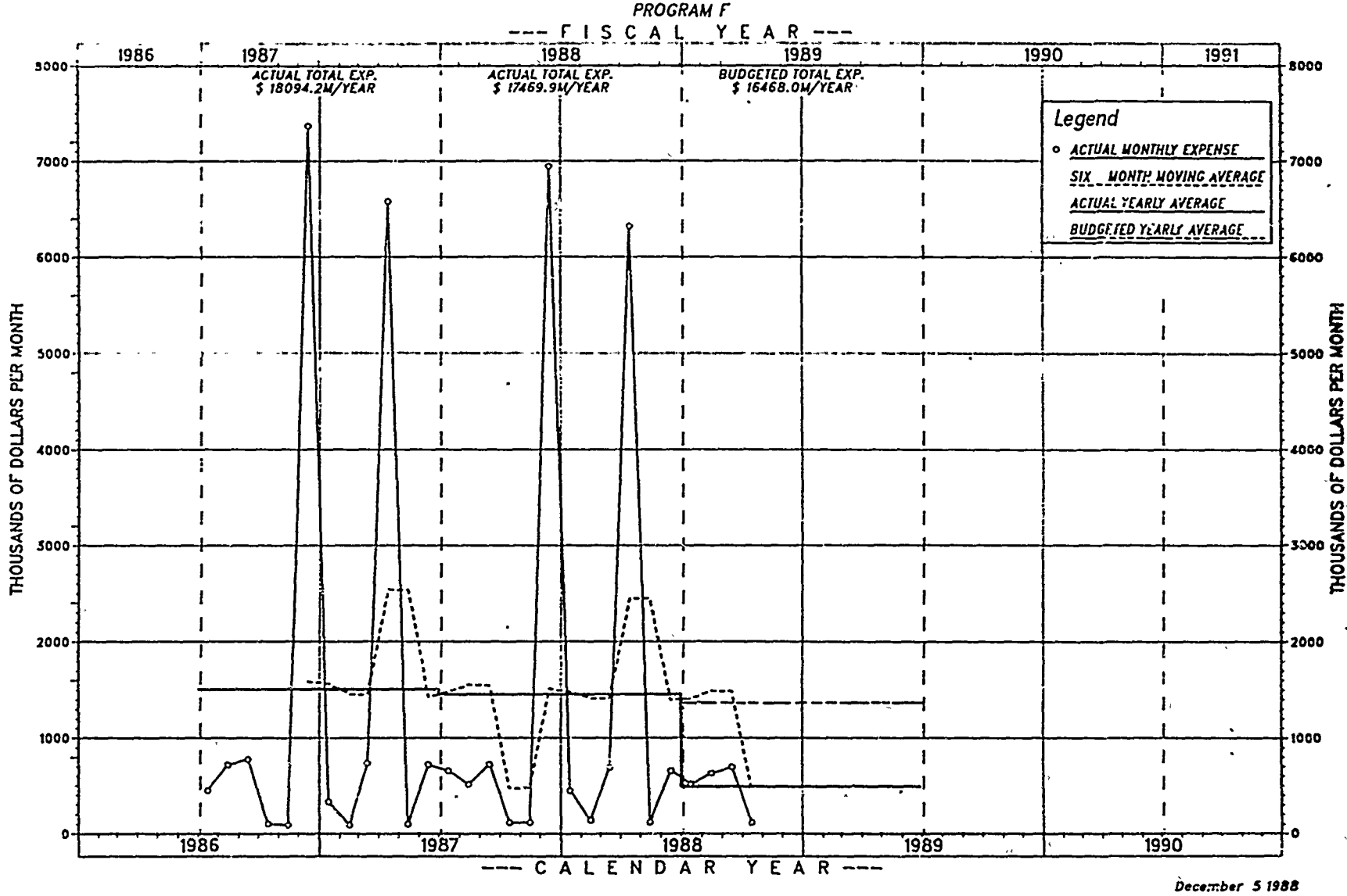
EXHIBIT 14

LONG BEACH UNIT

TAXES, PRMTS, & RENTAL PROGRAM — TOTAL

PROGRAM F



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LONG BEACH UNIT

OIL & GAS PRODUCTION PROGRAM — FLUID LIFTING — HYDRAULIC LIFT – SURFACE

EXHIBIT 15

Plotted Data DOES NOT Include Administrative Overhead

BUDGET CODE 22 -- ACCOUNT CODE 911

--- FISCAL YEAR ---

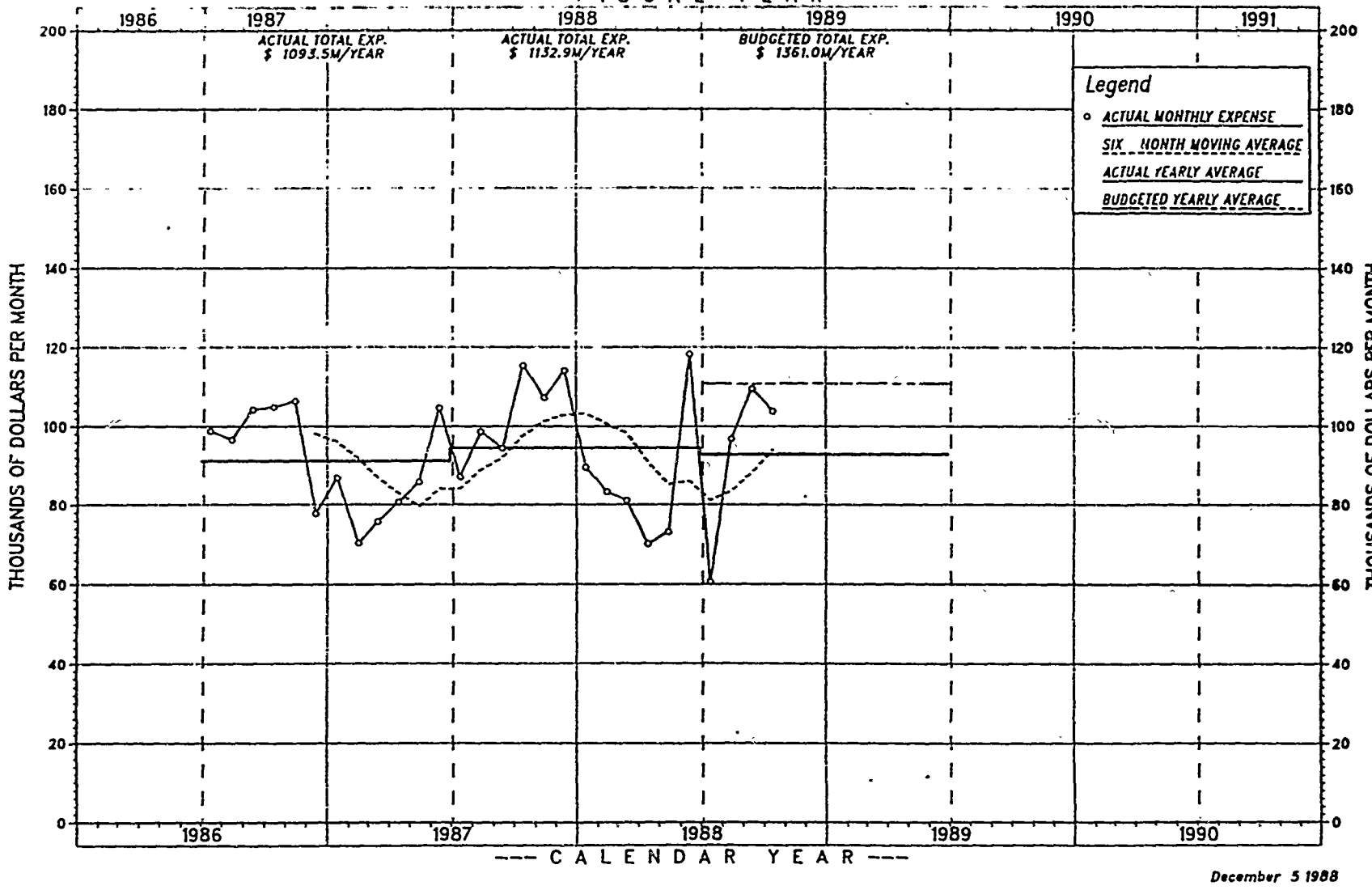

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EXHIBIT 18

L O N G B E A C H U N I T

OIL & GAS PRODUCTION PROGRAM — FLUID LIFTING — SUBMERSIBLE LIFT – SURFACE

BUDGET CODE 22 -- ACCOUNT CODE 918

Plotted Data DOES NOT include Administrative Overhead

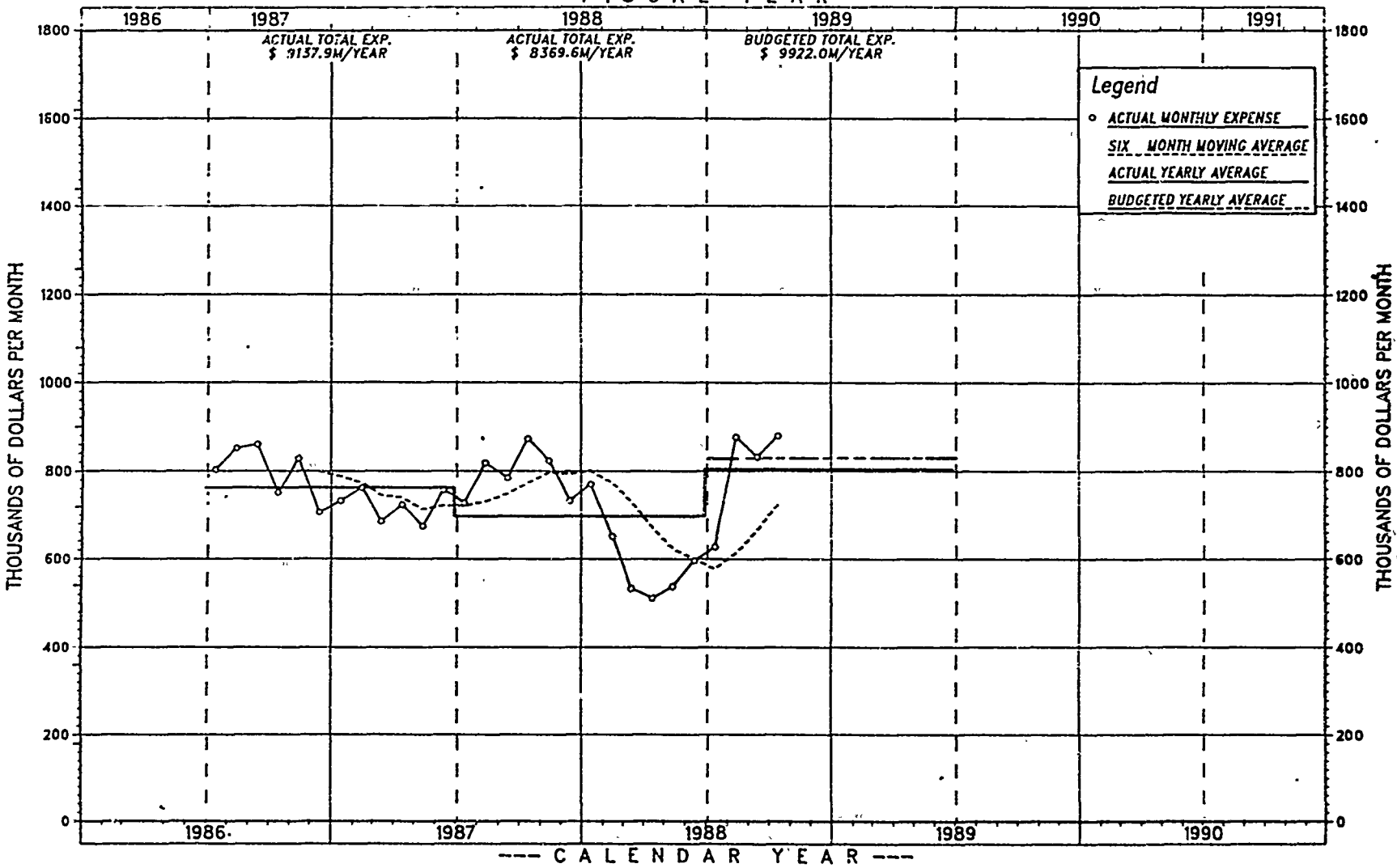

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EXHIBIT 17

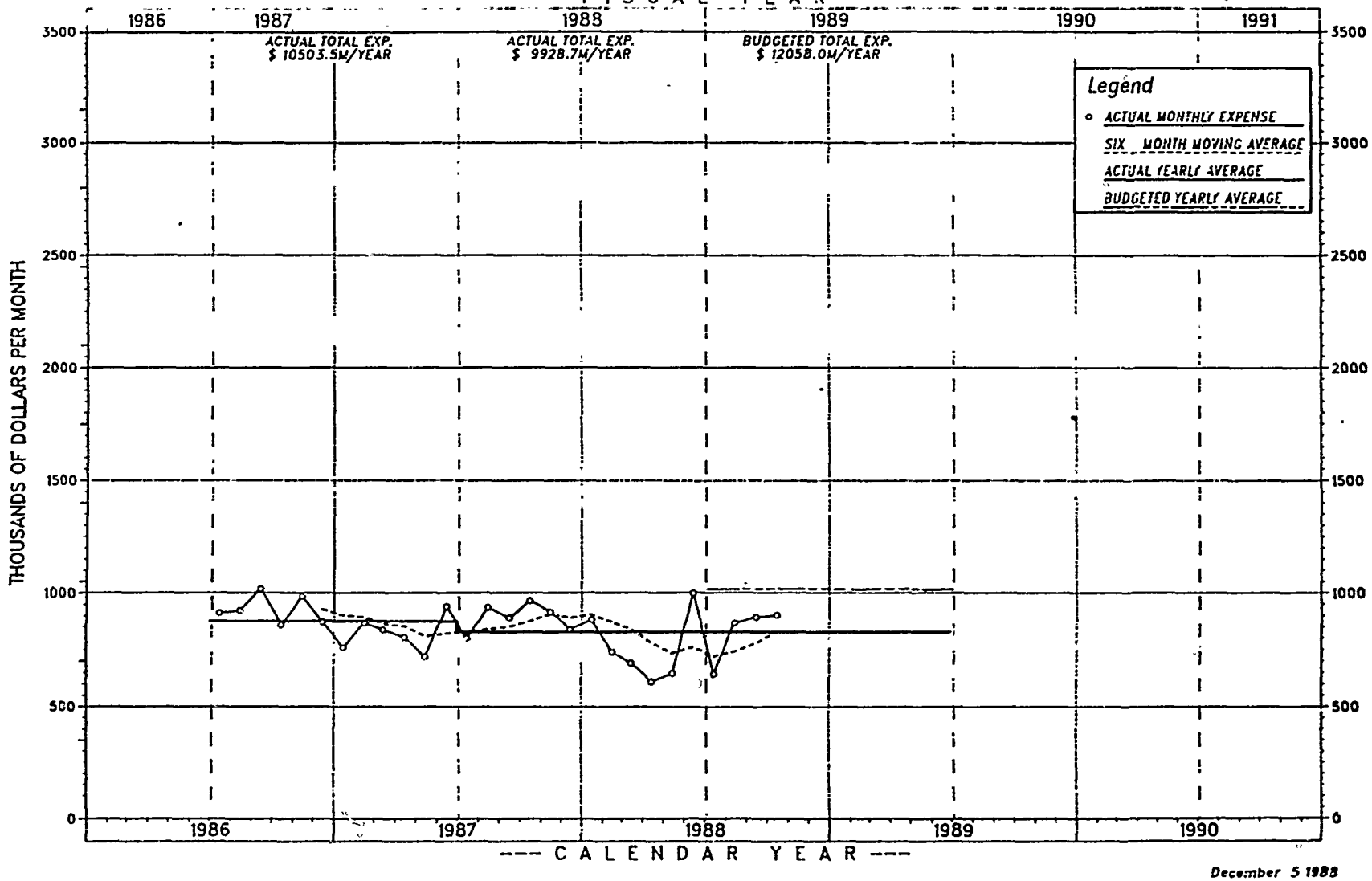
LONG BEACH UNIT

WATER INJECTION PROGRAM — WATER INJECTION SYSTEMS — WATER INJECTION SYSTEM

BUDGET CODE 42 -- ACCOUNT CODE 925

--- FISCAL YEAR ---

Plotted Data DOES NOT include Administrative Overhead



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LONG BEACH UNIT
COMPARISON OF
TOTAL FLUIDS & ENERGY CONSUMED

EXHIBIT 18

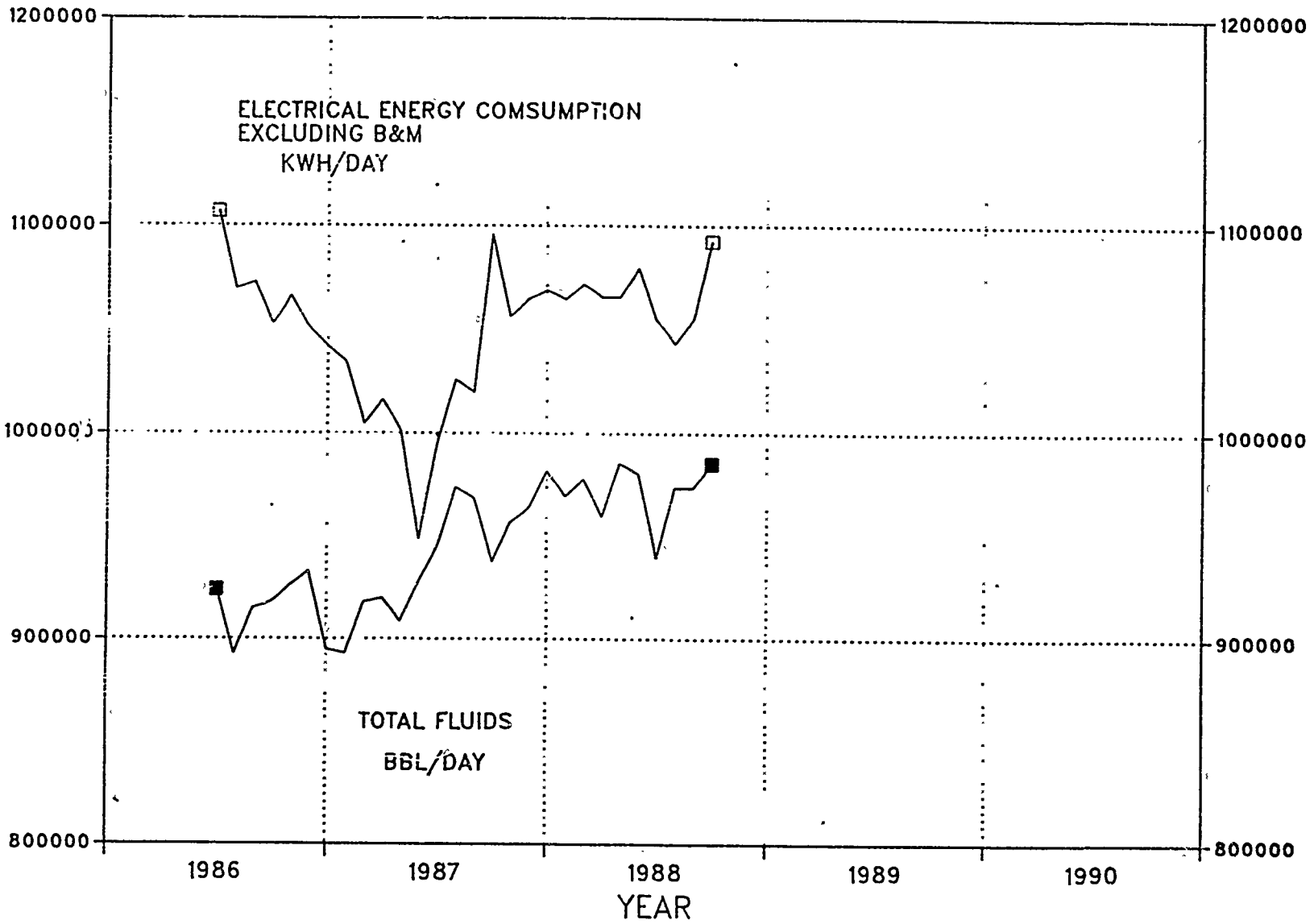

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EXHIBIT 19

LBU ISLANDS
COMPARISON OF
TOTAL FLUIDS & ENERGY CONSUMED

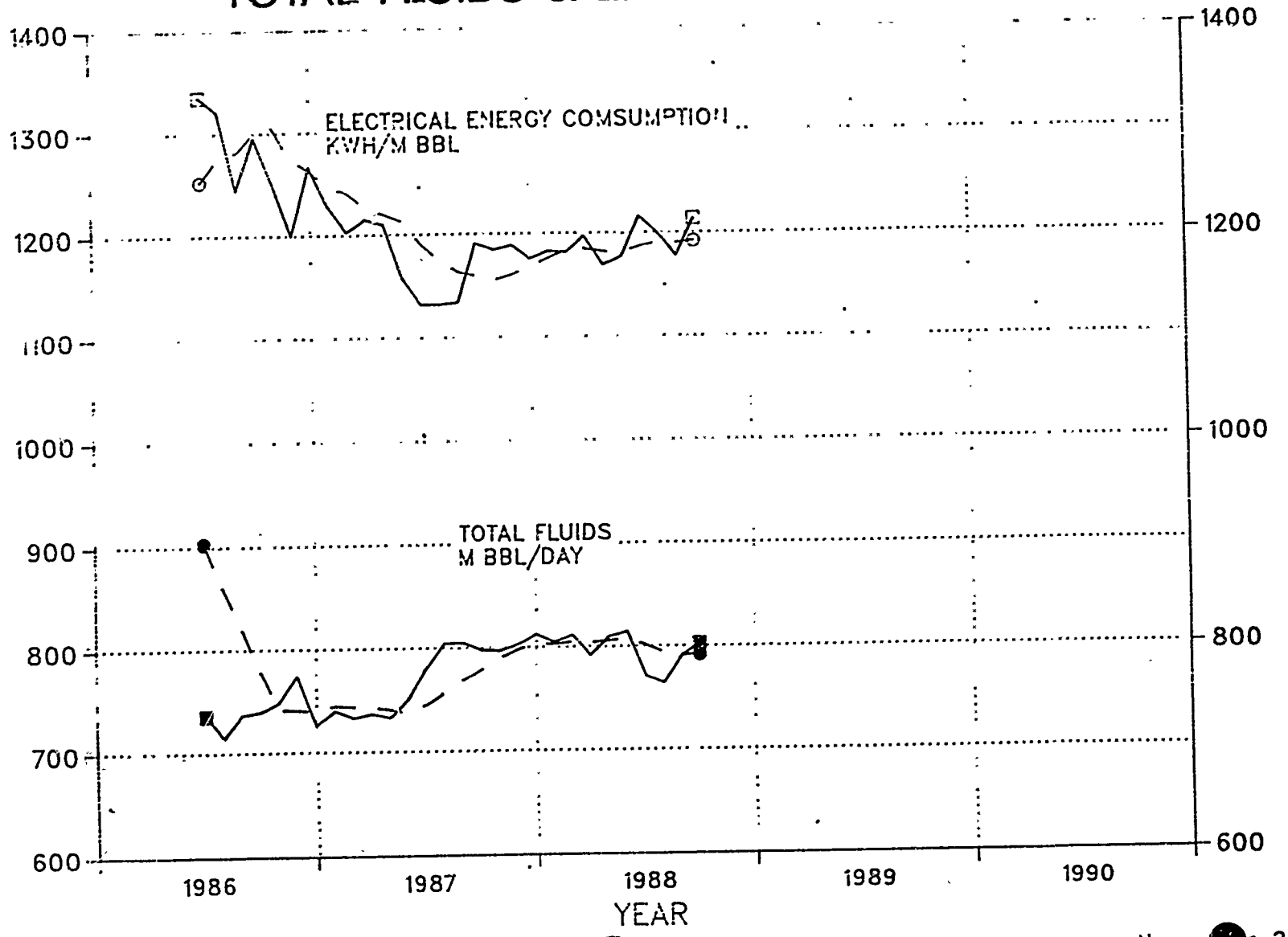

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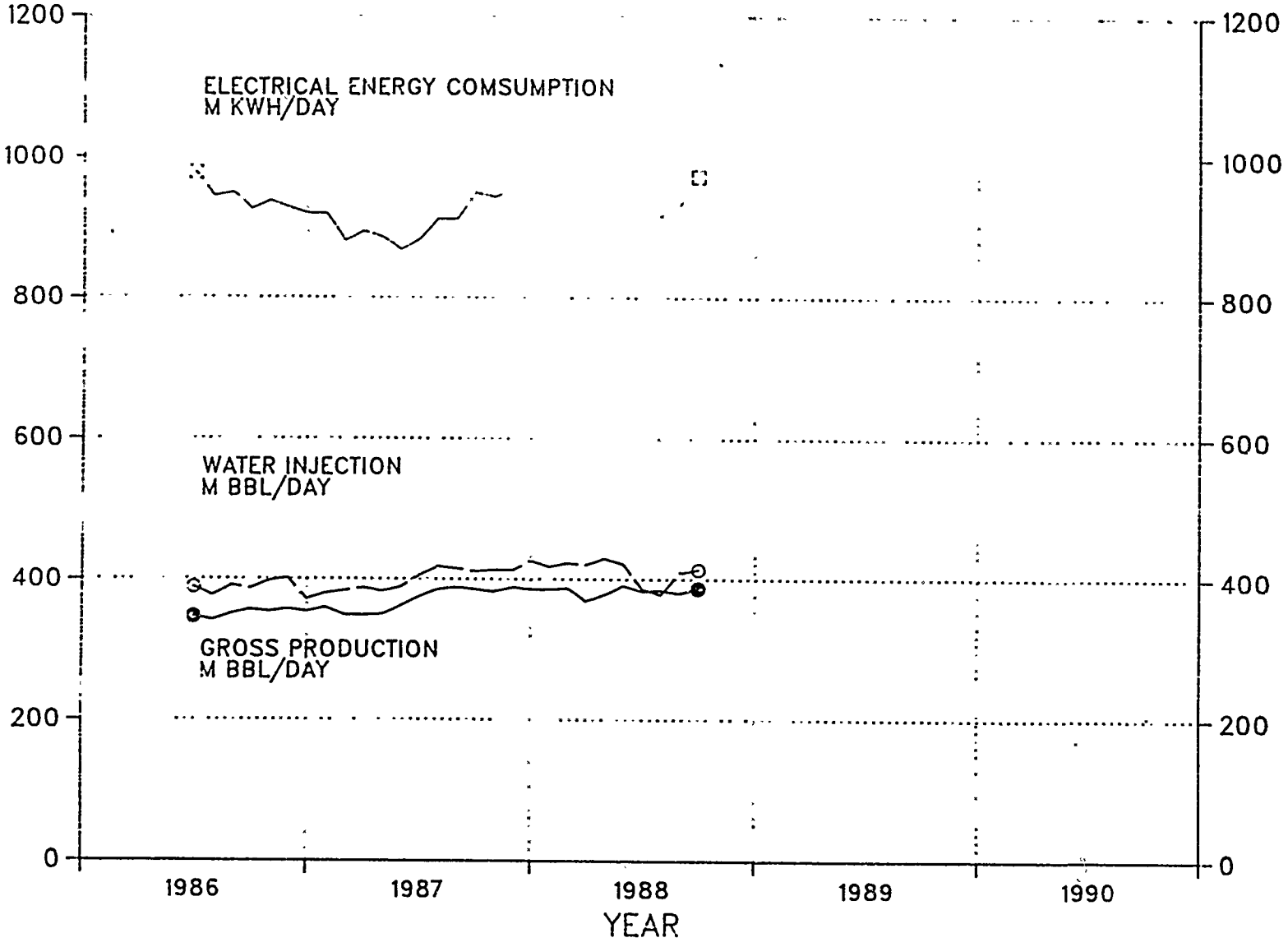
EXHIBIT 20

LBU ISLANDS
COMPARISON OF
GROSS PROD, WATER INJ, & ENERGY CONSUMED



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LBU ISLANDS COMPARISON OF TOTAL PRODUCED & INJECTED FLUIDS & ENERGY CONSUMED

EXHIBIT 21

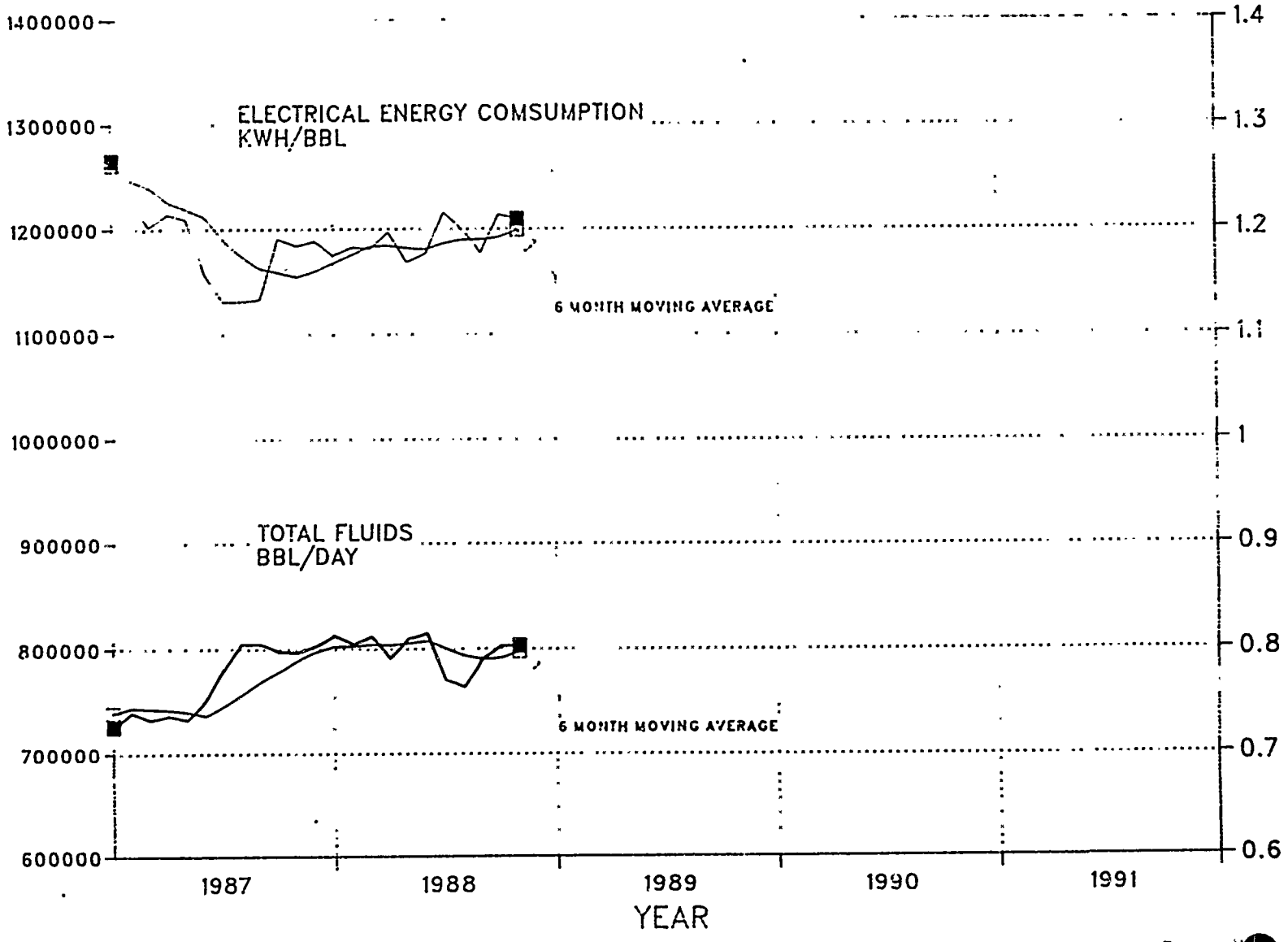

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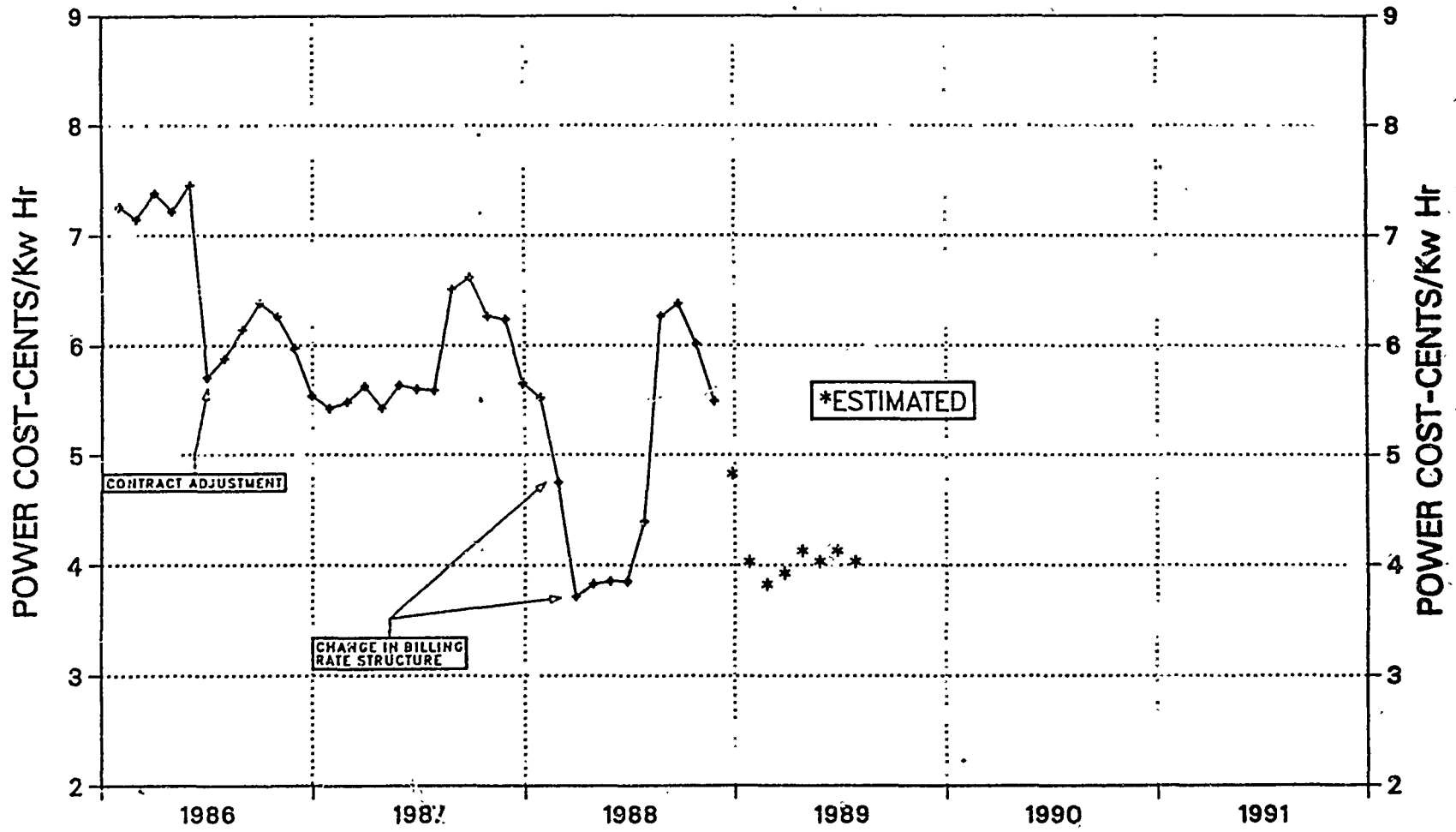
EXHIBIT 22

LONG BEACH UNIT
ELECTRICAL ENERGY COSTS



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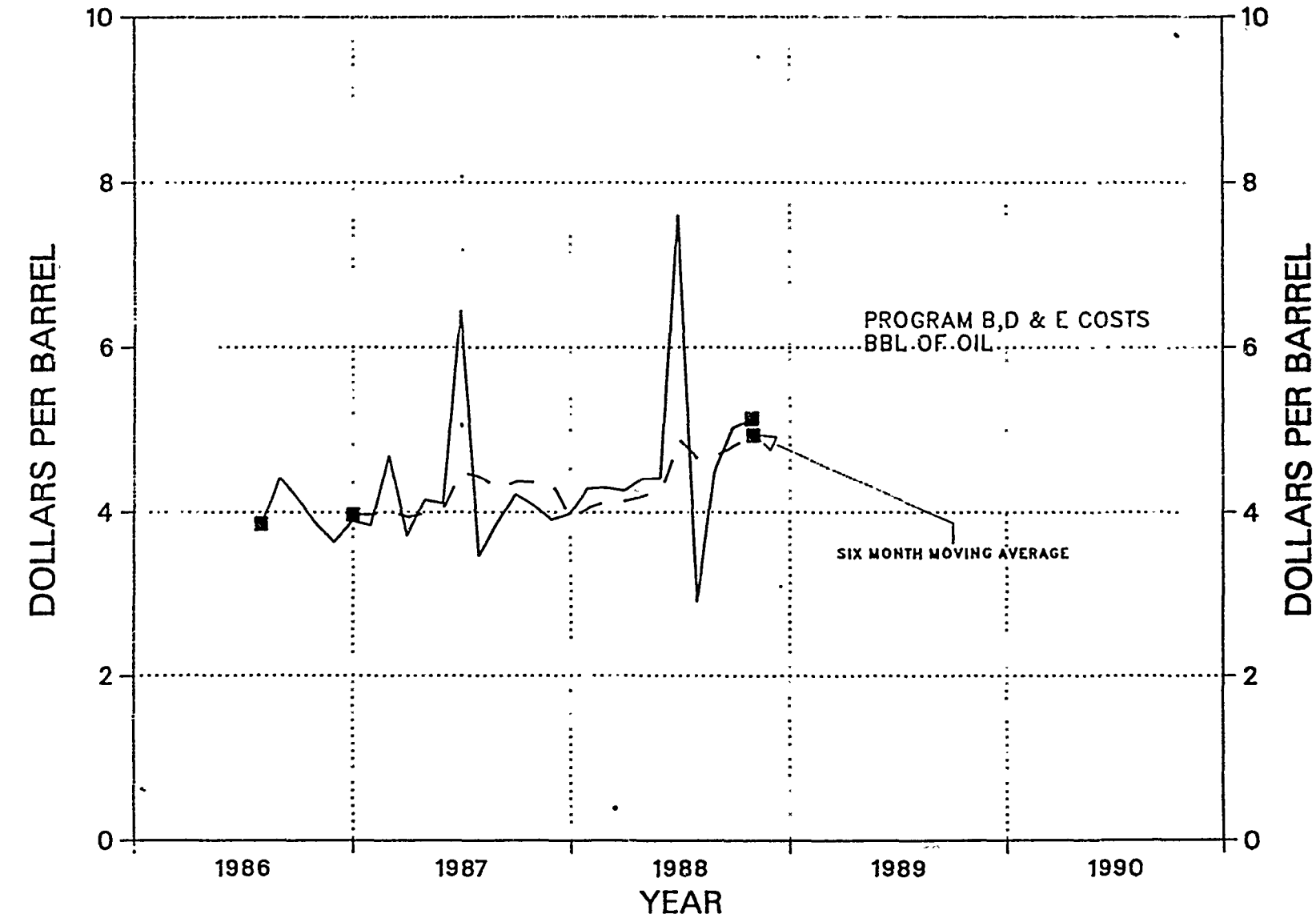
OIL & GAS, WATER INJECTION AND MANAGEMENT PROGRAMS COSTS EXPRESSED AS $/BBL OF OIL

EXHIBIT 23



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