

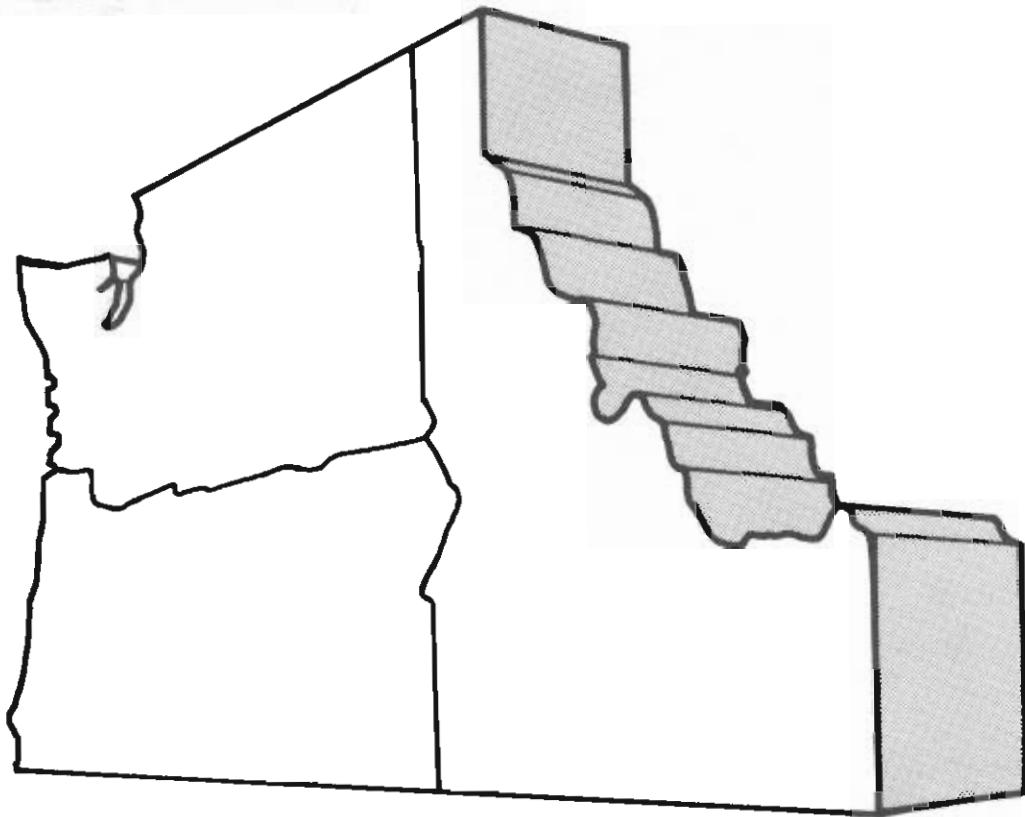


US Army Corps
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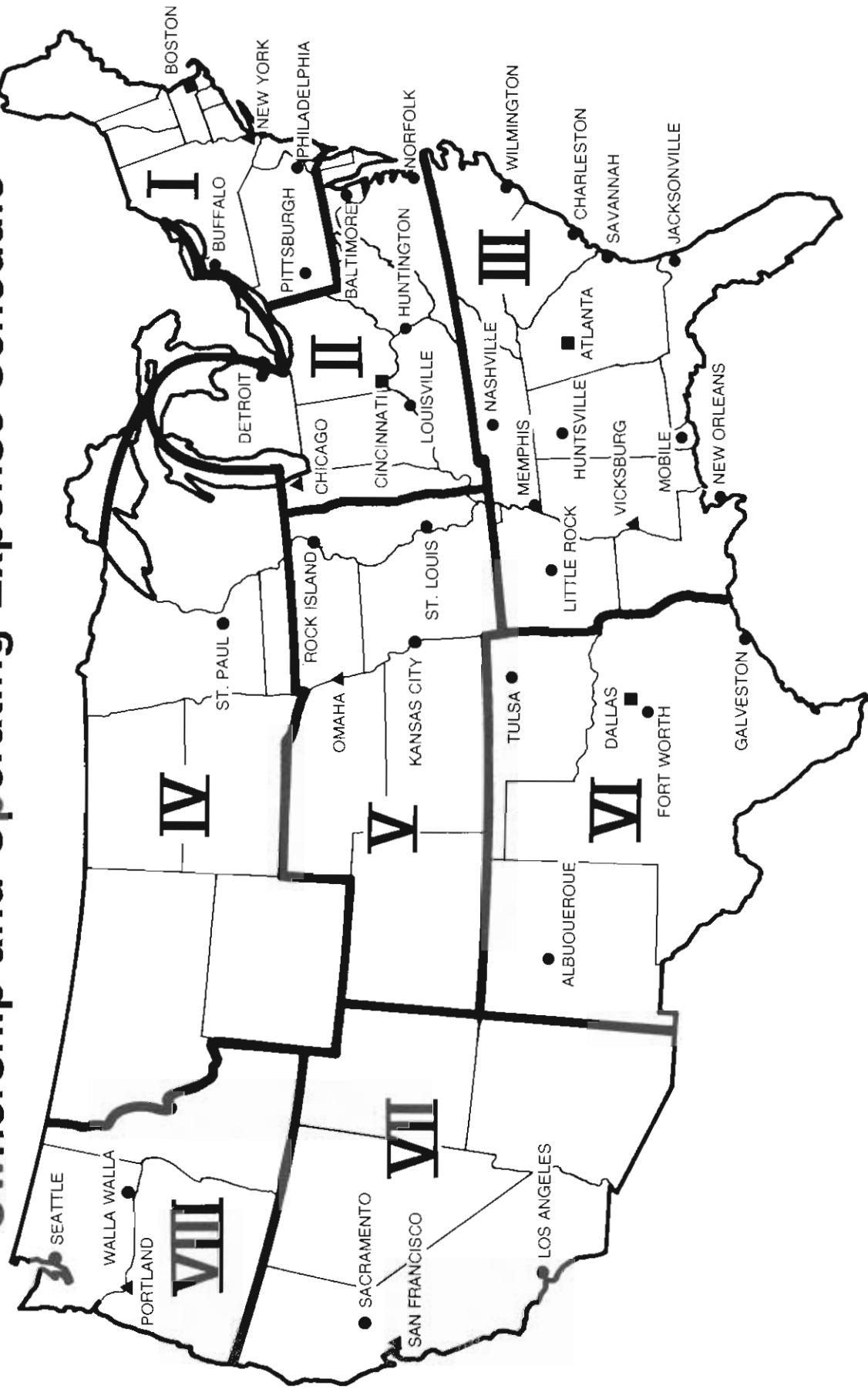
EP 1110-1-8
Volume 8
June 1981

Construction Equipment Ownership and Operating Expense Schedule

Region VIII



Regions for the Construction Equipment Ownership and Operating Expense Schedule



DAEN-CWE-BA
DAEN-MPE-S

DEPARTMENT OF THE ARMY
US Army Corps of Engineers
Washington, DC 20314

EP 1110-1-8
Volume 8

Pamphlet
No. 1110-1-8

15 June 1981

Engineering and Design
CONSTRUCTION EQUIPMENT OWNERSHIP
AND OPERATING EXPENSE SCHEDULE

1. Purpose. This pamphlet establishes predetermined equipment ownership and operating expense rates for use in preparation of estimates and in pricing negotiated procurements requiring independent Government estimates.

2. Applicability. This pamphlet applies to all field operating activities having either military or civil works responsibilities for construction contracts in Region VIII which includes the following states:

Idaho

Oregon

Washington

3. General. The rates and percentages shown in this pamphlet are based on equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor. These rates and percentages do not include allowances for operating labor, mobilization or demobilization costs, overhead, or profit, and do not represent rental charges for those in the business of renting equipment. The rates included in this pamphlet are based on construction equipment purchased new on 1 July 1979. The percentages for marine equipment provide an allowance for ownership expenses only. This pamphlet will be updated annually or more frequently if necessary.

FOR THE COMMANDER:

[Signature]
FORREST T. GAY, III
Colonel, Corps of Engineers
Chief of Staff

Initial Issue

DAEN-CWE-BA
DAEN-MPE-S

DEPARTMENT OF THE ARMY
US Army Corps of Engineers
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EP 1110-1-8
(Vol. 8)

Engineer Pamphlet
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CHAPTER 1

INTRODUCTION

1-1. Purpose. This pamphlet establishes predetermined equipment ownership and operating expense rates for use in preparation of estimates and in pricing negotiated procurements requiring independent Government estimates.

1-2. Applicability. This pamphlet applies to all field operating activities having either military or civil works responsibilities for construction contracts for work in Region VIII, which includes the following states:

Idaho
Oregon
Washington

1-3. References. See APPENDIX A.

1-4. General. The rates and percentages shown in this pamphlet are based on equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor. These rates and percentages do not include allowances for operating labor, mobilization or demobilization costs, overhead, or profit, and do not represent rental charges for those in the business of renting equipment. The rates included in this pamphlet are based on construction equipment purchased new on 1 July 1979. The percentages for marine equipment provide an allowance for ownership expenses only. This pamphlet will be updated annually or more frequently if necessary.

1-5. Use. This pamphlet shall be used as the basis for estimating equipment costs for all construction contracts (including dredging) and modifications requiring an independent Government estimate. This pamphlet shall also be used in pricing of contract modifications over \$25,000 when:

- a. Cost or pricing data is not required.
- b. Cost or pricing data is required and actual cost data to support either ownership or operating costs for each piece of equipment or equipment groups of similar serial and series is not available.
- c. Cost or pricing data is required and available but all or part of the data is determined not to be in accordance with the cost principles of the Defense Acquisition Regulations (DAR).

CHAPTER 2

METHODOLOGY

2-1. General. This pamphlet provides hourly use rates for construction equipment and annual ownership percentages for marine plant and equipment. The methodology used to compute the hourly use rates for construction equipment is provided in paragraph 2-2. The methodology used to compute the annual ownership percentages for marine equipment is provided in paragraph 2-3.

2-2. Construction Equipment.

a. General. The total hourly rates include all costs of owning and operating equipment except operating labor and overhead expenses. The ownership portion of the rate consists of allowances for depreciation and cost of facilities capital. Operating costs include allowances for: fuel; filters, oil and grease; servicing the equipment; repair and maintenance; and tire wear and tire repair. Area factors used to compute the hourly equipment ownership and operating expenses are provided in APPENDIX B.

b. Operating Conditions.

(1) Equipment rates have been computed for both "Average" and "Severe" working conditions. "Difficult" conditions are the arithmetic mean of "Average" and "Severe" rates. Where only the "Average" rate is shown, the one rate will apply for all conditions.

(2) Average, difficult, or severe conditions in accordance with contract specifications are determined by the Contracting Officer on the basis of supporting evidence and in general accordance with the "Guide for Selecting Operating Conditions" in APPENDIX C. Difficult conditions are those lying midway between average and severe. Evaluation of operating conditions for equipment not listed in APPENDIX C will be consistent with the examples shown in the "guide."

c. Ownership Costs. The ownership portion of the rate consists of allowances for depreciation and cost of facilities capital and is computed from a predetermined "equipment cost." "Equipment cost" is based on the total catalog price for the equipment, including extras normally purchased, and required safety features. A 7.5 percent discount is taken for all equipment except highway trucks which are discounted

17.5 percent. Freight and sales tax are added to the discounted price to arrive at the predetermined "equipment cost."

(1) Depreciation.

(a) Depreciation was computed using the straight-line method and the hourly rate was determined by dividing the "Depreciation Value" ("equipment cost," less tire cost and estimated salvage) by the expected normal life of the equipment in hours.

(b) Salvage value for the used equipment was determined from the "Handbook of New and Used Construction Equipment Values" (Green Guide) and advertisements of used equipment for sale displayed in current engineering and construction magazines. The salvage value percentages used for each type of equipment are listed in APPENDIX D (column "SLV") as a percent of the "equipment cost" and are equal for both "Average Condition" and "Severe Condition." The percentages are adjusted by the economic adjustment factor (EAF) to bring the salvage value up to current price levels. The factor is obtained from APPENDIX E and is equal to the economic index for the current year divided by the economic index for the year the equipment was purchased new. The ownership costs shown in TABLE 3-1 represent the hourly costs for equipment purchased new approximately two years ago.

(c) Tire cost was considered to be an operating expense and was subtracted from the "equipment cost" before computing depreciation. The tire cost is that cost at the time the equipment was purchased new.

(d) The expected normal life of the equipment was established from manufacturers' or equipment associations' recommendations. The expected normal life in hours is given in APPENDIX D. (Column "LFE" in thousand Hrs.)

(e) Annual average operating hours have been established for equipment operation within the region covered by this pamphlet. Average hours of use per year were determined by reducing the maximum available hours (40 hours per week, 52 weeks per year) to allow for lost time due to weather, employee's holidays, equipment maintenance and repairs, mobilization and demobilization and miscellaneous down time. The hours of use per year shown in APPENDIX B is equivalent to one year's life for single shift operation.

(2) Cost of Facilities Capital ("CFC").

(a) The cost of facilities capital (CFC) as defined in DAR 15-205.50 and CAS 414 is included in the use rates. This

cost was computed by multiplying the cost of money rate (14.625%) determined by the Secretary of the Treasury pursuant to P.L. 92-41 (85 Stat. 97) by the average value of equipment and prorating the result over the annual operating hours. This cost of money rate was discounted to 11.6% to avoid duplication when applying markups for overhead and profit.

$$CFC/hr = \frac{[(N-1)(1+S)+2]}{2N} \frac{(\text{Equipment Cost})}{(\text{Work Hrs per Year})} (11.6\%)$$

Where: N = No. of years in depreciation period
S = Salvage Value Factor

(b) The salvage value is determined by multiplying the salvage value percentage in APPENDIX D times the economic adjustment factor as explained in paragraph 2-2.c.(1)(b).

(3) Licenses, Taxes, Storage and Insurance. License fees, taxes, storage and insurance costs are considered indirect costs and are not included in the use rates. If the Contractor normally allocates these costs directly to a particular item of work, an allowance for these costs may be made.

d. Operating Cost.

(1) General. The total operating cost is the sum of the costs for fuel, filters, oil and grease, servicing the equipment, repairs and maintenance, tire wear and tire repair.

(2) Fuel Consumption Cost.

(a) The fuel consumption in gallons per BHP-hour is listed in TABLE 3-1 for both "Average" and "Severe" conditions. The fuel consumption rate for "Severe Conditions" is 30 percent greater than the "Average Conditions" rate. Fuel consumption is computed by using the following formula:

$$\text{Fuel consumption(gal/hr)} = \frac{\text{BHP} \times \text{HP Factor} \times \text{Lbs Fuel per BHP-HR}}{\text{Wt of Fuel per Gallon}}$$

where:

(1) BHP as used herein is the net brake HP of the engine at the flywheel under the following conditions: (1) at sea level; and (2) at full-load governed speed with engine fully equipped with generator, fan, air cleaner, and other regular equipment.

(2) Gasoline consumption = 0.62 lbs per BHP-hr

(3) Diesel consumption = 0.42 lbs per BHP-hr

(4) Gasoline wt = 6.1 lbs per gallon

(5) Diesel wt = 7.1 lbs per gallon

(b) Electricity consumption = HP factor x 1 KW per electric HP hour. This assumes that electric motor uses 1 KW/HP considering all inefficiencies.

(c) It is necessary to modify the rated horsepower as engines and motors in actual production do not work at their full rated horsepower at all times. The horsepower factor used in the fuel and electricity consumption formulas represents the average percent of full rated horsepower being utilized by the engine. The "HP Factors" are given in APPENDIX D.

(d) The cost per gallon for gasoline and diesel fuel and the cost per kilowatt hour for electricity used to compute the hourly fuel and electricity costs are shown in APPENDIX B. The hourly fuel costs for all gasoline powered equipment and diesel powered highway trucks and truck crane carriers includes an allowance for federal and state road taxes.

(e) The estimated hourly fuel costs included in TABLE 3-1 are also noted separately for both average and severe conditions. Hourly fuel costs will be adjusted in the event the averaged (weighted) fuel prices (f.o.b. jobsite) vary by more than 10 percent above or below the price assumed in the basic computation. For example, if the price per gallon should increase by 15 percent, then 15 percent of the hourly fuel cost will be added to the total hourly rate. The Contractor will be required to furnish copies of all fuel supply contracts and invoices to the Government. Request for upward adjustment in the rates will be considered only where fuel is to be supplied by recognized distributors.

(3) Filters, Oil and Grease Costs (FOG). "FOG" costs are computed as either a percentage of the hourly fuel costs (see APPENDIX D) or, if the equipment has no engine, a reasonable hourly cost is included. Labor and equipment costs for fueling, greasing, and servicing are included in the rate. The "FOG" allowance for cranes, draglines, backhoes, and shovels (except self-propelled hydraulic cranes) has been reduced to allow for servicing normally performed by the oiler assigned to the piece of equipment.

(4) Maintenance and Repair Costs.

(a) The cost of maintenance and repairs includes all expenses incurred for parts, labor, fringe benefits, shop overhead, supporting facilities, outside specialty services, and maintenance equipment. The basic hourly costs are computed as follows:

$$\text{Repairs/Hr} = \frac{(\text{New Equipment Cost} - \text{Tire Cost})}{\text{Life in Hrs}} (\text{Repairs \%})$$

The maintenance and repair cost percentages are given in APPENDIX D (Column "RPR"). The tire cost is the cost of the tires when the equipment was purchased new.

(b) The basic hourly rate for maintenance and repairs is adjusted by two multiplying factors so that actual costs and site conditions are considered.

(1) Economic Adjustment Factor. The economic adjustment factor (EAF) is used to adjust the basic hourly rate to current price levels. The indexes in APPENDIX E are used to develop this factor which is equal to the economic index for current year divided by the economic index for the year the piece of equipment was purchased new.

(2) Labor Adjustment Factor. The labor adjustment factor (LAF) is used to adjust the repairs percentage (RPR) to account for variations in labor costs. The factor for the area covered by this pamphlet is given in APPENDIX B.

(5) Hourly Tire Cost.

(a) Tires included on rubber-tired equipment are the bias ply tires suggested as standard equipment by the equipment manufacturers.

(b) The hourly tire cost equals the current cost of new tires plus the cost of one recapping divided by the expected life of the new tires plus the life of the recapped tires. It has been determined that a recap costs approximately 50 percent of the new tire cost and that the life of a new tire plus recapping will equal approximately 1.8 times the "useful life" of a new tire.

(c) The useful tire life was determined from the method and tables in the manual prepared by Terex Division of General Motors "Production and Cost Estimating of Material Movement with Earthmoving Equipment," with the exception that the maximum tire life has been assumed to be as indicated in APPENDIX F. A

sample computation of the tire wear factors for off-highway haul units is given in APPENDIX F.

(d) The tire wear factor for front tires for belt loaders shown in APPENDIX D is used to provide an hourly allowance for belt wear of the conveyor belt.

(6) Tire Repair Costs. Tire repairs are computed as 15 percent of the hourly tire wear cost.

e. Standby. The standby rate is computed from the average condition rates by allowing the full "CFC" hourly cost plus one-fourth of the hourly depreciation. No more than 8 hours of standby will be paid during a 24-hour day, nor more than 40 hours per week. Standby time will not be allowed unless the equipment has been in idle status in excess of 16 hours during a 24-hour day. Likewise, standby will not be allowed during periods when the equipment would have otherwise been in idle status. Actual operating time during a week will be credited against the 40 hours maximum standby allowance.

f. Working Hours. The hourly use rates shown in TABLE 3-1 are computed on the basis of a 40-hour work week. When the Contractor works more than 40 hours per week the cost for "CFC" will be excluded from the hourly rate for those hours in excess of 40 hours per week. The hourly use rates for work weeks greater than 40 hours can be computed as shown in the sample computations or may be calculated by the use of TABLE 3-3.

g. Sample Computation. A sample computation has been provided in Figure 2-1 to illustrate how the hourly use rates in TABLE 3-1 were computed using the methodology stated in this pamphlet. When an hourly rate for a specific piece of equipment must be computed by the methods in Figure 2-1, the procedure given shall be followed.

FOR ILLUSTRATION PURPOSES ONLY

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CONSTRUCTION EQUIPMENT HOURLY OWNERSHIP AND OPERATING RATE WORK SHEET
(EP 1110-1-8)

1. REQUIRED DATA

a. Unit Number 2740

(1) Equipment Description Lorain Truck Crane 50-Ton
(2) Model and Series MC-550A IN/160' Boom
(3) Year Purchased 1979 (4) Year Purchased New 1979
(5) Equipment Horsepower 115 (6) Carrier Horsepower 246
(7) Fuel Type Diesel/Diesel (8) Shipping Weight 111,100 Lbs.
(9) Tire Size: Front 140x20-18 PR Drive 140x20-18 PR Trailing ex/a

b. Key Number from APPENDIX D 225

(1) Condition Average
(2) Salvage Value % 20% (3) Life 18,000 Hrs
(4) Equipment Fuel Factor .038 (5) Carrier Fuel Factor .006
(6) FOG Factor: Gas N/A Diesel .26 Electric N/A
(7) Tire Wear Factor: Front .95 Drive .90 Trailing N/A
(8) Repairs Cost Factor .60

2. EQUIPMENT COST

a. List Price When New (including extras) = \$ 267,037.00

(1) Discount: (List Price) x *7.5% *(17.5% for Highway Trucks)

$$= (\$ 267,037.00) \times .075 = (-) \$ 20,027.78$$

(2) Freight: (Shipping Weight) x (Prep. and Del. Rate)
From 1-a-(8) From APPENDIX B

$$= (111 \text{ Cwt}) \times (\$ 5.87) = (+) \$ 6,521.57$$

b. Subtotal: Summation of Part a. (Use actual cost when available) = \$ 253,530.79

(1) State Sales Tax: (Subtotal) x (Tax Rate)
From 2-b

$$= (\$ 253,530.79) \times .03 = (+) \$ 7,605.92$$

c. Equipment Cost: Summation of Part b. (Use actual cost when available) = \$ 261,136.71

CONSTRUCTION EQUIPMENT HOURLY OWNERSHIP AND OPERATING RATE WORK SHEET (Continued)

3. LIFE (N)

(Life From 1-b-(3)) + (Hours Use/Year From APPENDIX B)

$$= (\underline{18,000} \text{ Hrs}) + (\underline{1,600} \text{ Hrs/Yr}) \quad \underline{11.25} \text{ Yrs.}$$

4. ECONOMIC ADJUSTMENT FACTOR (EAF)

(Economic Index for Present) + (Economic Index for Year)
Year From APPENDIX E Purchased New From APP. E

$$= (\underline{3044}) + (\underline{2512}) = 1212 \text{ (EAF)}$$

5. SALVAGE VALUE FACTOR (S)

(Salvage Factor) x (EAF)
From 1-b-(2) From 4

$$= (\underline{.20}) \times (\underline{1.212}) = \underline{.242}(\text{S})$$

6. OWNERSHIP COSTS

a. Depreciation:

$$= [(\$ \underline{261,137}) \times [1.0 - (.242)] - (\$ \underline{5698})] \div (\underline{18,020} \text{ Hr}) = \$ \underline{10,68} / \text{Hr.}$$

b. Cost of Facilities Capital (CFC):

$$(1) \quad [((From) - 1.0) \times ((S \ From) + 1.0) + 2.0] + [(From) \times 2.0]$$

$$= [(11.25 \text{ Yrs}) - 1.0] \times [(.242) + 1.0] + 2.0] \div [(11.25 \text{ Yrs}) \times 2.0] = .6547$$

(2) (Cost From) x (Value Factor) x (From Para.) + (Yr From)
 2-c From 6-b-(1) 2-2.c.(2) APP. B

$$= (\$ \underline{261,137}) \times (.6547) \times \underline{616} \div (\underline{1,680} \text{ Hrs/Yr}) = \$ \underline{12.40/\text{Hr.}}$$

c. Total Hourly Ownership: (Sum 6-a + 6-b-(2))

= \$ 23.08/Hr.

CONSTRUCTION EQUIPMENT HOURLY OWNERSHIP AND OPERATING RATE WORK SHEET (Continued)

7. OPERATING COSTS

a. Fuel Costs:

(1) Equipment: (Equip Fuel Factor) x (H.P. From) x (Fuel Cost)
 From 1-b-(4) 1-a-(5) Per Gal.

$$= (.038) \times (115 \text{ HP}) \times (\$ 1.05 / \text{Gal}) = \$ 4.59 / \text{Hr.}$$

(2) Carrier: (Carrier Fuel Factor) x (H.P. From) x (Fuel Cost)
 From 1-b-(5) 1-a-(6) Per Gal.

$$= (.006) \times (246 \text{ HP}) \times (\$ 1.16 / \text{Gal}) = \$ 1.71 / \text{Hr.}$$

(3) Total Fuel Costs: (Sum 7-a-(1), 7-a-(2)) = \$ 6.30 / Hr.

b. FOG Costs:

(1) Equipment: (FOG Factor) x (Hourly Fuel Cost)
 From 1-b-(6) From 7-a-(1)

$$= (.26) \times (\$ 4.59 / \text{Hr}) = \$ 1.19 / \text{Hrs.}$$

(2) Carrier: (FOG Factor) x (Hourly Fuel Cost)
 From 1-b-(6) From 7-a-(2)

$$= (.26) \times (\$ 1.71 / \text{Hr}) = \$.44 / \text{Hr.}$$

(3) Total FOG Costs: (Sum 7-b-(1), 7-b-(2)) = \$ 1.63 / Hr.

c. Repairs Cost:

(1) Repair Factor:

(Repairs Cost Factor) x (EAF) x (LAF From)
 From 1-b-(8) From 4 APP. B

$$= (.60) \times (1.212) \times (1.02) = .7417$$

(2) Hourly Repairs:

Equipment Life
 [(Cost From) - (Tire Cost)] x (Repair Factor) + (From)
 2-c When New From 7-c-(1) 1-b-(3)

$$= [(\$ 261,137) - (\$ 5,698)] \times (.7417) + (\$ 18,000 / \text{Hr}) = \$ 10,53 / \text{Hr.}$$

CONSTRUCTION EQUIPMENT HOURLY OWNERSHIP AND OPERATING RATE WORK SHEET (Continued)

d. Tire Wear Costs:

$$(2) \text{ Drive Tires: } 1.5 \times (\text{Tires}) + [1.8 \times (\text{Ftr Frm}) \times (\text{Life Frm})]$$

Drive Cost	D-Tire 1-b-(7)	Max Tire Tbl F-1
---------------	-------------------	---------------------

$$= 1.5 \times (\$ 4845) + [1.8 \times (.90) \times (5000 \text{ Hr.})] = \$ 1,90 \text{ /Hr.}$$

$$(3) \text{ Trailing Tires: } 1.5x(\text{Tires}) \div [1.8x(\text{Ftr Frm}) \times (\text{Life Frm})]$$

Cost 1-b-(7) Tbl F-1

$$= 1.5x(\$ \quad \quad \quad) \div [1.8x(\quad \quad \quad) \times (\quad \quad \quad \text{Hr.})] = \$ \cancel{\text{NA}} / \text{Hr.}$$

(4) Total Tire Wear Cost: (Sum 7-d-(1) thru (3)) = \$ 1.33 /Hr.

e. Tire Repair Cost: (Tire Wear) x 0.15
 Frm 7-d-(4)

$$= (\$ 1.33) \times 0.15 = \$.20 / Hr.$$

f. Total Operating Costs: (Sum 7-a thru 7-e) = \$ 19.99 / Hr.

8. TOTAL HOURLY RATES

a. Single Shift Hourly Rate: (40 Hours per Week)

(Ownership Costs Frm 6-c) + (Operating Costs Frm 7-f)

$$= (\$ \underline{\underline{23.08}} / \text{Hr}) + (\$ \underline{\underline{19.99}} / \text{Hr}) = \$ \underline{\underline{43.07}} / \text{Hr}$$

b. Hourly Rate for Other Work Shifts:

(Depreciation) + [(CFC Frm) x 40 + (Work Hrs)] + (Operating Costs)
 From 6-a 6-b-(2) Per Week Frm 7-f

$$= (\$ \underline{10.68} / \text{Hr}) + [(\$ \underline{12.40} / \text{Hr}) \times 40 \div (\underline{60} \text{ Hr/Wk})] + (\$ \underline{19.99} / \text{Hr}) = \$ \underline{38.94} / \text{Hr}$$

c. Hourly Standby Rate:

(Depreciation) x 0.25 + (CFC Frm)
From 6-a 6-b-(2)

$$= (\$ \underline{10.68} / \text{Hr}) \times 0.25 + (\$ \underline{12.40} / \text{Hr}) = \$ \underline{15.07} / \text{Hr}$$

2-3. Marine Equipment.

a. General. Hourly use rates for ownership and operating costs have not been developed for marine equipment since this type of equipment is normally custom designed and built. This section, however, presents the methodology for determining the ownership expense expressed as a percent of equipment value, which is defined as the actual acquisition cost plus any capital improvements. The annual percentages are shown in TABLE 2-1 for various types of equipment. When a type of equipment is not listed, the ownership expense percent may be determined by using the percentage listed for a similar type with the same expected life. Hourly ownership and operating expenses for any land-based equipment involved with the operation will be based on the methodology herein for construction equipment.

b. Ownership Cost. Ownership cost is based on the equipment value and equals the cost of depreciation and facilities capital. When cost or pricing data is available, the actual equipment value shall be used. Otherwise, the value of a similar piece of equipment may be used and, if necessary, adjusted so that capacity, size, and horsepower are properly considered.

(1) Depreciation. Depreciation is computed using the straight-line method and the annual rate is determined by dividing the depreciable value by the expected normal life of the equipment in years. When the actual age of a piece of equipment exceeds the normal life, one year shall be added to the actual age and the depreciation shall be recomputed. The depreciable value is the acquisition cost, plus any capital improvements, less estimated salvage. Costs for drydocking and major repairs, which occur periodically, are considered a part of operating costs and will be allocated on an equal annual basis over the years between such occurrences, in accordance with paragraph 15-205.20 of DAR.

(2) Cost of Facilities Capital (CFC). The cost of facilities capital (CFC) is computed as shown in paragraph 2-2.c, except that CFC is determined on an annual basis instead of an hourly basis and it is expressed here as an annual percentage factor.

$$CFC = \frac{[(N-1)(1+S) + 2]}{2N} (11.6\%)$$

where: N = No. of years in depreciation period
S - Salvage Value Factor

(3) The salvage value factor is expressed as a decimal and is shown in TABLE 2-1 for different items of equipment.

(4) Taxes, storage (layup), and insurance are considered indirect (overhead) costs or a part of operating costs (see paragraph 2-2.c.(3)). These are not included in ownership rates since they vary by geographic areas and with individual contractors and should not be duplicated in the estimate or submitted proposal.

(5) The expected life shown in TABLE 2-1 for shore pipeline and floating pipeline is based on average dredging conditions. When more severe conditions are encountered, such as the dredging of very abrasive sand or rock, the expected life should be decreased. Similarly when better than average conditions are encountered, such as dredging mud or silt, the expected life should be increased. In either case, the adjustment should be made only for the time required to dredge the exceptional material. When the dredged material is a combination of various types, a weighted average should be estimated and the expected life adjusted accordingly. The repair of pipelines during the economic life is considered a part of operating costs.

c. Annual Use. Marine equipment is normally operated 24 hours per day, 7 days per week, and costs are usually kept on a monthly basis. This is the preferred basis, but if an hourly or daily basis is used, the monthly cost should be divided by the actual number of hours or days the contractor is working. If actual time cannot be determined the monthly cost should be divided by 720 hours or 30 days. The number of months' use per year is of such a variable nature that it is established for each contract by including this factor in the clauses of the contract.

d. Standby. The standby rate is computed by allowing the full CFC monthly rate plus one-fourth of the monthly depreciation. In addition to the standby ownership rate, on dredges it may be necessary to include a small amount for operating costs to account for the operation of a diesel engine generator for power to operate pumps, navigation lights, etc. Standby will not be allowed during periods when the equipment would have otherwise been in idle status.

TABLE 2-1 ANNUAL OWNERSHIP EXPENSE FACTORS FOR MARINE EQUIPMENT

<u>TYPE OF EQUIPMENT</u>	LIFE (YRS)	SALVAGE VALUE FACTOR	PERCENT <u>ANNUAL OWNERSHIP EXPENSE</u>		
			DEPRE- CIATION	CFC	TOTAL
Hydraulic dredge, including hydraulic dredges used as Boosters:					
10-inch thru 14-inch	20	.05	4.75	6.37	11.12
16-inch thru 20-inch	25	.10	3.60	6.59	10.19
24-inch and over	30	.10	3.00	6.55	9.55
Booster & Barge:					
10-inch thru 14-inch	20	.05	4.75	6.37	11.12
16-inch thru 20-inch	25	.10	3.60	6.59	10.19
24-inch and over	30	.10	3.00	6.55	9.55
Dredge, Hopper	30	.10	3.00	6.55	9.55
Dredge, clamshell/ dragline	20	.05	4.75	6.37	11.12
Dredge, Dipper/Hyd Excav	25	.05	3.80	6.31	10.11
Bucket Dredge	30	.10	3.00	6.55	9.55
Dump Scows	20	.05	4.75	6.37	11.12
Barges:					
Fuel	20	.05	4.75	6.37	11.12
Water	20	.05	4.75	6.37	11.12
Equipment or Work	20	.05	4.75	6.37	11.12
Derrick	20	.10	4.50	6.64	11.14
Anchor	20	.05	4.75	6.37	11.12
Drill Boat or Barge	20	.10	4.50	6.64	11.14
Mooring Barge	20	.05	4.75	6.37	11.12
Tugs	20	.10	4.50	6.64	11.14
Tenders	20	.10	4.50	6.64	11.14
Launches	12	.05	7.92	6.55	14.47
Shore Pipeline (Average)	3	0	33.3	7.73	41.03
Floating Line:					
Pontoons	15	0	6.7	6.19	12.89
Pipeline/Joints (Avg)	10	0	10.0	6.38	16.38

CHAPTER 3

RATE SCHEDULE

3-1. Introduction. Hourly rates for construction equipment for both average and severe conditions are presented in TABLE 3-1. The rates may be adjusted or recomputed when (a) "Difficult Conditions" are specified by the contract, (b) actual acquisition cost is significantly different from the "Equipment Cost" shown, (c) age is different from that used, (d) license, taxes, storage and insurance costs are charged directly to an item of work, (e) fuel costs differ by more than 10% from the cost shown, and (f) work week exceeds 40 hours per week. Whenever one or more of these conditions exist, the rates may be adjusted using the tables in this chapter or computed as shown in the sample computations in Figure 2-1.

3-2. Hourly Equipment Ownership and Operating Expense.

a. Description.

(1) The following example illustrates how the equipment is listed in TABLE 3-1: The unit number 2710 is the identifying number of this piece of equipment in the input and output computer listings. The number 5530 is the model number of the equipment (American Model 5530 Truck Crane). The crane is rated at 75 tons and is equipped with a 170-foot boom. The crane has a 115-horsepower engine, the carrier has a 238-horsepower engine and both engines are diesel. The cost column reflects the pre-determined "equipment cost," used to compute the rates.

(2) The "total hourly rate" column includes all ownership and operating expenses, including fuel costs. The "Adjustable Elements" column shows ownership and fuel costs broken out of the total rate so they can be adjusted as indicated in CHAPTER 2 and 3. Operating costs may be determined by subtracting the ownership cost from the total hourly rate. The CWT column is the shipping weight of the equipment in hundredweight.

b. Truck Selection. Because of the large number of possible combinations of highway truck chassis and truck bodies, they are listed separately. To make an exact truck selection for a given set of hauling conditions would require lengthy calculations; however, for estimating purposes the selection can be made by using the GVW rating of the truck chassis. The combined weight of the truck chassis, the truck body and the payload must not exceed the GVW rating shown for the truck chassis.

c. Dozer Selection. Because of the various number of dozer and ripper combinations available for each crawler tractor the tractors and attachments are listed separately. Only the hourly expense for those attachments that are required to perform the work shall be allowed.

d. Equipment Extras. Equipment extras included on the major pieces of equipment in TABLE 3-1 are listed in APPENDIX G.

e. Equipment Not Listed. When an item of equipment is not listed in TABLE 3-1 the hourly rate may be determined by using the hourly rate listed for a similar piece of equipment or by proportioning a rate listed so that capacity, size, and horsepower are properly considered. When an hourly rate cannot be determined from TABLE 3-1, the rate will be calculated following the methodology outlined in CHAPTER 2.

f. Over-Age Equipment. When an item of equipment has exceeded the economic service life given in APPENDIX D, it is considered over-age and the hourly use rate will not exceed the rate for a piece of equipment that is not over age. An hourly rate for over-age equipment will be computed from TABLE 3-1 and the age adjustment tables or as shown in Figure 2-1 on the basis that the equipment is as old as possible without exceeding the "life" as shown in APPENDIX D.

g. Equipment Purchased Used. A detailed method for computing an hourly use rate for equipment purchased used has not been included in this pamphlet. The condition of the equipment at the time of purchase (extent of capital improvements, mechanical condition of drive train, previous hours of operation, etc.) is difficult or impossible to determine and to evaluate when computing an hourly use rate based on actual acquisition cost. When actual cost data in accordance with paragraph 1-5 is not available, an hourly use rate and standby rate for equipment purchased used will be computed on the basis that the equipment was purchased new by the contractor in the year it was manufactured.

h. Rate Adjustment Tables. The rate adjustment tables (TABLES 3-2, 3-3 and 3-4) should be used to adjust the hourly rates in TABLE 3-1 when the actual age of the equipment and working hours are to be considered. These tables may be used whenever information is available to indicate that the contractor's equipment is not the same age as the equipment listed in this pamphlet or when the hours worked have exceeded 40 hours per week. The rate adjustment tables have been developed from the equations used to calculate ownership and standby costs and it has been determined that they provide

reasonable adjustment factors to allow a short-cut method for computing an hourly use rate when actual conditions are considered. When cost or pricing data is available the rate adjustment tables may be used in lieu of a step-by-step rate computation for each item of equipment, provided that the equipment is equivalent in size, capacity, horsepower, etc. to the item listed in the pamphlet.



TABLE 3-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

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TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		STAND-BY	ADJUSTABLE ELEMENTS		CWT				
			CONDITION			AVERAGE COND.	SEVERE COND.					
			AVERAGE	SEVERE		OWNER-SHIP	FUEL					
AGGREGATE SPREADER *****												
TOWED												
1005	WALES HANDY SPREADER SPREADS TO 2' DEPTH AND UP TO 10' WIDE	4,872	1.15		0.33	0.60	0.00	19				
1010	HI-WAY MOD R-1 SPREADS TO 3.5' DEPTH AND UP TO 12' WIDE	6,334	1.47		0.43	0.77	0.00	23				
SELF PROPELLED												
1020	ETNYRE TO 8' DEPTH & 13' WIDE 187 HP G	31,930	22.70		2.16	3.92	12.49	155				
1025	ETNYRE TO 8' DEPTH & 13' WIDE 123 HP D	35,533	12.82		2.41	4.38	3.87	160				
AIR COMPRESSORS PORTABLE ***** (HOSE NOT INCLUDED)												
ROTARY SCREW												
1040	SIZE 85 CFM QUIET 100 PSI 47 HP G	6,821	6.93		0.47	0.83	4.06	17				
1045	SIZE 85 CFM QUIET 100 PSI 38 HP D	9,630	4.15		0.66	1.17	1.52	20				
1050	SIZE 100 CFM QUIET 100 PSI 50 HP G	9,087	7.78		0.62	1.10	4.32	20				
1055	SIZE 100 CFM QUIET 100 PSI 42 HP D	10,892	4.65		0.75	1.33	1.68	23				
1060	SIZE 125 CFM QUIET 100 PSI 56 HP G	10,389	8.77		0.71	1.26	4.84	24				
1065	SIZE 125 CFM QUIET 100 PSI 47 HP D	12,174	5.20		0.84	1.48	1.88	26				
1070	SIZE 150 CFM QUIET 100 PSI 69 HP G	12,866	10.84		0.89	1.57	5.97	26				
1075	SIZE 150 CFM QUIET 100 PSI 70 HP D	15,092	7.04		1.04	1.84	2.79	28				
1080	SIZE 185 CFM QUIET 100 PSI 69 HP G	13,957	11.09		0.96	1.70	5.97	27				
1085	SIZE 185 CFM QUIET 100 PSI 70 HP D	16,432	7.34		1.13	2.00	2.79	29				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT					
			CONDITION	STAND-BY	AVERAGE COND.		SEVERE COND.							
					AVERAGE	SEVERE	OWNER-SHIP	FUEL						
AIR COMPRESSORS PORTABLE (CONT'D)														
XXXXXXXXXXXXXX														
(HOSE NOT INCLUDED)														
ROTARY SCREW (CONT'D)														
1090	SIZE 340 CFM QUIET 100 PSI	103 HP D	31,924	12.58	2.19	3.88	4.11		55					
1095	SIZE 450 CFM QUIET 100 PSI	152 HP D	42,343	17.48	2.91	5.15	6.06		80					
1100	SIZE 600 CFM QUIET 100 PSI	196 HP D	59,292	23.61	4.07	7.21	7.82		111					
1105	SIZE 750 CFM QUIET 100 PSI	228 HP D	68,806	27.44	4.73	8.37	9.10		120					
1110	SIZE 825 CFM QUIET 100 PSI	250 HP D	73,966	29.73	5.08	8.99	9.97		127					
1115	SIZE 900 CFM QUIET 100 PSI	280 HP D	81,804	33.07	5.62	9.95	11.17		148					
1120	SIZE 1000 CFM QUIET 100 PSI	283 HP D	93,132	35.82	6.40	11.33	11.29		165					
1125	SIZE 1200 CFM QUIET 100 PSI	325 HP D	112,557	42.43	7.73	13.69	12.97		192					
1130	SIZE 1600 CFM QUIET 100 PSI	456 HP D	133,270	53.86	9.15	16.21	18.19		223					
AIR TOOLS														
XXXXXXXX														
(HOSE NOT INCLUDED)														
GARDNER DENVER														
1140	TAMPER T23	20CFM A	852	0.47	0.09	0.21	0.00		1					
1145	SPADER SP27E	32CFM A	858	0.47	0.09	0.21	0.00		1					
1150	SINKER DRILL S48	88CFM A	1,766	0.97	0.19	0.44	0.00		1					
1155	SINKER DRILL S58	98CFM A	1,877	1.02	0.19	0.46	0.00		1					
1160	PAVING BREAKER B37	41CFM A	881	0.48	0.09	0.22	0.00		1					
1165	PAVING BREAKER B67C	46CFM A	944	0.51	0.10	0.23	0.00		1					
1170	PAVING BREAKER B87C	50CFM A	1,026	0.57	0.11	0.26	0.00		1					

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
AIR TOOLS (CONT'D)											
1175 FEED LEG DRILL FL83-54" TRAVEL RETRACTABLE		103CFM A	3,446	1.88		0.36	0.85	0.00		1	
1180 FEED LEG DRILL FL53-48" TRAVEL RETRACTABLE		88CFM A	2,950	1.60		0.30	0.72	0.00		1	
SANDBLASTERS CLESCO											
1190	SCW-1028P SANDBLASTER 1/2" HOSE INCLUDES ACCESSORIES AND 50' HOSE	85CFM A	1,219	0.73		0.13	0.30	0.00		2	
1195	SCW-1440P SANDBLASTER 3/4" HOSE INCLUDES ACCESSORIES AND 50' HOSE	85CFM A	2,175	1.25		0.23	0.54	0.00		5	
1200	SCWB-1648P SANDBLASTER 1" HOSE INCLUDES ACCESSORIES AND 50' HOSE	125CFM A	2,253	1.29		0.24	0.56	0.00		6	
1205	SCWB-2452P SANDBLASTER 1-1/4" HOS INCLUDES ACCESSORIES AND 50' HOSE	210CFM A	2,361	1.35		0.24	0.58	0.00		6	
1210	SCW-3079P SANDBLASTER 1-1/4" HOSE INCLUDES ACCESSORIES AND 50' HOSE	210CFM A	2,593	1.48		0.27	0.64	0.00		9	
CONCRETE VIBRATORS (BART)											
1220	CONCRETE VIBRATOR MOD A-600SH 6"	120CFM A	2,150	2.14		0.22	0.53	0.00		1	
1225	CONCRETE VIBRATOR MOD A-450SH 4.5"	98CFM A	1,835	1.82		0.19	0.45	0.00		1	
1230	CONCRETE VIBRATOR MOD A-35012 3.5"	74CFM A	1,640	1.63		0.17	0.40	0.00		1	
1235	CONCRETE VIBRATOR MOD A-30012 3"	50CFM A	1,463	1.46		0.15	0.36	0.00		1	
1240	CONCRETE VIBRATOR MOD A-25010 2.5"	44CFM A	1,191	1.19		0.13	0.30	0.00		1	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
ASPHALT DISTRIBUTOR-ROSCO ***** (NO CHASSIS)											
1250	MOD RES 1000 GAL. TRUCK MOUNTED 18,000 TO 24,000 GVW REQUIRED	50 HP 6	18,264	9.72		1.27	2.15	4.32		72	
1255	MOD RES 1500 GAL. TRUCK MOUNTED 24,000 TO 32,000 GVW REQUIRED	50 HP 6	18,948	9.86		1.31	2.22	4.32		75	
1260	MOD RES 2000 GAL. TRUCK MOUNTED 32,000 GVW REQUIRED	50 HP 6	20,353	10.18		1.41	2.39	4.32		87	
1265	MOD RES 3000 GAL. TRUCK MOUNTED 42,000 GVW REQUIRED	50 HP 6	23,033	10.83		1.58	2.65	4.32		109	
 ASPHALT FINISHERS-BARBER GREENE *****											
1275	MOD SB111 8'-12' WIDE (PNEUMATIC)	70 HP D	69,507	20.07		4.73	8.67	2.79		155	
1280	MOD SB131 10'-12' WIDE (P'MATIC) W/VIB SCREED,AUTO. FEEDERS AND GR CONTROL	95 HP D	100,608	29.01		6.84	12.49	3.79		245	
1285	MOD SB140 10'-12' WIDE (P'MATIC) OPTIONS SAME AS MOD SB131	130 HP D	115,092	34.60		7.80	14.20	5.19		314	
1290	MOD SA150 10'-12' WIDE (CRAWLER) OPTIONS SAME AS MOD SB131	130 HP D	138,607	39.11		9.48	17.41	5.19		370	
 BROOMS M-B *****											
1300	MOD 53T HYD 7 FT. TOWED MECH/DRIVE W/SPRINKLER		5,020	1.35		0.35	0.63	0.00		24	
1305	MOD 53-M 7 FT. TOWED MOTOR/DRIVEN W/SPRINKLER	25 HP 6	6,422	4.21		0.44	0.79	2.16		30	
1310	MOD MT 7 FT. TRACTOR/MOUNTED PTO/DRIVE W/SPRINKLER/		2,288	0.69		0.15	0.28	0.00		10	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT	
			CONDITION	STAND BY	AVERAGE OWNERSHIP	FUEL	SEVERE OWNERSHIP	FUEL		
	BROOMS M-B (CONT'D) *****									
1315	MOD HT 7 FT. TRACTOR/MOUNTED HYD/DRIVE W/SPRINKLER	3,816	1.02		0.26	0.48	0.00		14	
	BRUSH CHIPPERS - FITCHBERG *****									
1325	MOD TWC-612 CAP. TO 6" DIA. L06 151 HP G	5,167	18.48		0.36	0.65	13.06		37	
1330	MOD TWC-915 CAP. TO 9" DIA. L06 165 HP G	6,308	20.34		0.43	0.78	14.27		40	
	BUCKETS-CLAMSHELL *****									
	GENERAL PURPOSE - SQUARE NOSE ESCO MODEL 6									
1340	1.0 C.Y.	8,146	1.89	2.83	0.56	1.01	0.00	1.59	0.00	43
1345	1.5 C.Y.	11,990	2.78	4.16	0.82	1.48	0.00	2.33	0.00	65
1350	2.0 C.Y.	13,553	3.15	4.70	0.93	1.68	0.00	2.63	0.00	72
1355	2.5 C.Y.	17,664	4.10	6.12	1.22	2.19	0.00	3.43	0.00	94
1360	3.0 C.Y.	18,706	4.34	6.49	1.28	2.31	0.00	3.64	0.00	99
1365	3.5 C.Y.	19,201	4.45	6.66	1.31	2.37	0.00	3.73	0.00	110
1370	4.0 C.Y.	21,130	4.90	7.33	1.45	2.61	0.00	4.11	0.00	120
1375	4.5 C.Y.	22,860	5.31	7.93	1.57	2.83	0.00	4.45	0.00	132
1380	5.0 C.Y.	24,782	5.75	8.59	1.70	3.06	0.00	4.81	0.00	146
1385	5.5 C.Y.	26,748	6.20	9.28	1.83	3.30	0.00	5.20	0.00	158
1390	6.0 C.Y.	27,708	6.42	9.60	1.90	3.42	0.00	5.38	0.00	166
1395	6.5 C.Y.	29,948	6.95	10.38	2.05	3.70	0.00	5.82	0.00	177

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS			CWT				
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP					
BUCKETS-CLAMHELL (CONT'D)													

GENERAL PURPOSE - SQUARE NOSE CONT'D													
ESCO MODEL G													
1400	7.0 C.Y.	30,859	7.16	10.70	2.12	3.82	0.00	6.00	0.00	185			
HEAVY DUTY - SQUARE NOSE													
ESCO MODEL HD													
1410	1.0 C.Y.	9,863	2.28	3.43	0.67	1.21	0.00	1.93	0.00	49			
1415	1.5 C.Y.	14,358	3.33	4.99	0.98	1.77	0.00	2.80	0.00	74			
1420	2.0 C.Y.	15,505	3.60	5.37	1.07	1.92	0.00	3.01	0.00	82			
1425	2.5 C.Y.	19,700	4.58	6.83	1.35	2.44	0.00	3.83	0.00	104			
1430	3.0 C.Y.	21,550	5.00	7.47	1.48	2.66	0.00	4.19	0.00	115			
1435	3.5 C.Y.	23,265	5.40	8.08	1.60	2.88	0.00	4.53	0.00	126			
1440	4.0 C.Y.	25,013	5.80	8.68	1.71	3.09	0.00	4.87	0.00	137			
1445	4.5 C.Y.	26,852	6.23	9.30	1.84	3.32	0.00	5.21	0.00	147			
1450	5.0 C.Y.	29,558	6.85	10.25	2.02	3.65	0.00	5.74	0.00	163			
1455	5.5 C.Y.	31,185	7.23	10.81	2.13	3.85	0.00	6.06	0.00	172			
1460	6.0 C.Y.	32,990	7.65	11.44	2.26	4.07	0.00	6.41	0.00	182			
1465	6.5 C.Y.	34,409	7.99	11.93	2.36	4.26	0.00	6.69	0.00	193			
1470	7.0 C.Y.	35,745	8.28	12.40	2.45	4.41	0.00	6.95	0.00	193			
EXTRA HEAVY DUTY - SQUARE NOSE													
ESCO MODEL X													
1480	1.0 C.Y.	11,286	2.62	3.92	0.78	1.40	0.00	2.20	0.00	58			
1485	1.5 C.Y.	16,760	3.89	5.81	1.15	2.07	0.00	3.26	0.00	85			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS			CWT				
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP					
BUCKETS-CLAMSHELL (CONT'D)													
XXXXXXXXXXXXXXXXXXXXXX													
EXTRA HEAVY DUTY - SQUARE NOSE CONT'D													
ESCO MODEL X													
1490	2.0 C.Y.	20,273	4.71	7.03	1.39	2.51	0.00	3.94	0.00	103			
1495	2.5 C.Y.	22,674	5.27	7.87	1.56	2.81	0.00	4.41	0.00	121			
1500	3.0 C.Y.	24,640	5.72	8.55	1.69	3.05	0.00	4.79	0.00	135			
1505	3.5 C.Y.	25,957	6.02	9.00	1.78	3.21	0.00	5.04	0.00	149			
1510	4.0 C.Y.	27,495	6.38	9.53	1.89	3.40	0.00	5.34	0.00	158			
1515	4.5 C.Y.	28,813	6.68	9.99	1.97	3.56	0.00	5.60	0.00	168			
1520	5.0 C.Y.	30,905	7.17	10.72	2.12	3.82	0.00	6.01	0.00	181			
1525	5.5 C.Y.	32,729	7.59	11.35	2.24	4.04	0.00	6.36	0.00	193			
1530	6.0 C.Y.	34,209	7.94	11.86	2.35	4.23	0.00	6.65	0.00	203			
1535	6.5 C.Y.	37,064	8.60	12.85	2.54	4.58	0.00	7.20	0.00	220			
1540	7.0 C.Y.	38,197	8.86	13.25	2.62	4.72	0.00	7.43	0.00	230			
BUCKETS-CONCRETE-BAR-BRD													
XXXXXXXXXXXXXXXXXXXXXX													
GENERAL PURPOSE - MANUAL													
1550	1.0 C.Y.	1,108	0.26		0.08	0.14	0.00			6			
1555	1.5 C.Y.	1,389	0.32		0.10	0.17	0.00			8			
1560	2.0 C.Y.	1,808	0.42		0.12	0.22	0.00			11			
1565	3.0 C.Y.	2,615	0.60		0.18	0.32	0.00			19			
1570	4.0 C.Y.	3,297	0.77		0.23	0.41	0.00			23			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CNT			
			CONDITION	STAND-BY	AVERAGE	SEVERE	OWNER-SHIP	FUEL	OWNER-SHIP				
BUCKETS-CONCRETE-GAR-BRO (CONT'D)													
XXXXXXXXXXXXXXXXXXXXXX													
GENERAL PURPOSE - LOW SLUMP - AIR													
1580	1.0 C.Y.	4,699		1.10		0.33	0.59	0.00		19			
1585	1.5 C.Y.	4,933		1.14		0.34	0.61	0.00		21			
1590	2.0 C.Y.	5,155		1.20		0.36	0.64	0.00		23			
1595	3.0 C.Y.	7,111		1.65		0.49	0.88	0.00		42			
1600	4.0 C.Y.	7,463		1.73		0.51	0.92	0.00		52			
1605	6.0 C.Y. DBL. COMPT.	10,786		2.50		0.74	1.33	0.00		72			
1610	8.0 C.Y. DBL. COMPT.	12,804		2.97		0.88	1.58	0.00		80			
LAYDOWN - HEAVY DUTY - CLAM GATE TYPE													
1620	1.0 C.Y.	4,306		1.01		0.30	0.54	0.00		17			
1625	2.0 C.Y.	4,786		1.11		0.33	0.59	0.00		21			
1630	3.0 C.	5,497		1.28		0.38	0.68	0.00		27			
1635	4.0 C.Y.	6,625		1.54		0.45	0.82	0.00		60			
BUCKETS-DRAGLINE													
XXXXXXXXXXXXXXXXXXXX													
LIGHT WEIGHT - PERFORATED HENDRIX MODEL LS													
1650	1.0 C.Y.	2,594	0.60	0.91	0.18	0.32	0.00	0.51	0.00	18			
1655	1.5 C.Y.	3,200	0.74	1.11	0.22	0.39	0.00	0.62	0.00	26			
1660	2.0 C.Y.	3,784	0.88	1.32	0.26	0.47	0.00	0.74	0.00	32			
1665	2.5 C.Y.	4,431	1.03	1.55	0.30	0.55	0.00	0.87	0.00	36			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
BUCKETS-DRAGLINE (CONT'D)												
XXXXXXXXXXXXXX												
LIGHT WEIGHT - PERFORATED (CONT'D)												
HENDRIX MODEL LS												
1670	3.0 C.Y.	5,419	1.26	1.89	0.37	0.67	0.00	1.06	0.00	41		
1675	3.5 C.Y.	6,021	1.39	2.09	0.41	0.74	0.00	1.17	0.00	47		
1680	4.0 C.Y.	7,395	1.71	2.57	0.51	0.91	0.00	1.44	0.00	64		
1685	4.5 C.Y.	7,842	1.82	2.73	0.54	0.97	0.00	1.53	0.00	67		
1690	5.0 C.Y.	9,484	2.21	3.30	0.66	1.18	0.00	1.85	0.00	83		
1695	6.0 C.Y.	10,290	2.40	3.57	0.71	1.28	0.00	2.00	0.00	90		
1700	7.0 C.Y.	11,272	2.62	3.91	0.78	1.40	0.00	2.19	0.00	101		
1705	8.0 C.Y.	12,499	2.90	4.35	0.86	1.55	0.00	2.44	0.00	112		
1710	10.0 C.Y.	15,677	3.64	5.44	1.08	1.94	0.00	3.05	0.00	139		
1715	12.0 C.Y.	19,234	4.45	6.67	1.31	2.37	0.00	3.74	0.00	166		
1720	14.0 C.Y.	22,118	5.13	7.67	1.52	2.73	0.00	4.30	0.00	191		
MEDIUM WEIGHT - HENDRIX MODEL TS												
1730	1.0 C.Y.	3,116	0.73	1.08	0.22	0.39	0.00	0.61	0.00	19		
1735	1.5 C.Y.	3,873	0.89	1.35	0.26	0.47	0.00	0.76	0.00	28		
1740	2.0 C.Y.	4,637	1.07	1.62	0.32	0.57	0.00	0.91	0.00	36		
1745	2.5 C.Y.	5,344	1.24	1.85	0.37	0.66	0.00	1.04	0.00	41		
1750	3.0 C.Y.	6,384	1.48	2.22	0.44	0.79	0.00	1.25	0.00	49		
1755	3.5 C.Y.	7,053	1.63	2.46	0.48	0.87	0.00	1.38	0.00	54		
1760	4.0 C.Y.	8,503	1.97	2.96	0.59	1.05	0.00	1.66	0.00	70		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
BUCKETS-DRAGLINE (CONT'D)														
XXXXXXXXXXXXXXXXXXXXXX														
MEDIUM WT. - HENDRIX MODEL TS CONT'D														
1765	4.5 C.Y.	9,078	2.11	3.14	0.63	1.13	0.00	1.76	0.00	72				
1770	5.0 C.Y.	11,643	2.69	4.04	0.79	1.43	0.00	2.27	0.00	93				
1775	6.0 C.Y.	12,028	2.78	4.17	0.82	1.48	0.00	2.34	0.00	96				
1780	7.0 C.Y.	13,740	3.19	4.76	0.94	1.70	0.00	2.67	0.00	111				
1785	8.0 C.Y.	15,130	3.51	5.25	1.04	1.87	0.00	2.94	0.00	122				
1790	10.0 C.Y.	19,312	4.48	6.69	1.33	2.39	0.00	3.75	0.00	159				
1795	12.0 C.Y.	24,412	5.66	8.47	1.67	3.01	0.00	4.75	0.00	202				
1800	14.0 C.Y.	27,185	6.31	9.43	1.86	3.36	0.00	5.29	0.00	225				
HEAVY WEIGHT - HENDRIX MODEL MH-S														
1810	2.75 C.Y.	10,176	2.36	3.53	0.70	1.26	0.00	1.98	0.00	69				
1815	3.0 C.Y.	10,591	2.46	3.67	0.73	1.31	0.00	2.06	0.00	72				
1820	3.5 C.Y.	11,862	2.75	4.12	0.81	1.46	0.00	2.31	0.00	81				
1825	4.0 C.Y.	15,871	3.69	5.51	1.09	1.97	0.00	3.09	0.00	110				
1830	4.5 C.Y.	17,745	4.11	6.15	1.22	2.19	0.00	3.45	0.00	123				
1835	5.0 C.Y.	18,324	4.26	6.35	1.26	2.27	0.00	3.56	0.00	127				
1840	6.0 C.Y.	19,621	4.55	6.80	1.34	2.42	0.00	3.81	0.00	136				
1845	7.0 C.Y.	24,633	5.72	8.54	1.69	3.05	0.00	4.79	0.00	173				
1850	8.0 C.Y.	25,562	5.93	8.87	1.75	3.16	0.00	4.97	0.00	180				
1855	10.0 C.Y.	33,168	7.70	11.50	2.27	4.10	0.00	6.44	0.00	242				
1860	12.0 C.Y.	37,608	8.73	13.04	2.58	4.65	0.00	7.31	0.00	275				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CNT	
			CONDITION		STAND-BY	ADJUSTABLE ELEMENTS					
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	BUCKETS-DRAGLINE (CONT'D) *****										
1865	HEAVY WT - HENDRIX MODEL MH-S CONT'D 14.0 C.Y.	40,888	9.48	14.17	2.80	5.05	0.00	7.94	0.00	299	
	COMPACTORS MANUALLY OPERATED *****										
1875	UR-12 I-R RAMMER	3 HP G	1,422	0.98		0.12	0.25	0.36		1	
1880	GVR100 WACKER RAMMER	3 HP G	1,352	0.96		0.11	0.24	0.36		1	
1885	GVR220Y WACKER RAMMER	5 HP G	2,286	1.61		0.19	0.41	0.60		2	
1890	VPG160B WACKER VIBRO PLATE	4 HP G	1,054	0.98		0.08	0.18	0.48		2	
1895	VPG600 WACKER VIBRO PLATE	9 HP G	3,226	2.55		0.27	0.58	1.07		6	
	CONCRETE BUGGIES - REMINGTON *****										
1905	10 CF WALK-BEHIND	8 HP G	1,998	1.43		0.14	0.25	0.74		6	
	CONCRETE PAVERS *****										
	CMI										
1915	MOD SUPER 200 16' WIDE SLIPFORM UNIT, 0-25 FT/MIN, CRAWLER MTD.	165 HP D	106,516	33.37		7.28	13.38	6.58		296	
1920	MOD SUBURBAN 24' WIDE SLIPFORM UNIT, 0-60 FT/MIN, CRAWLER MTD.	250 HP D	189,998	57.26		12.99	23.86	9.97		720	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CMT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
CONCRETE PAVERS (CONT'D)												
GOMACO												
1930	MOD C-650 24' WIDE FORM PAVER W/4' FINISHING CYLINDERS	50 HP G	18,205	10.00	1.24	2.26	4.32		91			
1935	MOD HM-165 16'-6" WIDE SLIPFORM UNIT, AUTO VIBRATORS, CRLR MTD	100 HP D	85,457	25.12	5.84	10.73	3.99		240			
CONCRETE PLACERS												
ALIVA SHOTCRETE EQUIPMENT												
1945	MOD 240 PLACE 1 TO 5 CY/HR	275CFM A	8,956	2.17	0.61	1.11	0.00		7			
1950	MOD 250 PLACE 5.5 TO 10 CY/HR	450CFM A	16,421	3.87	1.13	2.05	0.00		13			
1955	MOD 260 PLACE 5 TO 22 CY/HR	675CFM A	23,493	5.47	1.61	2.93	0.00		19			
CONCRETE PUMPS - CHALLENGE-COOK												
1965	MOD 700 1" AGG 70 CY/HR 128 HP D REQUIRES 15,000 GVW TRUCK	128 HP D	42,111	21.77	3.13	6.09	7.53		84			
1970	MOD TITAN4000 TR'L MT'D 100 CY/HR 240 HP D	240 HP D	67,505	37.50	5.01	9.76	14.11		134			
1975	HYDRAULIC BOOM 60' VERT 52'RAD REQUIRES 20,000 GVW TRUCK FOR BOOM ONLY OR 43,000 GVW WITH PUMP		30,621	9.01	2.27	4.42	0.00		59			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	CRANE-SHOVEL-BACKHOE-DRAGLINE \$										
	CRAWLER TYPE-AMERICAN										
	MOD 4120 DRAGLINE 1 CY 93 HP D 13'-8" CRAWLERS W/28" SHOES										
1985	DRAGLINE OR CLAMSHELL (LESS BUCKET)	127.779	26.96	39.45	8.24	14.29	2.93	22.32	3.81	609	
	MOD 597-C 1.25 CY T/C 129 HP D 14'-7" CRAWLERS W/32" SHOES										
1990	DRAGLINE OR CLAMSHELL (LESS BUCKET)	183.765	34.99	50.46	11.13	18.09	4.06	28.51	5.28	814	
1995	CRANE 35-T W/70' BOOM	183.151	30.93	44.69	11.09	18.03	3.25	28.41	4.20	803	
	MOD 599-C LIFTING CRANE T/C 129 HP D 16'-0" CRAWLERS W/32" SHOES										
2005	CRANE 40-T W/80' BOOM	183.311	30.95	44.73	11.11	18.05	3.25	28.44	4.20	962	
	MOD 5299 LIFTING CRANE T/C 129 HP D 17'-6" CRAWLERS W/32" SHOES										
2015	CRANE 50-T W/80' BOOM	210.326	34.95	50.59	12.73	20.71	3.25	32.63	4.20	1088	
	MOD 797-C 2 CY T/C 205 HP D 17'-6" CRAWLERS W/33" SHOES										
2025	DRAGLINE OR CLAMSHELL (LESS BUCKET)	246.083	48.07	69.13	14.91	24.23	6.46	38.17	8.39	1278	
2030	CRANE 40-T W/80' BOOM	242.428	41.96	60.46	14.69	23.87	5.17	37.61	6.67	1262	
	MOD 7250 STEEL ERECTOR T/C 205 HP D 17'-6" CRAWLERS W/33" SHOES										
2040	CRANE 60-T W/80' BOOM	262.343	42.21	60.57	15.22	23.50	5.17	37.50	6.67	1421	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	CRANE-SHOVEL-BACKHOE-DRAGLINE CONT'D ***** CRAWLER TYPE-BUCYRUS ERIE										
	MOD 25-B SER-3 HVY DUTY 1 CY 115 HP D 13'-11" CRAWLERS W/30" SHOES										
2120	DRAGLINE OR CLAMSHELL (LESS BUCKET)	146,993	31.31	45.77	9.48	16.44	3.62	25.68	4.71	671	
2125	CRANE 28-T W/50' BOOM	145,635	24.97	36.01	8.83	14.35	2.90	22.60	3.74	674	
	MOD 30-B SER 4 HVY DUTY 1.5 CY 144 HP D 14'-9" CRAWLERS W/30" SHOES										
2135	BACKHOE	208,803	46.39	66.53	13.15	22.28	5.29	34.86	6.96	787	
2140	DRAGLINE OR CLAMSHELL (LESS BUCKET)	200,464	38.32	55.21	12.15	19.75	4.54	31.10	5.90	833	
2145	CRANE 35-T W/60' BOOM	197,587	33.51	48.40	11.98	19.46	3.63	30.66	4.69	831	
	MOD 38-B SER 2 HVY DUTY 2 CY T/C 178 HP D 17'-5" CRAWLERS W/36" SHOES										
2155	SHOVEL	293,552	64.16	92.15	18.49	31.32	6.54	49.01	8.60	1298	
2160	DRAGLINE OR CLAMSHELL (LESS BUCKET)	276,982	52.16	75.27	16.79	27.28	5.61	42.97	7.29	1226	
	MOD 61-B SER 2 3.25 CY T/C 205 HP D 15'-11" CRAWLERS W/33" SHOES										
2170	SHOVEL	416,051	80.61	114.70	24.81	39.58	7.53	62.61	9.90	1691	
2175	BACKHOE	399,050	77.69	110.48	23.80	37.97	7.53	60.05	9.90	1751	
2180	DRAGLINE OR CLAMSHELL (LESS BUCKET)	378,384	64.89	93.21	21.94	33.89	6.46	54.08	8.39	1523	
2185	CRANE 51-T W/70' BOOM	370,419	57.09	82.27	21.49	33.18	5.17	52.94	6.67	1536	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CMT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
	CRANE-SHOVEL-BACKHOE-DRAGLINE CONT'D *****											
	CRAWLER TYPE-BUCYRUS ERIE (CONT'D)											
	MOD 61-B SER-2 110-T 4 CY T/C 243 HP D 20'-6" CRAWLERS W/42" SHOES											
2195	CRANE 110T W/160' BOOM	473,716	70.96	101.91	26.86	40.32	6.12	64.93	7.91	2182		
2200	DRAGLINE OR CLAMSHELL (LESS BUCKET)	446,015	76.54	109.95	25.87	39.95	7.65	63.75	9.95	2010		
	MOD 71-B SER 3 4.25 CY T/C 246 HP D 16'-10" CRAWLERS W/36" SHOES											
2210	SHOVEL	473,678	92.32	131.29	28.24	45.06	9.04	71.27	11.88	2196		
2215	BACKHOE	448,964	88.06	125.18	26.77	42.71	9.04	67.56	11.88	2100		
2220	DRAGLINE OR CLAMSHELL (LESS BUCKET)	424,425	73.38	105.33	24.62	38.01	7.75	60.66	10.07	1736		
	MOD 88-B SER 4 5.5 CY T/C 365 HP D 17'-10" CRAWLERS W/36" SHOES											
2230	SHOVEL	663,948	125.44	177.24	38.51	59.47	13.41	94.89	17.63	2822		
2235	DRAGLINE OR CLAMSHELL (LESS BUCKET)	562,875	96.27	137.30	31.92	47.91	11.50	77.14	14.95	2274		
	CRAWLER TYPE-LINK BELT (FMC)											
	MOD LS-98A LIFTING CRANE T/C 118 HP D 15'-1" CRAWLERS W/24" SHOES											
2250	CRANE 40-T W/50' BOOM	151,544	25.92	37.41	9.18	14.92	2.97	23.51	3.84	772		
	MOD LS-118 LIFTING CRANE T/C 165 HP D 17'-0" CRAWLERS W/30" SHOES											
2260	CRANE 60-T W/80' BOOM	218,230	37.19	53.69	13.23	21.49	4.16	33.86	5.37	1232		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	CRANE-SHOVEL-BACKHOE-DRAGLINE CONT'D ***** CRAWLER TYPE-LINK BELT (CONT'D)										
	MOD LS-338 LIFTING CRANE T/C 208 HP D 20'-0" CRAWLERS W/38" SHOES										
2270	CRANE 100-T W/200' BOOM	348.528	53.07	76.10	19.76	29.66	5.24	47.77	6.77	1912	
	MOD LS-518 LIFTING CRANE T/C 230 HP D 24'-4" CRAWLERS W/44" SHOES										
2280	CRANE 150-T W/250' BOOM	508.735	75.29	108.25	28.85	43.30	5.80	69.72	7.49	2912	
	CRAWLER TYPE-MANITOWOC										
	MOD 3900 VICOM 3.5 CY T/C 334 HP D 20'-4" CRAWLERS W/38" SHOES										
2295	DRAGLINE OR CLAMSHELL (LESS BUCKET)	353.737	65.95	94.03	20.51	31.68	10.52	50.56	13.68	2306	
2300	CRANE 100T W/240' BOOM	362.632	59.85	85.67	21.04	32.48	8.42	51.83	10.87	2354	
	MOD 3900W VICOM SER2 4 CY T/C 334 HP D 24'-0" CRAWLERS W/48" SHOES										
2310	DRAGLINE OR CLAMSHELL (LESS BUCKET)	424.825	76.71	109.68	24.64	38.05	10.52	60.72	13.68	2763	
2315	CRANE 140T W/250' BOOM	432.732	69.49	99.75	25.09	38.75	8.42	61.85	10.87	2815	
	MOD 4100W VICOM SER2 5 CY T/C 345 HP D 26'-6" CRAWLERS W/48" SHOES										
2325	DRAGLINE OR CLAMSHELL (LESS BUCKET)	602.294	103.99	149.28	34.93	53.94	10.87	86.08	14.13	3788	
2330	CRANE 200T W/260' BOOM	613.077	92.74	133.06	34.77	52.18	8.69	84.03	11.23	3929	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	CRANE-SHOVEL-BACKHOE-DRAGLINE CONT'D XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX										
	CRAWLER TYPE-MANITOWOC (CONT'D)										
	MOD 4600 VICON SERIES 3 7CY T/C 685 HP D 26'-1" CRAWLERS W/60" SHOES										
2340	CRANE 240T W/260' BOOM	878.454	138.57	197.98	49.81	74.77	17.26	120.40	22.30	5095	
2345	DRAGLINE OR CLAMSHELL (LESS BUCKET)	907.878	158.84	226.10	51.48	77.27	21.58	124.42	28.05	5083	
	CRAWLER TYPE-NORTHWEST										
	MOD 28-D 3/4 CY 148 HP D 11'-11" CRAWLERS W/28" SHOES										
2360	DRAGLINE OR CLAMSHELL (LESS BUCKET)	115.176	26.68	38.66	7.43	12.88	4.66	20.12	6.06	484	
2365	CRANE 15-T W/30' BOOM	113.576	21.92	31.67	7.16	12.12	3.73	18.96	4.82	474	
	MOD-41 1 CY 148 HP D 15'-0" CRAWLERS W/30" SHOES										
2375	DRAGLINE OR CLAMSHELL (LESS BUCKET)	150.973	33.27	48.45	9.73	16.88	4.66	26.37	6.06	737	
2380	CRANE 20-T W/40' BOOM	148.634	27.33	39.70	9.37	15.86	3.73	24.82	4.82	720	
	MOD 6 1.5 CY T/C 238 HP D 14'-8" CRAWLERS W/33" SHOES										
2390	DRAGLINE OR CLAMSHELL (LESS BUCKET)	200.910	41.88	59.86	12.18	19.79	7.50	31.17	9.75	1001	
2395	CRANE 30-T W/45' BOOM	201.903	36.94	52.95	12.23	19.88	6.00	31.33	7.75	1001	
	MOD 80-D 2.5 CY T/C 238 HP D 15'-10" CRAWLERS W/30" SHOES										
2405	SHOVEL	305.306	69.02	98.85	19.23	32.57	8.75	50.97	11.50	1550	
2410	DRAGLINE OR CLAMSHELL (LESS BUCKET)	267.814	52.88	75.97	16.23	26.38	7.50	41.55	9.75	1380	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	CRANE-SHOVEL-BACKHOE-DRAGLINE CONT'D XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX										
	CRAMLER TYPE-NORTHWEST (CONT'D)										
	MOD 80-D 2.5 CY T/C 238 HP D 15'-10" CRAWLERS W/30" SHOES										
2415	CRANE 40-T W/50' BOOM	264,603	46.21	66.54	16.03	26.05	6.00	41.05	7.75	1320	
	MOD 95-WT 4.0 CY T/C 263 HP D 19'-0" CRAWLERS W/38" SHOES										
2425	DRAGLINE OR CLAMSHELL (LESS BUCKET)	340,678	61.33	87.72	19.76	30.51	8.28	48.69	10.77	1580	
2430	CRANE 60-T W/50' BOOM	337,622	54.29	77.92	19.58	30.24	6.63	48.26	8.56	1565	
	MOD 180-D SERIES 2 5 CY T/C 357 HP D 18'-1" CRAWLERS W/36" SHOES										
2440	SHOVEL	552,544	110.72	157.14	32.94	52.56	13.12	83.14	17.24	2571	
2445	DRAGLINE OR CLAMSHELL (LESS BUCKET)	508,931	90.30	129.31	29.52	45.58	11.25	72.74	14.62	2365	
2450	CRANE 90-T W/170' BOOM	530,506	83.64	120.27	30.77	47.52	9.00	75.82	11.62	2464	
	MOD 190-D SERIES 2 6.5 CY T/C 357 HP D 21'-1" CRAWLERS W/54" SHOES										
2460	SHOVEL	640,023	121.15	171.15	37.13	57.33	13.12	91.48	17.24	2825	
2465	DRAGLINE OR CLAMSHELL (LESS BUCKET)	546,818	93.60	133.50	31.01	46.54	11.25	74.95	14.62	2555	
2470	CRANE 100-T W/170' BOOM	572,243	89.39	128.65	33.19	51.26	9.00	81.79	11.62	2865	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	CRANE-SHovel-Backhoe-Dragline CONT'D *****										
	CRAWLER TYPE-P & H										
	MOD 535 1.25 CY T/C 158 HP D 15'-8" CRAWLERS W/30" SHOES										
2485	DRAGLINE OR CLAMSHELL (LESS BUCKET)	197,201	38.30	55.09	11.95	19.42	4.98	30.59	6.47	870	
2490	CRANE 35-T W/50' BOOM	191,023	32.95	47.51	11.57	18.81	3.98	29.63	5.14	870	
	MOD 550 1.75 CY T/C 158 HP D 18'-0" CRAWLERS W/30" SHOES										
2500	DRAGLINE (LESS BUCKET)	219,005	41.88	60.34	13.27	21.56	4.98	33.97	6.47	1002	
2505	CRANE 50-T W/80' BOOM	213,515	36.28	52.39	12.94	21.02	3.98	33.12	5.14	1002	
	MOD 670WLC 2 CY T/C 198 HP D 18'-6" CRAWLERS W/30" SHOES										
2515	DRAGLINE OR CLAMSHELL (LESS BUCKET)	257,394	49.68	71.53	15.60	25.35	6.24	39.93	8.11	1344	
2520	CRANE 70-T W/150' BOOM	263,213	42.12	60.47	15.27	23.58	4.99	37.62	6.44	1466	
	CRANES-HYDRAULIC-SELF PROPELLED *****										
	GROVE										
2535	MOD RT48 8 TON 123 HP D	76,932	25.55		4.65	7.11	10.63			326	
2540	MOD RT49 10 TON 123 HP D	78,187	25.74		4.73	7.23	10.63			336	
2545	MOD RT515 15 TON 115 HP D	93,765	20.04		5.66	8.61	4.59			415	
2550	MOD RT518 18 TON 115 HP D	93,814	20.40		5.62	8.47	4.59			450	
2555	MOD RT522 22 TON 115 HP D	107,761	22.45		6.47	9.78	4.59			495	
2560	MOD RT625 25 TON 156 HP D	134,657	28.74		8.07	12.19	6.22			545	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT						
			CONDITION	STAND-BY	AVERAGE COND.		SEVERE COND.								
					AVERAGE	SEVERE	OWNER-SHIP	FUEL							
CRANES-HYD.-SELF PROPELLED CONT'D)															
GROVE (CONT'D)															
2565	MOD RT65S	35 TON 173 HP D	186,956	37.60	11.21	16.95	6.90			673					
HYSTER															
2575	MOD K300B	15 TON 127 HP D	101,986	21.88	6.15	9.37	5.07			438					
2580	MOD K360B	18 TON 127 HP D	103,888	22.16	6.27	9.55	5.07			440					
2585	MOD K400B	20 TON 127 HP D	111,790	23.32	6.74	10.28	5.07			466					
PETTIBONE															
2595	MOD 25	12.5 TON 120 HP D	91,185	19.97	5.50	8.36	4.79			440					
2600	MOD 36	18 TON 120 HP D	106,279	22.31	6.40	9.71	4.79			460					
2605	MOD 70	35 TON 188 HP D	161,199	34.50	9.66	14.59	7.50			770					
2610	MOD 100SC	50 TON 188 HP D	229,837	44.62	13.83	21.00	7.50			1050					
CRANES-HYDRAULIC-TRUCK MOUNTED															
(HP & FUEL LISTED EQUIP/CARRIER)															
BUCYRUS ERIE															
2620	30-XC	30 TON W/80' BOOM	130/210 HP D/D	185,002	33.07	46.89	10.69	16.40	6.65	26.25					
2625	60-XC	60-TON W/136' BOOM	197/238 HP D/D	287,908	50.24	71.55	16.65	25.59	9.52	40.93					
GROVE															
2635	TMS185	18 TON W/106' BOOM	172 HP D	148,077	29.69	42.32	8.93	14.42	6.86	22.79					
2640	TMS300	35 TON W/136' BOOM	203 HP D	163,094	32.18	45.46	9.40	14.39	8.10	23.07					
										10.44					
										705					

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
CRANES-HYDRAULIC-TRUCK MOUNTED CONT'D ***** (HP & FUEL LISTED EQUIP/CARRIER)														
GROVE (CONT'D)														
2645	TMS475 50 TON W/142' BOOM	203 HP D	197,783	36.70	52.11	11.42	17.51	8.10	28.04	10.44	773			
2650	TM875 80 TON W/146' BOOM	212/302 HP D/D	299,024	53.14	74.99	16.85	25.03	10.56	40.52	13.36	1175			
LINK BELT (FMC)														
2660	HTC-25 25-T W/95' BOOM	216 HP D	146,026	30.46	42.81	8.43	12.92	8.62	20.69	11.11	462			
2665	HTC-35 35-T W/108' BOOM	216 HP D	171,998	33.94	47.92	9.93	15.22	8.62	24.37	11.11	628			
2670	HTC-50 50-T W/122' BOOM	244 HP D	209,703	40.26	56.99	12.12	18.60	9.74	29.77	12.55	727			
PETTIBONE														
2680	50TKLSPC 25 TON W/95' BOOM	210 HP D	144,669	31.42	44.39	8.70	13.97	8.38	22.12	10.80	520			
2685	60TKLSPC 30 TON W/101' BOOM	202 HP D	170,812	33.24	46.97	9.85	15.06	8.06	24.15	10.39	673			
2690	100TKLSPC 50 TON W/111' BOOM	244 HP D	213,312	40.93	57.92	12.31	18.86	9.74	30.21	12.55	820			
2695	160TKLSPC 80 TON W/153' BOOM	365 HP D	315,263	60.35	84.95	17.77	26.39	14.56	42.72	18.78	1395			
CRANES-TRUCK MOUNTED ***** (HP & FUEL LISTED EQUIP/CARRIER)														
AMERICAN														
2705	5530 75-T W/170' BOOM	115/238 HP D/D	277,402	44.45	63.41	15.66	23.32	6.24	37.71	7.85	1245			
2710	7530 125T W/200' BOOM	203/350 HP D/D	386,860	64.15	91.16	21.85	32.58	10.54	52.64	13.29	1696			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT									
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.											
			AVERAGE	SEVERE														
CRANES-TRUCK MOUNTED (CONT'D) \$																		
(HP & FUEL LISTED EQUIP/CARRIER)																		
LINK BELT (FMC)																		
2720	HC108C 50-T	W/150' BOOM 117/238 HP D/D	266.258	43.75	62.62	15.36	23.53	6.32	37.70	7.95	1197							
2725	HC218A 100-T	W/220' BOOM 165/318 HP D/D	365.065	58.55	82.84	20.24	29.45	8.80	47.99	11.07	1566							
2730	HC238A 140-T	W/230' BOOM 171/318 HP D/D	439.030	68.30	97.02	24.35	35.45	9.04	57.76	11.38	2068							
LORAIN																		
2740	HC550A 50-T	W/160' BOOM 115/246 HP D/D	261.137	43.06	61.59	15.07	23.08	6.30	36.97	7.91	1111							
2745	HC670A 70-T	W/170' BOOM 150/270 HP D/D	312.070	50.95	72.55	17.63	26.28	7.86	42.46	9.91	1243							
2750	HC680 80-T	W/190' BOOM 167/270 HP D/D	318.866	52.68	74.91	18.01	26.85	8.54	43.38	10.78	1373							
2755	HC790 90-T	W/220' BOOM 210/270 HP D/D	383.230	63.34	90.11	21.64	32.27	10.26	52.13	13.00	1594							
2760	HC8150 150T	W/250' BOOM 246/365 HP D/D	527.091	84.39	119.50	29.20	42.43	12.36	69.21	15.62	2625							
P & H																		
2770	325TC 25-T	W/110' BOOM 79/190 HP D/D	162.450	28.93	41.51	9.78	15.74	4.47	24.91	5.61	645							
2775	430ATC 35-T	W/150' BOOM 95/210 HP D/D	182.508	31.24	44.46	10.52	16.09	5.25	25.81	6.59	763							
2780	440TC 40-T	W/170' BOOM 95/236 HP D/D	194.987	33.20	47.27	11.24	17.18	5.43	27.55	6.80	964							
2785	650ATC 50-T	W/150' BOOM 135/236 HP D/D	271.441	45.33	64.76	15.67	24.00	7.03	38.44	8.86	1178							
2790	670TC 70-T	W/180' BOOM 135/255 HP D/D	290.743	47.33	67.39	16.41	24.46	7.16	39.53	9.02	1340							
2795	790TC 90-T	W/200' BOOM 160/350 HP D/D	337.856	55.70	79.14	19.07	28.41	8.82	45.92	11.07	1736							
2800	9125TC 140T	W/270' BOOM 210/350 HP D/D	463.698	73.65	104.44	25.72	37.46	10.81	61.02	13.65	2529							
2805	6250TC 250T	W/320' BOOM 363/450 HP D/D	919.802	140.58	200.46	51.06	74.46	17.62	121.21	22.33	4552							

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT
			CONDITION	STAND-BY	AVERAGE	SEVERE COND.	SEVERE COND.	OWNERSHIP	FUEL	
	DRILLS-BLAST HOLE-CRAWLER MTD *****									
	GARDNER DENVER									
2815	AT3100B/PR123J 3.5" HOLE 12' FEED 600CFM A	62,006	15.06		4.24	7.73	0.00			91
2820	AT3100B/PR55 4" HOLE 12' FEED 750CFM A	56,894	13.83		3.90	7.09	0.00			93
2825	AT3100B/PR66 4.5" HOLE 12' FEED 900CFM A	64,756	15.71		4.43	8.07	0.00			95
2830	AT3700A/PR123J ANGLE DRILL 600CFM A 3.5" HOLE 12' FEED	73,775	17.92		5.04	9.19	0.00			137
2835	AT3700A/PR66 ANGLE DRILL 900CFM A 4.5" HOLE 12' FEED	76,547	18.59		5.24	9.54	0.00			143
	INGERSOLL-RAND									
2845	CM350/VL140 5.5" HOLE 12' FEED 750CFM A	59,256	14.39		4.05	7.38	0.00			120
2850	ECM350/VL140 5.5" HOLE 12' FEED 750CFM A	65,727	15.96		4.50	8.20	0.00			129
2855	CM350/URD550 5.5" HOLE 12' FEED 900CFM A	64,877	15.74		4.44	8.08	0.00			121
2860	ECM350/URD550 5.5" HOLE 12' FEED 900CFM A	71,351	17.29		4.88	8.89	0.00			130
	JOY									
2870	RAM VCR260 4.5" HOLE 12' FEED 750CFM A	54,851	13.34		3.75	6.83	0.00			126
2875	MUSTANG VCR280 5" HOLE 23' FEED 1200CFM A	76,127	18.49		5.21	9.49	0.00			185
	DRILLS-CORE-AIR-COLUMN MOUNTED *****									
2885	LONGYEAR 24 WOLVERINE AX 700' 450CFM A	10,333	2.72		0.70	1.28	0.00			12
2890	LONGYEAR 65D EX 600' 400CFM A	6,789	1.88		0.47	0.85	0.00			3
2895	65D ROD PULLER 21' STROKE 400CFM A	1,123	0.47		0.08	0.14	0.00			1

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.					
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL				
DRILLS-CORE-SKID MOUNTED \$888888888888888888													
ACKER													
2905	HILLBILLY MARK-III NX 1000' MAX	46 HP D	22.822	8.27	1.56	2.84	2.27			40			
2910	MOUNTAINEER NX 2000' MAX	44 HP D	25.201	8.73	1.72	3.14	2.17			45			
SPRAGUE AND HENWOOD													
2920	MOD 37-H NX 400' MAX	18 HP G	10.443	4.72	0.72	1.30	1.91			18			
2925	MOD 40-CL NX 900' MAX	45 HP D	19.227	7.36	1.32	2.40	2.22			27			
LONGYEAR													
2935	MOD 24 STD AX 675' MAX	12 HP G	8.194	3.43	0.56	1.02	1.27			19			
2940	MOD 34 NX 1000' MAX	31 HP G	18.554	8.26	1.27	2.31	3.29			38			
2945	MOD 34 NX 1000' MAX	38 HP D	20.737	7.31	1.42	2.59	1.88			39			
2950	MOD 38 NX 1800' MAX	42 HP D	22.686	8.01	1.56	2.83	2.07			41			
2955	MOD 44 NX 2500' MAX	60 HP D	30.016	10.86	2.05	3.74	2.96			56			
DRILLS-ROTARY \$888888888888													
CHICAGO PNEUMATIC													
2965	MOD T-650 6-3/4" - W/TRUCK 50,000 G.V.W.	218 HP D	192.322	47.59	11.65	18.74	10.76			440			
JOY-ROBBINS													
2975	RRT 50 TK MOUNTED 6-3/4" TO 9"	304 HP D	319.379	75.52	19.32	31.09	15.00			820			
2980	RRT 60 TK MTD 6-3/4" TO 9-7/8"	325 HP D	358.095	83.58	21.68	34.89	16.04			920			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
DRILLS-ROTARY (CONT'D)														

JOY-ROBBINS (CONT'D)														
2985	RRT 70 TK MTD 6-3/4" TO 10-5/8"	350 HP D	411.103	94.38		24.90	40.10	17.27		1020				
2990	RR10S DN D9 6 -3/4" TO 9-7/8"	320 HP D	321.192	75.74		19.50	31.54	15.79		1120				
2995	RR10HD DN D9 6-3/4" TO 10-5/8"	500 HP D	388.372	98.50		23.58	38.14	24.67		1200				
3000	RR11 CRLR MTD 6-3/4" TO 12-1/4"	575 HP E	580.265	84.10		33.00	49.31	12.07		1421				
3005	RR12 CRLR MTD 10-5/8" TO 12-1/2"	600 HP E	723.661	101.20		41.16	61.50	12.60		1500				
3010	RR16 CRLR MTD 10-5/8" TO 15"	1100 HP E	823.173	128.26		46.81	69.95	23.10		2200				
FORK LIFTS														

HYSTER-CHALLENGER														
3020	H30H 3000# @ 24" LC (LOAD CNTR)	63 HP G	19.171	11.38		1.30	2.35	5.45		71				
3025	H60H 6000# @ 24" LC	63 HP G	21.872	12.04		1.49	2.69	5.45		103				
3030	H110F 11000# @ 24" LC	116 HP G	33.450	20.51		2.27	4.10	10.03		163				
3035	H150H 15000# @ 24" LC	127 HP G	46.627	24.89		3.17	5.70	10.98		223				
3040	H200HS20000# @ 24" LC	PS 127 HP G	53.072	26.44		3.61	6.51	10.98		256				
3045	H250H 25000# @ 24" LC	PS 127 HP G	55.357	27.01		3.75	6.76	10.98		295				
3050	H300B 30000# @ 24" LC	PS 127 HP G	61.256	28.42		4.15	7.49	10.98		360				
3055	H460B 46000# @ 48" LC	PS 190 HP G	117.730	48.86		7.98	14.35	16.43		590				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CMT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.		
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL	
	GENERATOR ELECT PLANTS *****									
	CATERPILLAR T = TURBOCHARGED TA = TURBOCHARGED AFTER COOLED									
	SKID MOUNTED									
3070	MOD 3304 -T 240/480V 86 KW 129 HP D	14.319	9.57	12.69	0.99	1.64	5.15	2.53	6.64	37
3075	MOD 3306 -T 240/480V 130 KW 200 HP D	17.207	13.72	18.12	1.19	1.97	7.98	3.04	10.29	45
3080	MOD 3306 -TA 240/480V 150 KW 220 HP D	19.600	15.24	20.14	1.36	2.24	8.78	3.46	11.32	46
3085	MOD 3406 -T 240/480V 175 KW 270 HP D	20.718	17.96	23.66	1.43	2.37	10.77	3.65	13.89	64
3090	MOD 3406 -TA 240/480V 200 KW 305 HP D	23.672	20.35	26.82	1.64	2.71	12.17	4.17	15.69	66
3095	MOD 3408 -T 240/480V 225 KW 335 HP D	26.840	22.54	29.72	1.86	3.07	13.37	4.73	17.24	72
3100	MOD 3408 -TA 240/480V 250 KW 375 HP D	30.129	25.24	33.28	2.09	3.45	14.96	5.31	19.29	75
3105	MOD D353E-TA 240/480V 335 KW 435 HP D	47.506	32.08	42.51	3.29	5.44	17.36	8.37	22.38	96
3110	MOD 3412 -T 240/480V 300 KW 425 HP D	41.729	30.30	40.09	2.89	4.78	16.96	7.35	21.87	92
3115	MOD 3412 -TA 240/480V 440 KW 565 HP D	46.339	38.25	50.46	3.21	5.31	22.54	8.17	29.07	94
3120	MOD D348 -TA 240/480V 480 KW 683 HP D	71.138	49.60	65.68	4.93	8.15	27.25	12.54	35.14	135
3125	MOD D398B-TA 230/460V 566 KW 812 HP D	95.466	61.39	81.48	6.60	10.93	32.40	16.82	41.78	197
3130	MOD D399 -TA 230/460V 770 KW 1074 HP D	122.491	80.35	106.57	8.48	14.03	42.85	21.57	55.26	278
	ONAN									
	SKID MOUNTED									
3145	120/240V 15 KW 27 HP D	4.998	2.45	3.28	0.35	0.57	1.08	0.89	1.39	14
3150	120/240V 30 KW 63 HP D	7.401	4.76	6.33	0.51	0.85	2.51	1.31	3.24	19
3155	120/240V 45 KW 87 HP D	9.785	6.47	8.60	0.68	1.12	3.47	1.73	4.48	25

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CNT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
GENERATOR ELECT PLANTS (CONT'D)														

OMAN (CONT'D)														
3160	120/240V 60 KW 102 HP D	11.227	7.55	10.00	0.78	1.29	4.07	1.98	5.25	26				
3165	120/240V 75 KW 162 HP D	13.353	10.98	14.49	0.92	1.53	6.46	2.36	8.33	30				
3170	120/240V 90 KW 162 HP D	13.980	11.11	14.68	0.97	1.60	6.46	2.47	8.33	30				
3175	120/240V 125 KW 210 HP D	16.288	14.00	18.45	1.13	1.86	8.38	2.87	10.80	50				
3180	120/240V 150 KW 276 HP D	19.343	17.95	23.62	1.34	2.22	11.01	3.41	14.20	65				
GRADERS MOTOR														

AUSTIN WESTERN														
3190	PACER 301 POWER SHIFT 4X4 146 HP D	83.126	22.51	32.28	5.36	8.81	5.37	14.07	7.05	245				
3195	SUPER 301 POWER SHIFT 6X6 146 HP D	90.279	24.08	34.74	5.81	9.49	5.37	15.17	7.05	273				
3200	PACER 501 POWER SHIFT 4X4 187 HP D	88.476	25.42	36.24	5.72	9.40	6.87	14.98	9.03	280				
3205	SUPER 501 POWER SHIFT 6X6 187 HP D	94.826	26.83	38.50	6.10	9.98	6.87	15.95	9.03	315				
CATERPILLAR														
3215	MOD 120-6 POWER SHIFT ARTIC 125 HP D	68.867	18.65	26.60	4.46	7.36	4.59	11.72	6.04	258				
3220	MOD 130-6 POWER SHIFT ARTIC 135 HP D	78.341	20.84	29.74	5.07	8.38	4.96	13.35	6.52	301				
3225	MOD 12-6 POWER SHIFT ARTIC 135 HP D	84.968	22.17	31.70	5.50	9.06	4.96	14.43	6.52	311				
3230	MOD 140-6 POWER SHIFT ARTIC 150 HP D	85.929	23.18	33.13	5.55	9.11	5.51	14.53	7.24	317				
3235	MOD 14-6 POWER SHIFT ARTIC 180 HP D	118.017	30.72	44.18	7.60	12.44	6.61	19.88	8.69	433				
3240	MOD 16-6 POWER SHIFT ARTIC 250 HP D	170.851	44.15	63.64	10.98	17.93	9.19	28.68	12.07	581				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT										
			CONDITION		STAND-BY	OWNER-SHIP	FUEL	OWNER-SHIP	FUEL												
			AVERAGE	SEVERE																	
GRADERS MOTOR (CONT'D)																					
\$88888888888888888888																					
FIAT-ALLIS																					
3250	MOD-65	DIRECT DRIVE	59 HP D	38.239	10.00	14.38	2.46	4.03	2.17	6.44	2.85	125									
3255	MOD-100C	CONSTANT MESH	135 HP D	72.795	19.97	28.46	4.70	7.74	4.96	12.33	6.52	310									
3260	MOD-150C	POWER SHIFT	135 HP D	77.801	20.86	29.80	5.02	8.27	4.96	13.20	6.52	316									
3265	MOD-200C	POWER SHIFT	160 HP D	83.788	23.23	33.12	5.41	8.89	5.88	14.18	7.73	322									
GALION																					
3275	MOD 503-L	DIRECT DRIVE	74 HP G	29.253	12.27	16.90	1.89	3.12	5.91	4.98	7.66	102									
3280	MOD T-500C	POWER SHIFT	150 HP D	65.830	19.75	28.25	4.21	6.82	5.51	10.95	7.24	257									
3285	MOD T-600C	POWER SHIFT	200 HP D	80.706	24.80	35.31	5.18	8.43	7.35	13.51	9.66	300									
MABCO																					
3295	MOD 444	POWER SHIFT	134 HP D	70.357	19.35	27.55	4.56	7.52	4.92	11.97	6.47	302									
3300	MOD 555-B	CONSTANT MESH	160 HP D	72.574	21.10	29.96	4.69	7.72	5.88	12.31	7.73	328									
3305	MOD 777-B	POWER SHIFT	201 HP D	85.330	25.70	36.61	5.48	8.94	7.39	14.30	9.71	355									
HOISTS																					
\$88888																					
BENDIX-SKAGIT																					
3315	BU-18W DOUBLE DRUM W/5/8" CABLE	100 HP D	45.578	15.86		3.12	5.68	3.99				85									
3320	G-70 DOUBLE DRUM W/7/8" CABLE	100 HP D	59.433	19.17		4.07	7.41	3.99				126									
3325	RB-80 DOUBLE DRUM W/1-1/8" CABLE	130 HP D	106.310	31.88		7.28	13.26	5.19				240									

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS			CWT	
			CONDITION	STAND-BY	AVERAGE	SEVERE	AVERAGE COND.	SEVERE COND.		
					OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
HOISTS (CONT'D) *****										
GARDNER DENVER										
3335	HML SINGLE DRUM W/1/2" CABLE	350CFM A	5.368	1.39		0.37	0.67	0.00		10
HYDRAULIC EXCAVATOR-CRAWLER MOUNTED *****										
T/B = TELESCOPING BOOM B/H = BACKHOE										
AMERICAN										
3345	MOD 25A	1.38 CY B/H 182 HP D	135.043	33.86	48.09	8.51	14.41	6.69	22.55	8.79
3350	MOD 35A	2.00 CY B/H 250 HP D	194.037	48.14	68.43	12.22	20.70	9.19	32.39	12.07
3355	MOD 45A	3.50 CY B/H 420 HP D	331.314	75.32	105.98	19.75	31.52	15.43	49.86	20.29
BUCYRUS ERIE										
3365	MOD 300-H	1.00 CY B/H 176 HP D	131.682	35.00	50.55	8.73	15.53	6.47	24.24	8.50
3370	MOD 325-H	1.75 CY B/H 205 HP D	180.145	43.53	62.00	11.35	19.22	7.53	30.08	9.90
3375	MOD 350-H	2.50 CY B/H 248 HP D	228.143	54.62	77.87	14.38	24.35	9.11	38.09	11.98
CATERPILLAR										
3385	MOD 225	1.00 CY B/H 125 HP D	114.656	29.25	42.40	7.60	13.52	4.59	21.10	6.04
3390	MOD 235	1.50 CY B/H 195 HP D	189.916	44.97	64.17	11.96	20.26	7.17	31.71	9.42
3395	MOD 245	2.50 CY B/H 325 HP D	294.370	70.69	100.76	18.54	31.41	11.94	49.15	15.70

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CNT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
	HYDRAULIC EXCAVATOR-CRLR MNTD CONT'D ***** T/B = TELESCOPING BOOM B/H = BACKHOE											
	DROTT											
3405	MOD 40-D	1.00 CY B/H 157 HP D	86.639	24.82	35.59	5.74	10.22	5.77	15.94	7.58	400	
3410	MOD 50-D	1.25 CY B/H 190 HP D	110.144	29.42	41.61	6.94	11.75	6.98	18.40	9.18	510	
	GRADALL											
3420	MOD 6-660	.50 CY T/B 115 HP D	117.212	29.35	42.62	7.77	13.82	4.23	21.58	5.55	459	
3425	MOD 6-880	.75 CY T/B 160 HP D	140.701	36.18	52.40	9.32	16.59	5.88	25.89	7.73	549	
3430	MOD 6-1000	1.25 CY T/B 272 HP D	188.509	48.05	68.15	11.88	20.12	10.00	31.47	13.14	787	
	HOP TO											
3440	MOD 211	1.13 CY B/H 160 HP D	117.187	29.47	41.86	7.38	12.50	5.88	19.57	7.73	521	
3445	MOD 311	1.88 CY B/H 235 HP D	163.033	41.53	58.93	10.27	17.39	8.64	27.22	11.35	743	
3450	MOD 900B	3.25 CY B/H 308 HP D	193.705	46.75	65.52	11.55	18.43	11.32	29.15	14.88	1009	
3455	MOD 1900	5.00 CY B/H 616 HP D	397.500	95.23	133.52	23.70	37.81	22.64	59.81	29.75	1998	
	INSLEY											
3465	MOD H1500B	1.50 CY B/H 240 HP D	171.126	43.31	61.49	10.78	18.26	8.82	28.58	11.59	801	
3470	MOD H3500B	3.00 CY B/H 355 HP D	236.795	56.21	78.87	14.11	22.52	13.05	35.63	17.15	1149	
	KOEMHRING											
3480	MOD 866D	1.75 CY B/H 325 HP D	255.258	63.17	89.83	16.08	27.24	11.94	42.62	15.70	1197	
3485	MOD 1066D	2.50 CY B/H 380 HP D	315.982	77.23	109.91	19.91	33.72	13.96	52.75	18.35	1524	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.	OWNER-SHIP	FUEL	OWNER-SHIP					
			AVERAGE	SEVERE											
HYDRAULIC EXCAVATOR-CRLR MNTD CONT'D															
=====															
	T/B = TELESCOPING BOOM														
	B/H = BACKHOE														
KOEHRING (CONT'D)															
3490	MOD 1266D	.50 CY B/H 760 HP D	647,207	144.53	203.56	38.58	61.57	27.93	97.39	36.71	2600				
P & H															
3500	MOD H-750	.75 CY B/H 105 HP D	90,598	23.37	33.86	6.00	10.68	3.86	16.68	5.07	390				
3505	MOD H-1250	1.00 CY B/H 190 HP D	126,347	34.49	49.71	8.37	14.89	6.98	23.26	9.18	620				
SHIELD BANTAM															
3515	MOD C166	.50 CY B/H 118 HP D	72,639	20.21	29.09	4.81	8.56	4.34	13.38	5.70	321				
UNIT															
3525	MOD H202C	.75 CY B/H 152 HP D	95,739	26.49	38.11	6.34	11.28	5.59	17.62	7.34	440				
3530	MOD H342	1.25 CY B/H 228 HP D	163,683	41.36	58.71	10.31	17.46	8.38	27.33	11.01	740				
3535	MOD H471	1.75 CY B/H 304 HP D	206,580	52.90	75.02	13.01	22.04	11.17	34.49	14.68	990				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
HYDRAULIC EXCAVATOR-TRUCK MOUNTED ***** (HP & FUEL LISTED EQUIP/CARRIER) T/B = TELESCOPING BOOM B/H = BACKHOE											
3545	MOD G-660 .50 CY T/B 115/180 HP D/G	137,520	28.43	40.43	8.30	13.39	6.95	21.16	8.98	419	
3550	MOD G-880 .75 CY T/B 160/210 HP D/D	152,622	31.76	44.86	9.19	14.80	7.85	23.41	9.94	508	
3555	MOD G-1000 1.25 CY T/B 272/228 HP D/D	200,617	42.61	59.58	11.57	17.73	12.44	28.42	15.85	698	
LAND CLEARING EQUIPMENT ***** (ADD TO TRACTOR)											
3565	FLECO LAND CLEARING RAKE FOR D-7	20,146	4.60	6.85	1.38	2.52	0.00	3.95	0.00	107	
3570	FLECO LAND CLEARING RAKE FOR D-8	25,799	5.87	8.75	1.77	3.22	0.00	5.05	0.00	145	
3575	FLECO LAND CLEARING RAKE FOR D-9	32,530	7.39	11.02	2.22	4.06	0.00	6.36	0.00	200	
3580	FLECO CLAMP RAKE FOR CAT 977 (ADD TO 977 LOADER)	10,190	2.36	3.49	0.70	1.28	0.00	2.00	0.00	23	
LIGHTING SETS-TRAILER MOUNTED *****											
ALLHAND METALLIC VAPOR											
3590	30' TOWER 4/1000W LTS 5 KW 11 HP D	9,807	2.94		0.67	1.13	0.65			26	
OVER LINE METALLIC VAPOR											
3600	38' TOWER 4/1000W LTS 6 KW 12 HP D	8,920	2.83		0.62	1.04	0.71			22	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.							
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL						
LOADERS-BELT															
XXXXXXXXXXXXXX															
KOLMAN															
3610	101XHD 24'X50' 355 T/HR	56 HP D	25,556	9.36	13.53	1.74	2.85	2.23	4.63	2.88	113				
OPTIONAL EQUIPMENT SELECT AS NEEDED															
3620	PLATE FEEDER DOZER TRAP MODEL 45		3,793	0.87	1.32	0.26	0.44	0.00	0.72	0.00	37				
3625	BELT FEEDER DOZER TRAP MODEL 65		5,384	1.25	1.87	0.38	0.63	0.00	1.01	0.00	36				
3630	WING WALLS STATIONARY		998	0.22	0.35	0.07	0.11	0.00	0.19	0.00	9				
3635	TUNNEL EXTENSION W/WING WALLS		5,316	1.22	1.85	0.36	0.61	0.00	1.00	0.00	61				
3640	SINGLE DECK SCREEN SB-70 7'X42		3,894	0.90	1.35	0.27	0.45	0.00	0.73	0.00	19				
3645	DOUBLE DECK SCREEN DC-70-42 7'X42		4,799	1.11	1.67	0.34	0.56	0.00	0.91	0.00	26				
3650	TRIPLE DECK SCREEN TC-70-42 7'X42		6,072	1.40	2.11	0.42	0.70	0.00	1.14	0.00	34				
3655	XHD CONVEYOR JACKLEG		800	0.18	0.28	0.05	0.09	0.00	0.15	0.00	9				
3660	101XHD 30'X50' 615 T/HR	56 HP D	26,560	9.75	14.15	1.80	2.94	2.23	4.79	2.88	122				
OPTIONAL EQUIPMENT SELECT AS NEEDED															
3670	PLATE FEEDER DOZER TRAP MODEL 45		4,689	1.08	1.63	0.32	0.54	0.00	0.88	0.00	42				
3675	BELT FEEDER DOZER TRAP MODEL 65		5,659	1.30	1.96	0.39	0.65	0.00	1.06	0.00	40				
3680	WING WALLS STATIONARY		998	0.22	0.35	0.07	0.11	0.00	0.19	0.00	9				
3685	TUNNEL EXTENSION W/WING WALLS		5,316	1.22	1.85	0.36	0.61	0.00	1.00	0.00	61				
3690	SINGLE DECK SCREEN SB-80 8'X48		4,382	1.00	1.52	0.30	0.50	0.00	0.82	0.00	23				
3695	DOUBLE DECK SCREEN DC-80-48 8'X48		5,604	1.29	1.94	0.39	0.65	0.00	1.05	0.00	35				
3700	TRIPLE DECK SCREEN TC-80-48 8'X48		6,888	1.59	2.39	0.48	0.80	0.00	1.29	0.00	43				
3705	XHD CONVEYOR JACKLEG		800	0.18	0.28	0.05	0.09	0.00	0.15	0.00	9				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
LOADERS-BELT (CONT'D)											
XXXXXXXXXXXXXXXXXXXXXX											
KOLMAN (CONT'D)											
3710	101XHD 36"X50' 910 T/HR	68 HP D	32.845	11.96	17.36	2.23	3.64	2.71	5.93	3.50	173
OPTIONAL EQUIPMENT SELECT AS NEEDED											
3720	PLATE FEEDER DOZER TRAP MODEL 45		5.027	1.16	1.74	0.35	0.58	0.00	0.94	0.00	45
3725	BELT FEEDER DOZER TRAP MODEL 65		5.990	1.38	2.08	0.41	0.69	0.00	1.13	0.00	42
3730	WING WALLS STATIONARY		998	0.22	0.35	0.07	0.11	0.00	0.19	0.00	9
3735	TUNNEL EXTENSION W/WING WALLS		5.316	1.22	1.85	0.36	0.61	0.00	1.00	0.00	61
3740	SINGLE DECK SCREEN SB-90 9'X54		4.961	1.15	1.72	0.35	0.58	0.00	0.93	0.00	28
3745	DOUBLE DECK SCREEN DC-90-54 9'X54		6.303	1.45	2.18	0.44	0.73	0.00	1.18	0.00	43
3750	TRIPLE DECK SCREEN TC-90-54 9'X54		8.365	1.93	2.89	0.58	0.97	0.00	1.56	0.00	54
3755	XHD CONVEYOR JACKLES		800	0.18	0.28	0.05	0.09	0.00	0.15	0.00	9
3760	101XHD 42"X50' 1260 T/HR	84 HP D	38.134	14.13	20.48	2.59	4.22	3.35	6.88	4.32	204
OPTIONAL EQUIPMENT SELECT AS NEEDED											
3770	PLATE FEEDER DOZER TRAP MODEL 45		5.360	1.24	1.86	0.38	0.63	0.00	1.01	0.00	48
3775	BELT FEEDER DOZER TRAP MODEL 65		6.861	1.59	2.38	0.48	0.80	0.00	1.29	0.00	45
3780	WING WALLS STATIONARY		998	0.22	0.35	0.07	0.11	0.00	0.19	0.00	9
3785	TUNNEL EXTENSION W/WING WALLS		5.316	1.22	1.85	0.36	0.61	0.00	1.00	0.00	61
3790	SINGLE DECK SCREEN SB-100		6.212	1.43	2.16	0.43	0.72	0.00	1.17	0.00	37
3795	DOUBLE DECK SCREEN DC-100-60 10'X		7.799	1.80	2.70	0.54	0.91	0.00	1.46	0.00	55
3800	TRIPLE DECK SCREEN TC-100-60 10'X		9.759	2.25	3.38	0.67	1.13	0.00	1.83	0.00	68
3805	XHD CONVEYOR JACKLEG		800	0.18	0.28	0.05	0.09	0.00	0.15	0.00	9

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
LOADERS-BELT (CONT'D)														
XXXXXXXXXXXXXXXXXXXX														
KOLMAN (CONT'D)														
3810	101XHD 48"X50' 1700 T/HR	125 HP D	68.665	23.45	34.00	4.67	7.68	4.99	12.48	6.43	287			
OPTIONAL EQUIPMENT SELECT AS NEEDED														
3820	PLATE FEEDER DOZER TRAP MODEL 45		8.275	1.91	2.87	0.57	0.96	0.00	1.55	0.00	51			
3825	WING WALLS STATIONARY		998	0.22	0.35	0.07	0.11	0.00	0.19	0.00	9			
3830	TUNNEL EXTENSION W/WING WALLS		5,921	1.37	2.05	0.41	0.69	0.00	1.11	0.00	66			
3835	SINGLE DECK SCREEN SB-120 12'X		7.819	1.81	2.72	0.54	0.91	0.00	1.47	0.00	53			
3840	DOUBLE DECK SCREEN DC-120-72 12'X		9.694	2.24	3.36	0.67	1.13	0.00	1.82	0.00	77			
3845	TRIPLE DECK SCREEN TC-120-60 12'X		10,987	2.54	3.81	0.76	1.28	0.00	2.06	0.00	80			
3850	XHD CONVEYOR JACKLEG		800	0.18	0.28	0.05	0.09	0.00	0.15	0.00	9			
3855	303 48"X50' 2000 CY/HR	125 HP D	112.749	33.73	49.42	7.71	12.75	4.99	20.67	6.43	627			
3860	303 48"X60' 2000 CY/HR	185 HP D	125.320	39.78	57.88	8.58	14.20	7.38	23.00	9.52	662			
3865	303 60"X50' 3600 CY/HR	185 HP D	129.482	40.84	59.49	8.86	14.66	7.38	23.76	9.52	682			
3870	303 60"X60' 3600 CY/HR	290 HP D	149.017	51.02	73.69	10.20	16.90	11.57	27.37	14.92	737			
OPTIONAL EQUIPMENT SELECT AS NEEDED														
3880	SINGLE DECK SCREEN SB-120 12'X		8.665	1.99	3.01	0.60	1.00	0.00	1.63	0.00	53			
3885	DOUBLE DECK SCREEN DC-120-72 12'X		10.723	2.47	3.72	0.74	1.24	0.00	2.01	0.00	77			
3890	TRIPLE DECK SCREEN TC-120-60 12'X		12.164	2.80	4.22	0.84	1.41	0.00	2.28	0.00	80			
3895	SINGLE DECK VIBRATING GRIZZLE 72"W		14.277	3.29	4.95	0.98	1.65	0.00	2.68	0.00	80			
3900	404 48"X50' 2000 CY/HR	185 HP D	141.937	43.98	64.26	9.71	16.08	7.38	26.05	9.52	607			
3905	404 48"X60' 2000 CY/HR	185 HP D	149.209	46.00	67.37	10.20	16.87	7.38	27.35	9.52	638			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CNT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.							
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL						
LOADERS-BELT (CONT'D)															

KOLMAN (CONT'D)															
3910	404	60'X50' 3600 CY/HR	290 HP D	166.369	55.41	80.36	11.38	18.85	11.57	30.53	14.92	658			
3915	404	60'X60' 3600 CY/HR	290 HP D	182.089	59.47	86.55	12.45	20.61	11.57	33.40	14.92	709			
OPTIONAL EQUIPMENT SELECT AS NEEDED															
3925	SINGLE DECK SCREEN	SB-120	12'X	8.665	1.99	3.01	0.60	1.00	0.00	1.63	0.00	53			
3930	DOUBLE DECK SCREEN	DC-120-72	12'X	10.723	2.47	3.72	0.74	1.24	0.00	2.01	0.00	77			
3935	TRIPLE DECK SCREEN	TC-120-60	12'X	12.164	2.80	4.22	0.84	1.41	0.00	2.28	0.00	80			
3940	SINGLE DECK VIBRATING GRIZZLE	72"W		14.277	3.29	4.95	0.98	1.65	0.00	2.68	0.00	80			
LOADERS - F.E. TRACK TYPE															

CASE															
3950	350	3/4 CY	39 HP D	28.375	9.66	13.82	1.95	3.43	1.68	5.44	2.21	125			
3955	450	1 CY	53 HP D	38.549	13.11	18.78	2.65	4.65	2.28	7.39	3.01	160			
3960	850B	1-1/2 CY	72 HP D	51.075	17.49	25.01	3.52	6.17	3.10	9.78	4.08	220			
3965	1150B	2 CY	105 HP D	66.202	23.35	33.32	4.55	7.99	4.52	12.67	5.95	290			
CATERPILLAR															
3975	931	1 CY	62 HP D	37.294	13.32	19.01	2.57	4.50	2.67	7.14	3.52	151			
3980	941B	1-1/2 CY	80 HP D	52.737	18.38	26.27	3.62	6.36	3.44	10.10	4.54	257			
3985	951C	1-3/4 CY	95 HP D	57.043	20.38	29.08	3.92	6.88	4.09	10.92	5.39	270			
3990	955L	2-1/4 CY	130 HP D	77.526	27.76	39.59	5.32	9.35	5.60	14.85	7.37	355			
3995	977L	3-1/4 CY	190 HP D	115.378	41.12	58.63	7.93	13.93	8.18	22.09	10.77	507			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT		
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
	LOADERS - F.E. TRACK TYPE (CONT'D)											
	CATERPILLAR (CONT'D)											
4000	983	5 CY	275 HP D	175,746	61.77	88.18	12.08	21.21	11.84	33.64	15.59	783
	FIAT-ALLIS											
4010	FL9	1-5/8 CY	87 HP D	49,014	17.84	25.40	3.37	5.92	3.75	9.39	4.93	272
4015	FL10C	1-7/8 CY	122 HP D	62,651	23.44	33.32	4.31	7.56	5.25	12.00	6.92	312
4020	FL14C	2-1/2 CY	150 HP D	78,417	29.18	41.47	5.39	9.46	6.46	15.01	8.50	436
	INTERNATIONAL											
4030	100-E	1 CY	65 HP D	37,387	13.52	19.28	2.57	4.51	2.80	7.16	3.69	160
4035	125-E	1-1/4 CY	78 HP D	44,661	16.18	23.05	3.07	5.39	3.36	8.56	4.42	198
4040	175-C	2 CY	134 HP D	67,732	25.46	36.19	4.65	8.17	5.77	12.97	7.60	317
4045	250-C	2-3/4 CY	190 HP D	99,429	36.99	52.58	6.83	12.00	8.18	19.04	10.77	443
	JOHN DEERE											
4055	JD350-C	3/4 CY	42 HP D	27,396	9.59	13.68	1.89	3.31	1.81	5.25	2.38	119
4060	JD450-C	1-1/4 CY	65 HP D	36,659	13.33	19.01	2.52	4.42	2.80	7.03	3.69	167

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.							
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL						
LOADERS - F.E. WHEEL TYPE															
XXXXXXXXXXXXXX															
BOBCAT															
4070	MOD 630	1/2 CY SKID-STEER	30 HP	D	9,245	5.42	7.51	0.64	1.10	2.59	1.76	3.38	34		
CASE															
4080	W-14	1-1/2 CY ARTIC	83 HP	D	46,943	15.05	21.99	3.19	5.51	3.31	8.80	4.27	148		
4085	W-18	2 CY ARTIC	103 HP	D	57,801	18.64	27.29	3.93	6.77	4.11	10.82	5.30	199		
4090	W-24 C	2-1/2 CY ARTIC	132 HP	D	79,569	25.76	38.45	5.37	9.16	5.27	14.70	6.79	236		
4095	W-36	3-1/2 CY ARTIC	185 HP	D	94,718	32.44	48.32	6.38	10.86	7.38	17.43	9.52	332		
CATERPILLAR															
4105	920	1-3/4 CY ARTIC	80 HP	D	50,645	15.66	22.93	3.45	5.95	3.19	9.51	4.12	183		
4110	930	2-1/4 CY ARTIC	100 HP	D	58,237	18.57	27.20	3.96	6.82	3.99	10.90	5.14	205		
4115	950	3 CY ARTIC	130 HP	D	79,498	25.34	37.55	5.38	9.23	5.19	14.77	6.69	284		
4120	966-C	4 CY ARTIC	170 HP	D	103,956	33.55	50.12	7.01	11.97	6.78	19.19	8.75	374		
4125	980-C	5-1/4 CY ARTIC	270 HP	D	149,666	47.75	70.92	9.47	15.87	10.77	25.11	13.89	577		
4130	988-B	7 CY ARTIC	375 HP	D	225,634	70.80	105.98	14.24	23.82	14.96	37.75	19.29	888		
4135	992-C	12-1/2 CY ARTIC	690 HP	D	457,321	142.82	217.26	28.72	47.73	27.53	75.84	35.50	1908		
CLARK															
4145	35C	1-1/4 CY	74 HP	D	43,731	13.68	19.89	2.99	5.17	2.95	8.24	3.81	171		
4150	55-B	2 CY ARTIC	114 HP	D	61,481	19.99	29.14	4.18	7.22	4.55	11.54	5.87	247		
4155	75-B	2-1/2 CY ARTIC	142 HP	D	82,253	26.81	39.80	5.56	9.51	5.67	15.23	7.31	303		
4160	125B	3-1/2 CY ARTIC	212 HP	D	111,434	38.46	57.95	7.47	12.64	8.46	20.33	10.91	419		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CMT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
LOADERS - F.E. WHEEL TYPE (CONT'D)														
XXXXXXXXXXXXXX														
CLARK (CONT'D)														
4165	175-B	4-1/2 CY ARTIC	273 HP D	140.036	45.99	68.38	8.84	14.79	10.89	23.45	14.05	527		
4170	275-B	6-1/2 CY ARTIC	344 HP D	197.009	62.00	91.96	12.46	20.93	13.73	33.13	17.70	739		
4175	475-B	12 CY ARTIC	632 HP D	382.266	121.29	183.01	24.05	40.07	25.22	63.62	32.52	1544		
FIAT-ALLIS														
4185	345-B	1-3/4 CY ARTIC	80 HP D	48.543	15.22	22.28	3.30	5.70	3.19	9.11	4.12	174		
4190	545-B	2 CY ARTIC	102 HP D	59.271	18.90	27.67	4.03	6.95	4.07	11.10	5.25	217		
4195	605-B	2-1/2 CY ARTIC	108 HP D	62.589	19.93	29.14	4.26	7.35	4.31	11.74	5.56	238		
4200	645-B	3 CY ARTIC	151 HP D	81.546	26.94	39.70	5.53	9.48	6.02	15.17	7.77	286		
4205	745-C	4 CY ARTIC	202 HP D	108.514	37.29	56.32	7.27	12.29	8.06	19.77	10.39	418		
4210	945-B	6 CY ARTIC	335 HP D	193.118	62.34	94.12	12.14	20.20	13.37	32.09	17.24	708		
INTERNATIONAL														
4220	515	1-3/4 CY	95 HP D	44.425	15.12	21.91	3.02	5.22	3.79	8.35	4.89	161		
4225	H-60E	2-1/4 CY ARTIC	104 HP D	50.826	17.09	24.83	3.46	5.96	4.15	9.53	5.35	205		
4230	H-90E	4-1/2 CY ARTIC	239 HP D	111.427	37.01	54.14	7.06	11.90	9.54	18.81	12.30	402		
4235	H-100-C	5 CY ARTIC	290 HP D	123.797	43.45	64.35	7.80	13.03	11.57	20.66	14.92	487		
4240	560	6-1/2 CY ARTIC	380 HP D	186.074	61.71	91.27	11.76	19.71	15.16	31.22	19.55	796		
4245	H-400-C	11 CY ARTIC	580 HP D	332.175	106.00	158.66	20.95	35.01	23.14	55.50	29.84	1254		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
LOADERS - F.E. WHEEL TYPE (CONT'D)														
XXXXXXXXXXXXXXXXXXXXXX														
TEREX (GM)														
4255	72-31B	3 CY ARTIC	160 HP D	78.274	26.76	39.32	5.30	9.09	6.38	14.54	8.23	277		
4260	72-51B	4 CY ARTIC	231 HP D	111.042	37.59	56.07	6.99	11.66	9.22	18.51	11.88	392		
4265	72-61	5-1/2 CY ARTIC	307 HP D	145.194	49.58	74.11	9.14	15.22	12.25	24.16	15.80	562		
4270	72-71B	7-1/2 CY ARTIC	388 HP D	201.770	65.21	96.23	12.78	21.47	15.48	33.95	19.96	846		
4275	72-81	9 CY ARTIC	434 HP D	305.572	90.48	134.72	19.36	32.56	17.32	51.48	22.33	1149		
YALE														
4285	1500-C	1-3/4 CY ARTIC	98 HP D	45.337	15.47	22.39	3.09	5.34	3.91	8.52	5.04	166		
4290	1700-C	2 CY ARTIC	136 HP G	53.712	27.55	38.82	3.65	6.28	11.76	10.04	15.32	193		
4295	1900-C	2-1/4 CY ARTIC	136 HP D	56.347	20.19	29.21	3.83	6.60	5.43	10.54	7.00	203		
4300	2000-C	3 CY ARTIC	165 HP D	74.967	26.35	38.67	5.08	8.69	6.58	13.91	8.49	278		
4305	2500-C	3-3/4 CY ARTIC	182 HP D	95.747	33.28	50.37	6.41	10.80	7.26	17.39	9.36	369		
4310	3000-C	4-1/4 CY ARTIC	255 HP D	100.570	36.40	53.84	6.33	10.56	10.17	16.77	13.12	409		
4315	5500-C	5-1/2 CY ARTIC	320 HP D	142.378	48.51	71.24	9.01	15.13	12.77	23.94	16.46	590		
4320	7500-C	6-1/2 CY ARTIC	400 HP D	191.801	64.92	96.75	12.08	20.16	15.96	31.98	20.58	778		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	LOADER-BACKHOE IND. TYPE TRACTOR *****										
	CASE										
4330	580C LDR/BHOE 7/8 CY FE BUCKET 55 HP D 24° B/H DIPPER	31+150	9.53	13.75	2.13	3.70	2.19	5.89	2.83	114	
4335	680E LDR/BHOE 1-1/4 CY FE BUCKET 80 HP D 30° B/H DIPPER	45+519	13.97	20.22	3.11	5.39	3.19	8.59	4.12	152	
	JOHN DEERE										
4345	410 LDR/BHOE 1 CY FE BUCKET 66 HP D 24° B/H DIPPER	32+222	10.47	15.17	2.19	3.79	2.63	6.05	3.40	137	
4350	510B LDR/BHOE 1-1/2 CY FE BUCKET 83 HP D 30° B/H DIPPER	48+621	14.84	21.52	3.32	5.74	3.31	9.15	4.27	205	
	LOADER-BACKHOE CRLR TYPE TRACTOR *****										
	CASE										
4360	350 LDR/BHOE 3/4 CY FE BUCKET 39 HP D 24° B/H DIPPER	38+510	12.28	17.67	2.65	4.65	1.68	7.38	2.21	141	
4365	450 LDR/BHOE 1 CY FE BUCKET 53 HP D 24° B/H DIP	48+579	15.71	22.59	3.34	5.87	2.28	9.31	3.01	167	
	CATERPILLAR										
4375	931 LDR/BHOE 1 CY FE BUCKET 62 HP D 30° B/H DIPPER	45+896	15.54	22.28	3.16	5.54	2.67	8.80	3.52	187	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
LOADER-BACKHOE ATTACHMENT'S *****												
HYDRAULICALLY OPERATED IMPACTOR MOUNTED ON BACKHOE BOOM TO FIT CASE AND JOHN DEERE BACKHOES (ADD TO BASIC LOADER-BACKHOE)												
4385	IMPACTOR WITH TAMPER TOOL	9,548	3.61		0.80	1.69	0.00		12			
4390	IMPACTOR WITH CHISEL TOOL	9,004	3.42		0.75	1.60	0.00		11			
PILE EXTRACTORS *****												
MKT CORPORATION												
4400	E2 700 FT-LBS 400CFM A	10,983	4.25		0.92	1.95	0.00		26			
4405	E4 1000 FT-LBS 550CFM A	16,918	6.44		1.42	3.01	0.00		45			
VULCAN												
4415	400A 500 FT-LBS 450CFM A	13,791	5.28		1.15	2.44	0.00		29			
4420	800A 1000 FT-LBS 900CFM A	18,723	7.10		1.57	3.32	0.00		55			
4425	1200A 1640 FT-LBS 1350CFM A	22,106	8.34		1.85	3.92	0.00		92			
PILE HAMMERS-DIESEL ***** (FUEL NOT INCLUDED)												
MKT CORPORATION												
4435	DE-20B/30B (6-FT) 12,000 FT-LBS	28,056	10.39		2.35	4.98	0.00		74			
4440	DE-20B/30B (6-FT) 16,800 FT-LBS	29,226	10.83		2.45	5.19	0.00		82			
4445	DE-50B/70B (6-FT) 30,000 FT-LBS	52,841	19.54		4.43	9.39	0.00		138			
4450	DE-50B/70B (6-FT) 42,000 FT-LBS	56,211	20.77		4.71	9.98	0.00		158			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS			CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
PILE HAMMERS-SINGLE ACTING												

VULCAN												
4460	1	15000 FT-LBS	750CFM A	23.970	9.04		2.01	4.26	0.00	101		
4465	106	19000 FT-LBS	750CFM A	30.329	11.38		2.54	5.38	0.00	121		
4470	06	19500 FT-LBS	900CFM A	27.486	10.33		2.30	4.88	0.00	121		
4475	08	26000 FT-LBS	1100CFM A	31.198	11.70		2.62	5.54	0.00	178		
4480	010	32500 FT-LBS	1350CFM A	34.197	12.82		2.87	6.08	0.00	198		
4485	014	42000 FT-LBS	1750CFM A	48.655	18.14		4.08	8.64	0.00	283		
4490	016	48750 FT-LBS	1750CFM A	57.196	21.29		4.80	10.16	0.00	320		
4495	020	60000 FT-LBS	2150CFM A	61.470	22.87		5.15	10.92	0.00	425		
4500	030	90000 FT-LBS	2350CFM A	89.009	33.02		7.46	15.81	0.00	550		
PILE HAMMERS-DOUBLE ACTING												

HKT CORPORATION												
4510	9-B-3	8750 FT-LBS	900CFM A	20.495	7.76		1.72	3.64	0.00	72		
4515	10-B-3	13100 FT-LBS	1200CFM A	26.541	9.98		2.22	4.71	0.00	111		
4520	11-B-3	19150 FT-LBS	1200CFM A	34.397	12.88		2.89	6.11	0.00	138		
4525	5 (SELF STOP)	1000 FT-LBS	375CFM A	7.762	3.06		0.65	1.38	0.00	16		
4530	6 (SELF STOP)	2500 FT-LBS	600CFM A	9.404	3.67		0.79	1.67	0.00	30		
4535	7 (SELF STOP)	4150 FT-LBS	750CFM A	12.747	4.90		1.07	2.26	0.00	49		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
PILE HAMMERS-DOUBLE ACTING (CONT'D)												
XXXXXXXXXXXXXXXXXXXXXX												
VULCAN												
4545	50C	15100 FT-LBS	1250CFM A	28.705	10.79		2.41	5.10	0.00	127		
4550	65C	19200 FT-LBS	1450CFM A	33.014	12.38		2.77	5.87	0.00	158		
4555	80C	24450 FT-LBS	1750CFM A	34.060	12.76		2.86	6.05	0.00	191		
4560	100C	32900 FT-LBS	2050CFM A	34.921	13.08		2.93	6.21	0.00	232		
4565	140C	36000 FT-LBS	2150CFM A	45.613	17.02		3.83	8.10	0.00	287		
4570	200C	50200 FT-LBS	2350CFM A	68.634	25.51		5.76	12.19	0.00	422		
4575	400C	113500 FT-LBS	5000CFM A	185.059	68.43		15.52	32.87	0.00	850		
PILE HAMMERS-VIBRATORY												
XXXXXXXXXXXXXXXXXXXXXX												
MKT CORPORATION												
4585	V5	WITH POWER PACK	59 HP D	47.705	20.60		4.00	8.47	2.35	131		
4590	V16	WITH POWER PACK	156 HP D	94.602	42.84		7.93	16.80	6.22	225		
4595	V18	WITH POWER PACK	248 HP D	136.353	62.95		11.43	24.22	9.90	304		
PIPELAYER												
XXXXXXXXXXXXXX												
CATERPILLAR												
4605	561B	15 FT BOOM, 40,000 LB CAP	105 HP D	81.991	15.39	22.68	5.34	8.89	2.32	14.11		
4610	571B	18 FT BOOM, 60,000 LB CAP	200 HP D	138.572	26.66	39.17	9.04	15.03	4.41	23.84		
4615	572B	18 FT BOOM, 90,000 LB CAP	200 HP D	158.643	29.67	43.76	10.34	17.19	4.41	27.30		
4620	583K	20 FT BOOM, 140,000 LB CAP	300 HP D	205.928	39.70	58.31	13.43	22.33	6.61	35.43		
										900		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS			CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.		
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL	
	PIPELAYER (CONT'D) *****									
	CATERPILLAR (CONT'D)									
4625	5946 24 FT BOOM, 200,000 LB CAP 410 HP D PUMPS-GROUT ***** G.M. PHILPOTT GROUT UNITS WITH GARDNER-DENVER PUMPS	293.112	56.00	82.37	19.10	31.77	9.04	50.43	11.62	1230
4635	SSF2-10 W/ (2 EA) FG-A6 6" X 3" X 6" PUMPS UNIT INCLUDES (2)-10 C.F. TANKS, AUTO. WATER METER, FITTINGS, HOSES & SKID MOUNTING CAPACITY: 21 GPM @ 252 PSI TO 60 GPM @ 90 PSI	600CFM A	20.230	5.98		1.51	2.93	0.00		64
4640	SSF2-20 W/ (2 EA) FD-FS 10" X 3" X 10" PUMPS UNIT INCLUDES (2)-20 C.F. TANKS, AUTO. WATER METER, FITTINGS, HOSES & SKID MOUNTING CAPACITY: 32 GPM AT 700 PSI TO 98 GPM @ 252 PSI	900CFM A	31.703	9.32		2.35	4.58	0.00		107
	PUMPS-WATER-FOR CORE DRILLS *****									
	LONGYEAR									
4650	520 RQ 5.7-20 GPM UP TO 600PSI	10 HP G	4,145	2.51		0.29	0.52	1.19		7
4655	535 RQ 9.9-35 GPM UP TO 800PSI	15 HP G	5,306	3.56		0.36	0.66	1.79		10

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CMT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
PUMPS-WATER-CENTRIF.-DEWATERING												
XXXXXXXXXXXXXX												
HOMELITE, SKID MOUNTED												
4665	MOD 110S 1-1/2"-5000 GPH @ 30' H 2 HP G	342	0.40		0.03	0.05	0.24			1		
4670	MOD 111S 2" - 9000 GPH @ 22' H 3 HP G	381	0.56		0.03	0.05	0.36			1		
4675	MOD 120SP 3" - 18000 GPH @ 20' H 6 HP G	578	1.08		0.04	0.07	0.72			2		
MARLOW, WHEEL MOUNTED												
4685	MOD 4D2 465 GPM @ 20' HEAD 59 HP G	6,217	10.69		0.43	0.78	7.03			14		
4690	MOD 4D2 470 GPM @ 20' HEAD 47 HP D	8,060	5.43		0.55	1.00	2.62			15		
4695	MOD 6E4A 1095 GPM @ 20' HEAD 117 HP G	7,430	20.10		0.51	0.93	13.95			18		
4700	MOD 6E4A 1090 GPM @ 20' HEAD 80 HP D	11,800	8.82		0.81	1.48	4.45			24		
4705	MOD 8FA3 2200 GPM @ 20' HEAD 108 HP D	14,402	11.56		0.99	1.80	6.01			23		
4710	MOD 1061 2840 GPM @ 20' HEAD 108 HP D	16,071	11.94		1.10	2.01	6.01			30		
PUMPS-WATER-CENTRIF.-TRASH												
XXXXXXXXXXXXXX												
HOMELITE, SKID MOUNTED												
4720	MOD 121TP 2" - 11500 GPH @ 20' H 4 HP G	546	0.76		0.04	0.07	0.48			2		
4725	MOD 122TP 3" - 21600 GPH @ 20' H 4 HP G	750	0.81		0.06	0.10	0.48			3		
4730	MOD 123TP 4" - 36500 GPH @ 20' H 10 HP G	1,357	1.88		0.10	0.17	1.19			4		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
PUMPS-WATER-DIAPHRAGM												
\$												
HOMELITE, SKID MOUNTED												
4740	MOD 111DP 2" - 1900 GPH @ 10' HD	4 HP G	639	0.78		0.04	0.08	0.48		2		
4745	MOD 111DP 3" - 4140 GPH @ 10' HD	4 HP G	1,429	0.96		0.10	0.18	0.48		3		
PUMPS-WATER-SUBMERSIBLE												
\$												
HOMELITE												
4755	MOD SP-2 2" - 7400 GPH @ 10' HD	2 HP E	695	0.19		0.04	0.08	0.05		1		
4760	MOD SP-3 3" - 19000 GPH @ 15' HD	5 HP E	1,248	0.40		0.08	0.15	0.13		2		
RIPPER & HYDR. BANK SLOPER												
\$												
(DOES NOT INCLUDE COST OF POINT WEAR)												
ATECO												
4770	VRAR-1 D9H RADIAL LIFT		30,541	8.32	12.86	2.27	4.43	0.00	7.04	0.00	136	
4775	D-9H SHANKS EA		2,362	0.64	1.00	0.18	0.34	0.00	0.55	0.00	15	
4780	LPAS-D8K PARALLEL LIFT		17,407	4.76	7.36	1.29	2.52	0.00	4.02	0.00	87	
4785	D-8K SHANKS EA		3,276	0.89	1.38	0.25	0.48	0.00	0.76	0.00	19	
4790	LPAS-D7G PARALLEL LIFT		13,768	3.78	5.83	1.03	2.00	0.00	3.18	0.00	45	
4795	D-7G SHANKS EA		2,306	0.63	0.98	0.18	0.34	0.00	0.54	0.00	10	
4800	PS D6D RADIAL LIFT		6,688	1.86	2.86	0.50	0.97	0.00	1.55	0.00	24	
4805	D-6C SHANKS EA		221	0.06	0.10	0.02	0.03	0.00	0.06	0.00	1	
4810	V-LPRF-TD25C PARALLEL LIFT STD SVC		15,629	4.28	6.61	1.16	2.26	0.00	3.61	0.00	89	
4815	TD-25C SHANKS EA		1,411	0.38	0.60	0.10	0.20	0.00	0.33	0.00	8	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE CUND. SEVERE CUND.								
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
RIPPER & HYDR. BANK SLOPER (CONT'D) ***** (DOES NOT INCLUDE COST OF POINT WEAR)														
ATECO (CONT'D)														
4820	V-LPRF-TD20E PARALLEL LIFT STD SVC	11.341	3.12	4.81	0.84	1.64	0.00	2.62	0.00	51				
4825	TD-20E SHANKS EA	1.017	0.28	0.43	0.08	0.15	0.00	0.24	0.00	4				
4830	PS-TD15C RADIAL LIFT	6.337	1.77	2.72	0.47	0.92	0.00	1.47	0.00	22				
4835	TD-15C SHANKS EA	221	0.06	0.10	0.02	0.03	0.00	0.06	0.00	1				
4840	V-LPRF 82-50 PARALLEL LIFT STD SVC	17.612	4.82	7.43	1.31	2.55	0.00	4.06	0.00	96				
4845	82-50 SHANKS EA	1.411	0.38	0.60	0.10	0.20	0.00	0.33	0.00	8				
4850	LPRS-82-50 PARALLEL LIFT EXT SVC	17.083	4.68	7.21	1.27	2.48	0.00	3.94	0.00	88				
4855	82-50 SHANKS EA	3.276	0.89	1.38	0.25	0.48	0.00	0.76	0.00	19				
4860	V-LPRF-82-30 PARALLEL LIFT	15.629	4.28	6.61	1.16	2.26	0.00	3.61	0.00	89				
4865	82-30 SHANKS EA	1.411	0.38	0.60	0.10	0.20	0.00	0.33	0.00	8				
4870	D9,D8;82-30,82-50;TD25 HYDR BANK SLOP	6.633	1.55	2.29	0.46	0.83	0.00	1.30	0.00	28				
CATERPILLAR														
4880	D-10 MULTI-SHANK BEAM	34.731	9.45	14.62	2.58	5.03	0.00	8.01	0.00	150				
4885	D-10 SHANKS EA	2.594	0.70	1.10	0.19	0.37	0.00	0.61	0.00	16				
4890	D-10 SINGLE-SHANK BEAM	37.444	10.14	15.70	2.78	5.43	0.00	8.63	0.00	165				
4895	D-9 MULTI-SHANK BEAM W/HYD-CONTROL	27.365	7.46	11.54	2.04	3.97	0.00	6.32	0.00	132				
4900	D-9 SHANKS EA	1.362	0.37	0.58	0.10	0.20	0.00	0.32	0.00	8				
4905	D-9 SINGLE-SHANK BEAM HYD-CNTL SHANK	25.478	6.95	10.74	1.89	3.69	0.00	5.88	0.00	124				
4910	D-8 MULTI-SHANK BEAM HYD-CONTROL	19.391	5.30	8.18	1.44	2.81	0.00	4.47	0.00	103				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	RIPPER & HYDR. BANK SLOPER (CONT'D) \$88888888888888888888888888888888 (DOES NOT INCLUDE COST OF POINT WEAR)										
	CATERPILLAR (CONT'D)										
4915	D-8 SHANKS EA	1,301	0.35	0.55	0.10	0.19	0.00	0.30	0.00	7	
4920	D-8 SINGLE-SHANK BEAM HYD-CNTL&SHANK	18,839	5.14	7.96	1.39	2.72	0.00	4.35	0.00	100	
4925	D-7 MULTI-SHANK BEAM HYD-CONTROL	11,194	3.08	4.75	0.83	1.62	0.00	2.59	0.00	53	
4930	D-7 SHANKS EA	681	0.18	0.30	0.05	0.09	0.00	0.17	0.00	4	
4935	D-6 MULTI-SHANK BEAM HYD-CONTROL	6,967	1.94	2.98	0.52	1.01	0.00	1.61	0.00	27	
4940	D-6 SHANKS EA	350	0.09	0.15	0.03	0.05	0.00	0.08	0.00	2	
4945	D-4 MULTI-SHANK BEAM HYD-CONTROL	4,254	1.21	1.83	0.32	0.62	0.00	0.98	0.00	14	
4950	D-4 SHANKS EA	183	0.05	0.07	0.02	0.03	0.00	0.04	0.00	1	
4955	D-3 FIVE-SHANK BEAM HYD-CONTROL	1,898	0.57	0.85	0.15	0.28	0.00	0.44	0.00	6	
4960	D-3 SHANKS EA	106	0.03	0.05	0.01	0.02	0.00	0.03	0.00	1	
	FIAT-ALLIS										
4970	41-R W/HYD-CNTL AND 2 SHANKS	39,253	10.68	16.51	2.92	5.69	0.00	9.05	0.00	204	
4975	31-R W/HYD-CNTL AND 2 SHANKS	31,963	8.70	13.45	2.37	4.63	0.00	7.37	0.00	188	
4980	21-R W/HYD-CNTL AND 2 SHANKS	20,483	5.60	8.64	1.52	2.97	0.00	4.72	0.00	108	
4985	16-R W/HYD-CNTL AND 2 SHANKS	12,905	3.54	5.47	0.96	1.87	0.00	2.98	0.00	73	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION	STAND-BY	AVERAGE COND.	SEVERE COND.	OWNER-SHIP	FUEL				
ROLLERS-RUBBER-TIRED-SELF PROPELLED												
 \$\$\$\$\$\$\$\$\$\$\$\$\$\$												
INGRAM												
4995	9-2800-P	12 TON	107 HP G	20,349	16.38		1.38	2.49	9.25	77		
5000	9-2800-PA	12 TON	76 HP D	25,006	9.78		1.70	3.07	3.03	89		
5005	11-2700	15 TON	107 HP G	24,247	17.32		1.64	2.96	9.25	89		
5010	11-2700	15 TON	76 HP D	26,621	10.17		1.81	3.26	3.03	91		
5015	13-2300	15 TON	107 HP G	24,755	17.47		1.68	3.02	9.25	94		
5020	13-2300	15 TON	76 HP D	27,804	10.48		1.89	3.40	3.03	96		
5025	9-6000	27 TON	117 HP D	59,168	20.20		3.98	7.14	4.67	208		
5030	7-10000	35 TON	148 HP D	64,113	23.13		4.28	7.61	5.91	241		
ROLLER-RUBBER TIRED-TOMED												
 \$\$\$\$\$\$\$\$\$\$												
5040	FERGUSON RT-100S	50 TON		38,781	9.43		2.52	4.31	0.00	200		
5045	FERGUSON RT-120S	60 TON		45,179	10.95		2.96	5.11	0.00	233		
5050	SOUTHWEST C 75	75 TON		52,764	12.84		3.43	5.89	0.00	347		
5055	SOUTHWEST C 50	50 TON		50,013	12.17		3.26	5.61	0.00	309		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.				
			AVERAGE	SEVERE							
	ROLLER-SHEEPS FOOT-DOUBLE DRUM *****										
	FERGUSON-TOWED										
5065	MOD 112	40"X48"	8,216	2.05	0.57	1.03	0.00			65	
5070	MOD 112W-48	48"X48"	10,647	2.63	0.73	1.33	0.00			105	
5075	MOD 120	60"X60"	16,359	3.99	1.12	2.05	0.00			157	
5080	MOD 120 MODIFIED	60"X60"	30,721	7.39	2.10	3.84	0.00			230	
5085	MOD 120-RE	60"X60"	36,950	8.87	2.53	4.62	0.00			327	
5090	MOD 22	60"X72"	22,457	5.43	1.54	2.81	0.00			215	
5095	MOD 22 MODIFIED	60"X72"	35,425	8.51	2.42	4.43	0.00			269	
5100	MOD 144-RE	60"X72"	43,126	10.34	2.95	5.39	0.00			385	
	CATERPILLER-SELF PROPELLED										
5110	815	40.5"X38"	170 HP D	88.874	29.51	6.08	11.11	6.78		360	
5115	825C	51"X41.5"	300 HP D	159.054	52.60	10.87	19.88	11.97		631	
5120	825C	M/S BLADE	300 HP D	167.632	54.64	11.47	20.96	11.97		683	
	HYSSTER-SELF PROPELLED										
5130	C455-B TANDEM	60"X72" ARTIC	330 HP D	160.169	54.36	10.96	20.03	13.17		523	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
ROLLER-SMOOTH WHEEL-SELF PROPELLED												
INGRAM												
5140	8 TON 3 WHEEL 3" OVERLAP	107 HP G	30.151	18.63	2.06	3.77	9.25			124		
5145	8 TON 3 WHEEL 3" OVERLAP	76 HP D	33.201	11.64	2.27	4.15	3.03			126		
5150	12 TON 3 WHEEL 3" OVERLAP	107 HP G	36.825	20.21	2.52	4.60	9.25			203		
5155	12 TON 3 WHEEL 3" OVERLAP	86 HP D	39.873	13.71	2.72	4.98	3.43			205		
5160	14 TON 3 WHEEL 3" OVERLAP	107 HP G	38.964	20.72	2.67	4.87	9.25			241		
5165	14 TON 3 WHEEL 3" OVERLAP	86 HP D	42.009	14.22	2.87	5.25	3.43			243		
5170	4-6 TON 2 WHEEL TANDEM	53 HP G	18.547	10.08	1.27	2.32	4.58			82		
5175	6-9 TON 2 WHEEL TANDEM	107 HP G	25.167	17.45	1.73	3.15	9.25			133		
5180	6-9 TON 2 WHEEL TANDEM	76 HP D	28.217	10.46	1.93	3.53	3.03			135		
5185	8-12 TON 2 WHEEL TANDEM	107 HP G	30.538	18.72	2.09	3.82	9.25			171		
5190	8-12 TON 2 WHEEL TANDEM	76 HP D	33.587	11.73	2.30	4.20	3.03			173		
5195	10-14 TON 2 WHEEL TANDEM	107 HP G	33.105	19.33	2.27	4.14	9.25			258		
5200	10-14 TON 2 WHEEL TANDEM	76 HP D	36.170	12.35	2.47	4.52	3.03			262		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
ROLLER-VIBRATORY														
***** TF=ROLLER W/TAMPING FEET														
TOWED														
5210	FERGUSON 652 TF 60"X60" 9 TON 49 HP D	28,414	13.10			2.11	3.95	2.73		125				
5215	SOUTHWEST 756 TF 66"X78" 20 TON 75 HP D	56,226	24.40			4.16	7.82	4.17		240				
5220	FERGUSON 230 66"X78" 20 TON 66 HP D	42,472	19.07			3.14	5.90	3.67		234				
5225	FERGUSON 230 TF 66 HP D	46,088	20.31			3.41	6.41	3.67		266				
5230	HYSTER C200B 48"X60" 12.5 TON 36 HP D	22,598	10.21			1.67	3.14	2.00		87				
5235	HYSTER C210A TF 58"X60" 14 TON 39 HP D	26,503	11.76			1.97	3.69	2.17		100				
SELF PROPELLED SINGLE DRUM														
5245	VIBRO PLUS CA-25 60"X84" 23 TON 125 HP D	51,284	26.23			3.77	7.02	6.96		198				
5250	VIBRO PLUS CA-25S 61"X84" 28 TON 125 HP D	54,264	27.24			3.99	7.43	6.96		203				
5255	VIBRO PLUS CA-25PD 60"X48" 30 TON 125 HP D	62,508	30.05			4.60	8.57	6.96		240				
5260	RAYGO RASCAL 400A 59"X84" ARTIC 88 HP D	56,197	25.34			4.13	7.71	4.90		197				
5265	RAYGO RASCAL 600A 60"X100" 119 HP D	69,255	31.97			5.10	9.50	6.62		288				
5270	I-RAND SP-60 60"X100"	210 HP D	110,035	52.30		8.05	14.91	11.69		450				
5275	I-RAND SPF-54 TF 54"X85"	120 HP D	64,464	30.37		4.76	8.89	6.68		264				
5280	FERGUSON SP 75D	120 HP D	55,231	27.21		4.06	7.57	6.68		179				
5285	FERGUSON SP 75DT TF	120 HP D	62,923	29.86		4.64	8.64	6.68		217				
5290	FERGUSON SP 230D	148 HP D	65,058	32.53		4.80	8.95	8.24		302				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CMT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	SCRAPERS-SELF PROPELLED ***** (CAPACITY AS RECOMMENDED BY MFGR HP & FUEL LISTED TRACTOR/SCRAPER PP = PUSH PULL ATTACHMENT)										
	CATERPILLAR										
5300	613-B 13 T 11 CY P.S. 150 HP D	86.652	30.98	43.91	5.79	10.27	6.14	16.25	8.03	311	
5305	621-B 24 T 14-20 CY P.S. 330 HP D	172.487	57.05	85.02	11.48	20.30	12.13	32.16	15.94	640	
5310	623-B 25 T 22 CY P.S. 330 HP D	192.125	65.10	92.81	12.82	22.75	13.51	36.00	17.67	702	
5315	627-B 24 T 14-20 CY P.S. 225/225 HP D/D	201.948	74.79	105.67	13.50	23.98	17.48	37.92	22.68	715	
5320	627-B PP 24 T 14-20 CY P.S. 225/225 HP D/D	214.691	77.49	109.65	14.37	25.57	17.48	40.41	22.68	757	
5325	631-B 37.5T 21-31 CY P.S. 450 HP D	263.825	84.52	126.24	17.57	31.09	16.54	49.24	21.73	876	
5330	633-B 37.5T 34 CY P.S. 450 HP D	301.223	98.15	140.32	20.13	35.77	18.43	56.56	24.10	996	
5335	637-D 37.5T 21-31 CY P.S. 450/255 HP D/D	324.671	118.15	167.03	21.73	38.70	27.39	61.14	35.53	983	
5340	637-D PP 37.5T 21-31 CY P.S. 450/255 HP D/D	338.910	121.18	171.49	22.71	40.48	27.39	63.93	35.53	1018	
5345	641-B 47 T 28-38 CY P.S. 550 HP D	328.847	105.40	157.88	21.87	38.62	20.21	61.20	26.56	1155	
5350	651-B 52 T 32-44 CY P.S. 550 HP D	342.578	108.31	162.17	22.80	40.33	20.21	63.89	26.56	1179	
5355	657-B 52 T 32-44 CY P.S. 550/400 HP D/D	423.091	161.90	228.69	28.11	49.62	36.91	78.67	47.88	1408	
	CLARK										
5365	110-11B 13 T 11 CY P.S. 174 HP D	92.369	34.24	48.47	6.14	10.86	7.13	17.21	9.32	345	
5370	110-15 18 T 15 CY P.S. 232 HP D	122.331	42.88	61.00	8.15	14.43	9.50	22.84	12.42	456	
5375	110-TB 19 T 16 CY P.S. 140/140 HP D/D	162.477	57.37	81.44	10.87	19.34	11.47	30.57	14.99	521	
5380	210-HB 26.5T 23 CY P.S. 324 HP D	195.148	65.46	93.37	13.03	23.13	13.27	36.58	17.35	710	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
SCRAPERS-SELF PROPELLED (CONT'D)														
(CAPACITY AS RECOMMENDED BY MFGR HP & FUEL LISTED TRACTOR/SCRAPER PP = PUSH PULL ATTACHMENT)														
FIAT-ALLIS														
5390	161	18.7 T 15 CY P.S.	229 HP D	126,459	46.62	66.05	8.40	14.82	9.38	23.50	12.26	448		
5395	260B	25 T 15-21 CY P.S.	325 HP D	173,732	57.07	85.11	11.56	20.45	11.94	32.40	15.70	586		
5400	261B	26.5T 23 CY P.S.	325 HP D	200,518	66.69	95.17	13.40	23.80	13.31	37.64	17.40	639		
5405	262B	25 T 15-21 CY P.S.	325/171 HP D/D	205,085	74.35	107.82	13.71	24.37	18.23	38.53	23.96	681		
5410	263-B	26.5 T 23 CY P.S.	325/171 HP D/D	234,450	89.17	126.05	15.63	27.69	20.31	43.83	26.56	744		
INTERNATIONAL														
5420	412	13 T 11 CY P.S.	150 HP D	82,757	30.48	43.18	5.50	9.71	6.14	15.39	8.03	308		
5425	431B	24 T 14-21 CY P.S.	326 HP D	160,197	54.25	80.94	10.64	18.76	11.98	29.76	15.75	594		
5430	433B	24 T 14-21 CY P.S.	126/185 HP D/D	187,821	65.04	92.49	12.53	22.21	12.08	35.15	15.67	690		
5435	442B	25 T 22 CY P.S.	326 HP D	182,257	62.74	89.39	12.14	21.51	13.35	34.07	17.46	680		
5440	444B	25 T 22 CY P.S.	326/185 HP D/D	215,519	84.25	118.78	14.38	25.52	20.93	40.38	27.36	805		
JOHN DEERE														
5450	JD762	13.7 T 11 CY P.S.	175 HP D	93,412	34.31	48.57	6.22	11.03	7.17	17.48	9.37	345		
5455	JD860-B	18.7 T 15 CY P.S.	215 HP D	120,481	41.31	58.88	8.03	14.24	8.80	22.56	11.51	451		
TEREX (GM)														
5465	S-23E	26.5T 23 CY P.S.	310 HP D	179,179	62.14	88.64	11.89	20.95	12.69	33.25	16.60	655		
5470	S-24B	40 T 24-34 CY P.S.	475 HP D	278,508	89.46	133.80	18.53	32.76	17.46	51.91	22.94	931		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL						
SCRAPERS-SELF PROPELLED (CONT'D)													
***** (CAPACITY AS RECOMMENDED BY MFGR HP & FUEL LISTED TRACTOR/SCRAPER PP = PUSH PULL ATTACHMENT)													
TEREX (GM) (CONT'D)													
5475	TS-14B 23.5T 14-20 CY P.S. 144/144 HP D/D	172,656	60.15	85.52	11.51	20.39	11.19	32.28	14.52	528			
5480	TS-18 30 T 18-24 CY P.S. 295/225 HP D/D	233,814	87.74	123.99	15.58	27.60	20.20	43.71	26.21	720			
5485	TS-24 40 T 24-32 CY P.S. 394/225 HP D/D	315,799	114.18	161.81	21.05	37.32	24.05	59.08	31.20	932			
5490	TS-24B 52 T 24-34 CY P.S. 475/242 HP D/D	342,132	123.72	175.05	22.89	40.72	27.86	64.36	36.14	1050			
WARCO													
5500	1016 13 T 11 CY P.S. 161 HP D	86,696	32.50	46.06	5.74	10.09	6.59	16.03	8.62	317			
5505	222H 25 T 22 CY P.S. 332 HP D	185,651	64.68	92.18	12.33	21.76	13.60	34.51	17.78	648			
5510	229H 25 T 15-21 CY P.S. 332 HP D	162,746	55.78	83.62	10.77	18.90	12.20	30.02	16.04	594			
5515	252FT 32 T 27 CY P.S. 332/332 HP D/D	303,918	115.01	162.45	20.32	36.11	27.19	57.09	35.56	1017			
5520	333F 38 T 32 CY P.S. 467 HP D	269,578	91.88	130.96	17.98	31.86	19.12	50.43	25.01	1020			
5525	339F 41 T 25-34 CY P.S. 467 HP D	260,067	84.32	125.72	17.32	30.66	17.16	48.56	22.56	937			
5530	353FT 43 T 36 CY P.S. 493/473 HP D/D	426,938	167.86	236.93	28.39	50.14	39.56	79.46	51.73	1355			
SCRAPER-TRACTOR DRAWN													

5540	RONE 18T 12-17CY HYDR/CONTROL	48,772	10.35	15.19	3.03	4.97	0.00	7.94	0.00	235			
5545	RONE 27T 18-26CY HYDR/CONTROL	68,289	14.71	21.63	4.21	6.86	0.00	11.01	0.00	365			
5550	SOUTHWEST DS18 DRAG SCRAPER 8.8 CY	28,428	6.02	8.83	1.77	2.91	0.00	4.64	0.00	137			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.							
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL						
TRACTOR - CRAWLERS															
XXXXXXXXXXXXXX															
CATERPILLAR															
5560	D3	P.S.	62 HP D	26.133	9.52	13.65	1.80	3.04	2.67	4.90	3.52	119			
5565	3P	POWER ANGLE & POWER TILT		5.681	1.28	1.91	0.39	0.71	0.00	1.11	0.00	24			
5570	D4-E	D.D.	75 HP D	40.691	13.60	19.63	2.81	4.73	3.23	7.62	4.25	176			
5575	4A	ANGLE BLADE HYDRAULIC		7.561	1.75	2.60	0.51	0.94	0.00	1.48	0.00	30			
5580	4S	STRAIGHT BLADE HYDRAULIC		5.919	1.39	2.05	0.40	0.74	0.00	1.16	0.00	25			
5585	D5-B	P.S.	105 HP D	61.281	20.04	28.97	4.24	7.13	4.52	11.47	5.95	269			
5590	5A	ANGLE BLADE HYDRAULIC		9.147	2.11	3.14	0.62	1.14	0.00	1.79	0.00	41			
5595	5S	STRAIGHT BLADE HYDRAULIC		7.216	1.68	2.49	0.50	0.90	0.00	1.42	0.00	34			
5600	D6-D	P.S.	140 HP D	78.984	26.09	37.70	5.45	9.18	6.03	14.79	.94	264			
5605	6S	STRAIGHT BLADE HYDRAULIC		9.641	2.23	3.30	0.66	1.21	0.00	1.89	0.00	47			
5610	6A	ANGLE BLADE HYDRAULIC		10.741	2.47	3.67	0.73	1.34	0.00	2.10	0.00	51			
5615	D7-G	P.S.	200 HP D	107.995	36.16	52.18	7.46	12.56	8.61	20.22	11.34	373			
5620	7S	STRAIGHT BLADE HYDRAULIC		15.090	3.46	5.14	1.04	1.89	0.00	2.95	0.00	77			
5625	7U	HYD. UNIVERSAL BLADE		16.509	3.77	5.62	1.13	2.06	0.00	3.23	0.00	84			
5630	7A	ANGLE BLADE HYDRAULIC		13.184	3.02	4.50	0.90	1.64	0.00	2.58	0.00	68			
5635	D8-K	P.S.	300 HP D	150.703	48.27	68.05	9.82	16.33	12.91	25.93	17.01	606			
5640	8S	STRAIGHT BLADE HYDRAULIC		22.091	5.02	7.50	1.51	2.75	0.00	4.32	0.00	121			
5645	8U	HYD. UNIVERSAL BLADE		24.328	5.54	8.25	1.67	3.04	0.00	4.76	0.00	133			
5650	8A	ANGLE BLADE HYDRAULIC		18.857	4.30	6.42	1.29	2.35	0.00	3.70	0.00	116			
5655	PUSH PLATE USE W/8S			569	0.13	0.19	0.04	0.07	0.00	0.11	0.00	4			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	TRACTOR - CRAWLER (CONT'D) *****										
	CATERPILLAR (CONT'B)										
5660	D9-H P.S.	410 HP D	221.392	69.28	97.80	14.43	24.00	17.65	38.09	23.25	809
5665	9S STRAIGHT BLADE HYDRAULIC		28.668	6.52	9.72	1.96	3.58	0.00	5.61	0.00	173
5670	9A ANGLE BLADE HYDRAULIC		24.496	5.58	8.32	1.67	3.06	0.00	4.80	0.00	152
5675	9U HYD. UNIVERSAL BLADE		31.339	7.12	10.62	2.14	3.91	0.00	6.13	0.00	190
5680	9C CUSHION BLADE		22.006	5.02	7.47	1.51	2.75	0.00	4.30	0.00	127
5685	REAR CUSHION PUSH BLOCK		5.486	1.33	1.96	0.37	0.68	0.00	1.08	0.00	29
5690	FRONT PUSH PLATE		659	0.16	0.23	0.04	0.08	0.00	0.13	0.00	5
5695	DUAL D9-H P.S.	820 HP D	469.195	144.20	203.79	30.58	50.86	35.30	80.73	46.49	1851
5700	D10 P.S.	700 HP D	411.180	121.26	168.30	25.40	41.99	30.13	65.98	39.69	1478
5705	10S STRAIGHT BLADE HYDRAULIC		45.419	10.29	15.37	3.11	5.67	0.00	8.89	0.00	286
5710	10U HYD. UNIVERSAL BLADE		49.742	11.28	16.81	3.41	6.22	0.00	9.72	0.00	283
5715	FRONT PUSH PLATE		1.002	0.28	0.39	0.07	0.13	0.00	0.20	0.00	7
5720	REAR PUSH BLOCK		14.109	3.23	4.81	0.97	1.76	0.00	2.76	0.00	46
	FIAT-ALLIS										
5730	8 P.S.	87 HP D	41.011	14.37	20.64	2.84	4.77	3.75	7.68	4.93	189
5735	8-HA ANGLE BLADE HYDRAULIC		6.690	1.55	2.31	0.46	0.83	0.00	1.31	0.00	30
5740	8-HSU SEMI-U BLADE HYDRAULIC		6.986	1.63	2.41	0.48	0.88	0.00	1.37	0.00	30
5745	10-B P.S.	110 HP D	60.228	20.08	28.99	4.16	7.00	4.74	11.28	6.24	256
5750	10-HA ANGLE BLADE HYDRAULIC		7.466	1.73	2.57	0.51	0.93	0.00	1.46	0.00	36
5755	10-HSU SEMI-U BLADE HYDRAULIC		7.860	1.82	2.70	0.54	0.98	0.00	1.54	0.00	36

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CNT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.							
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL						
TRACTOR - CRAWLER (CONT'D)															
XXXXXXXXXXXXXXXXXXXXXX															
FIAT-ALLIS (CONT'D)															
5760	14-C P.S.	150 HP D	83,589	27.72	40.02	5.78	9.72	6.46	15.65	8.50	306				
5765	14-HA ANGLE BLADE HYDRAULIC		11,401	2.63	3.89	0.79	1.43	0.00	2.23	0.00	51				
5770	14-HSU STRAIGHT BLADE HYDRAULIC		11,892	2.74	4.06	0.82	1.49	0.00	2.33	0.00	51				
5775	16-B P.S.	195 HP D	110,236	36.39	52.58	7.62	12.82	8.39	20.64	11.06	453				
5780	16-HA ANGLE BLADE HYDRAULIC		12,221	2.81	4.17	0.84	1.53	0.00	2.39	0.00	66				
5785	16-HS STRAIGHT BLADE HYDRAULIC		12,811	2.93	4.37	0.87	1.59	0.00	2.51	0.00	66				
5790	16-HSU FULL-U BLADE HYDRAULIC		14,181	3.25	4.84	0.97	1.77	0.00	2.78	0.00	81				
5795	21-C P.S.	300 HP D	162,643	50.83	71.77	10.60	17.63	12.91	27.99	17.01	636				
5800	21HSU HYD. SEMI-UNIVERSAL BLADE		22,135	5.05	7.51	1.52	2.77	0.00	4.33	0.00	127				
5805	21-HU FULL-U BLADE HYDRAULIC		21,652	4.93	7.36	1.48	2.70	0.00	4.24	0.00	114				
5810	31 P.S.	425 HP D	248,208	75.80	107.18	16.18	26.90	18.30	42.70	24.10	908				
5815	31-HSU SEKI-U BLADE HYDRAULIC		31,747	7.21	10.75	2.17	3.96	0.00	6.21	0.00	190				
5820	31-HU FULL-U BLADE HYDRAULIC		32,764	7.44	11.09	2.24	4.09	0.00	6.40	0.00	210				
5825	31-HC CUSHION BLADE		23,411	5.33	7.94	1.60	2.92	0.00	4.58	0.00	120				
5830	41-B P.S.	524 HP D	315,797	92.42	128.32	19.51	32.25	22.56	50.67	29.71	1128				
5835	41-HSU SEMI-U BLADE HYDRAULIC		36,080	8.37	12.48	2.53	4.61	0.00	7.21	0.00	222				
5840	41-HU FULL-U BLADE HYDRAULIC		41,748	9.46	14.12	2.86	5.21	0.00	8.16	0.00	254				
5845	41-HC CUSHION BLADE		26,722	6.07	9.06	1.82	3.33	0.00	5.23	0.00	120				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT		
			CONDITION	STAND-BY	AVERAGE COND.	SEVERE COND.	OWNER-SHIP	FUEL			
			AVERAGE	SEVERE							
TRACTOR - CRAWLER (CONT'D)											
INTERNATIONAL											
5855	TD-7-E P. S. W/HYD BLADE	65 HP D	36.528	12.09	17.47	2.53	4.25	2.80	6.85	3.69	139
5860	TD-8-E P.S. W/HYD BLADE	78 HP D	44.543	14.67	21.20	3.08	5.19	3.36	8.35	4.42	172
5865	TD-15-C P.S.	140 HP D	72.758	24.66	35.56	5.03	8.46	6.03	13.63	7.94	269
5870	HYD. SEMI-UNIVERSAL BLADE		9.963	2.29	3.41	0.68	1.24	0.00	1.95	0.00	46
5875	ANGLE BLADE HYDRAULIC		11.076	2.55	3.79	0.76	1.38	0.00	2.17	0.00	50
5880	TD-20-E P.S.	210 HP D	104.728	35.97	51.80	7.23	12.18	9.04	19.61	11.91	475
5885	HYD. SEMI-UNIVERSAL BLADE		14.238	3.26	4.86	0.98	1.78	0.00	2.79	0.00	61
5890	ANGLE BLADE HYDRAULIC		14.760	3.38	5.03	1.01	1.84	0.00	2.89	0.00	71
5895	TD-25-E P.S.	310 HP D	143.411	47.27	66.50	9.35	15.54	13.35	24.68	17.58	590
5900	HYD. SEMI-UNIVERSAL BLADE		19.218	4.38	6.53	1.31	2.40	0.00	3.76	0.00	108
5905	ANGLE BLADE HYDRAULIC		17.100	3.91	5.82	1.17	2.14	0.00	3.35	0.00	110
5910	FRONT PUSHER CUSHION		7.644	1.78	2.63	0.53	0.96	0.00	1.50	0.00	29
5915	REAR PUSHER CUSHION		4.116	1.02	1.49	0.28	0.51	0.00	0.81	0.00	23
5920	FRONT PUSH BLOCK /S BLD		697	0.20	0.30	0.04	0.08	0.00	0.15	0.00	12
JOHN DEERE											
5930	JD350C/6305 D.D. W/HYD BLADE	42 HP D	25.784	8.30	12.03	1.78	2.99	1.81	4.83	2.38	102
5935	JD450C/6405 D.D. W/HYD BLADE	65 HP D	37.083	12.22	17.65	2.57	4.32	2.80	6.95	3.69	143
5940	JD550/6405 P.S. W/HYD BLADE	72 HP D	44.271	14.25	20.65	3.06	5.15	3.10	8.30	4.08	169

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
TRACTOR - CRAWLER (CONT'D)														
XXXXXXXXXXXXXXXXXXXXXX														
TEREX (GM)														
5950	82-20B P.S.	205 HP D	108,111	36.47	52.59	7.46	12.57	8.83	20.24	11.62	372			
5955	STRAIGHT BLADE HYDRAULIC		10,903	2.46	3.68	0.75	1.36	0.00	2.14	0.00	58			
5960	ANGLE BLADE HYDRAULIC		11,784	2.66	3.98	0.80	1.47	0.00	2.31	0.00	59			
5965	HYD. UNIVERSAL BLADE		11,760	2.65	3.97	0.80	1.47	0.00	2.31	0.00	57			
5970	82-30B P.S.	260 HP D	140,023	43.85	61.90	9.13	15.18	11.19	24.09	14.74	569			
5975	STRAIGHT BLADE HYDRAULIC		15,964	3.65	5.43	1.09	1.99	0.00	3.12	0.00	91			
5980	ANGLE BLADE HYDRAULIC		17,682	4.04	6.01	1.21	2.21	0.00	3.46	0.00	93			
5985	HYD. UNIVERSAL BLADE		17,670	4.04	6.01	1.21	2.21	0.00	3.46	0.00	92			
5990	REAR CUSHION PUSH BLOCK		4,795	1.18	1.72	0.33	0.60	0.00	0.94	0.00	21			
5995	82-50B P.S.	370 HP D	203,339	63.28	89.36	13.25	22.04	15.93	34.99	20.98	762			
6000	STRAIGHT BLADE		20,602	4.64	6.95	1.41	2.57	0.00	4.03	0.00	118			
6005	HYD. UNIVERSAL BLADE		23,023	5.19	7.77	1.57	2.87	0.00	4.51	0.00	134			
6010	ANGLE BLADE HYDRAULIC		23,299	5.23	7.86	1.59	2.90	0.00	4.56	0.00	157			
6015	PUSH PLATE (WELD ON)		843	0.18	0.29	0.06	0.10	0.00	0.17	0.00	6			
6020	PUSH BLOCK (CUSHION REAR)		4,795	1.08	1.62	0.33	0.60	0.00	0.94	0.00	21			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.	OWNER-SHIP	FUEL	OWNER-SHIP	FUEL	
			AVERAGE	SEVERE								
	TRACTOR - WHEEL TYPE DOZERS \$											
	CATERPILLAR											
6030	814 ARTICULATED ST BLADE P.S. 170 HP D	93,108	30.20	47.84	6.19	10.87	6.78	17.27	8.75	363		
6035	824-C ARTICULATED ST BLADE P.S. 300 HP D	165,416	54.37	87.46	10.95	19.09	11.97	30.40	15.43	603		
	CLARK											
6045	280 ARTICULATED ST BLADE P.S. 274 HP D	166,509	52.82	84.69	11.05	19.34	10.93	30.75	14.10	688		
6050	380 ARTICULATED ST BLADE P.S. 473 HP D	249,427	80.97	126.62	16.64	29.34	18.87	46.52	24.34	1010		
	TRACTOR - WHEEL TYPE - FARM TYPE \$											
	JOHN DEERE											
6060	MOD 20-40 40 HP G	9,761	6.79	10.15	0.64	1.08	3.46	1.74	4.51	0		
6065	MOD 24-40 60 HP G	14,226	9.83	14.27	0.94	1.63	5.19	2.60	6.76	0		
	TRENCHER-CHAIN-DITCH WITCH \$											
6075	MOD C99 6"X24" TRENCH 9 HP G	2,447	1.63	2.25	0.17	0.30	0.78	0.47	1.01	5		
6080	MOD 2200 8"X36" TRENCH 17 HP G	10,937	4.61	6.56	0.74	1.35	1.47	2.13	1.92	27		
6085	MOD V30 10"X36" TRENCH 30 HP G	12,087	6.38	8.89	0.82	1.49	2.59	2.34	3.38	40		
6090	MOD 65 12"X48" TRENCH 65 HP D	24,456	9.35	13.35	1.67	3.01	2.59	4.73	3.34	72		
6095	MOD 100 18"X72" TRENCH 101 HP D	56,553	19.20	27.91	3.84	6.93	4.03	10.89	5.20	95		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	TRENCHER-WHEEL TYPE *****										
	BARBER-GREEN										
6105	MOD TA 56 16"X5'-10" TRENCH	84 HP D	75.463	22.43	32.42	5.16	9.39	3.35	14.73	4.32	275
6110	MOD TA 65 22"X7'-0" TRENCH	175 HP D	171.346	50.14	72.55	11.72	21.32	6.98	33.42	9.00	632
	CLEVELAND										
6120	MOD 247-HD-1 21"X7' TRENCH	84 HP D	75.463	22.43	32.42	5.16	9.39	3.35	14.73	4.32	275
6125	MOD 400W-HD-1 36"X9' TRENCH	175 HP D	171.346	50.14	72.55	11.72	21.32	6.98	33.42	9.00	632
	TRUCKS - HIGHWAY ***** (CHASSIS ONLY)										
	FORD										
6140	F100 4X2 1/2T PKUP 4900 GVW 157 HP G	5,122	6.78	9.21	0.38	0.72	4.11	1.16	5.35	37	
6145	F150 4X2 1/2T PKUP 6150 GVW 157 HP G	5,530	6.89	9.37	0.41	0.78	4.11	1.25	5.35	38	
6150	F250 4X2 3/4T PKUP 7900 GVW 157 HP G	6,308	7.15	9.79	0.46	0.88	4.11	1.41	5.35	39	
6155	F250 4X4 3/4T PKUP 8400 GVW 157 HP G	7,375	7.42	10.30	0.54	1.03	4.11	1.66	5.35	44	
6160	F600 2AX 16000 GVW 155 HP G	9,423	13.54	18.27	0.69	1.31	8.33	2.10	10.76	51	
6165	F612 2AX 21000 GVW 155 HP G	9,639	13.66	18.50	0.70	1.32	8.33	2.12	10.76	53	
6170	F702 2AX 22000 GVW 170 HP G	11,497	15.26	20.76	0.83	1.56	9.13	2.52	11.80	59	
6175	F706 2AX 25500 GVW 170 HP G	11,776	15.40	21.04	0.84	1.57	9.13	2.55	11.80	62	
6180	L804 2AX 27500 GVW 170 HP G	13,377	15.81	21.66	0.96	1.81	9.13	2.91	11.80	66	
6185	L8000 2AX 35000 GVW 175 HP D	23,504	15.46	22.14	1.71	3.27	7.10	5.23	9.34	87	
6190	LTS900 3AX 39000 GVW 200 HP D	25,518	17.68	25.55	1.83	3.43	8.12	5.52	10.67	102	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
TRUCKS - HIGHWAY (CONT'D)														
XXXXXXXXXXXXXXXXXXXXXX														
(CHASSIS ONLY)														
FORD (CONT'D)														
6195	LTS904 3AX	46000 GVW 200 HP D	26.211	17.84	25.84	1.87	3.52	8.12	5.69	10.67				
6200	LTS9000 3AX	54000 GVW 250 HP D	40.837	24.28	35.34	2.95	5.60	10.15	9.00	13.34				
6205	LTS9000 3AX	58000 GVW 250 HP D	42.834	24.77	36.12	3.10	5.90	10.15	9.47	13.34				
GMC AND CHEVROLET														
6215	C10903 4X2 1/2T PKUP	6000 GVW 140 HP G	5.734	6.36	8.69	0.42	0.81	3.67	1.29	4.77				
6220	C10906 4X2	WAGON 6400 GVW 165 HP G	6.965	7.53	10.30	0.51	0.99	4.32	1.58	5.62				
6225	K10906 4X4	WAGON 6800 GVW 165 HP G	8.010	7.80	10.76	0.59	1.14	4.32	1.82	5.62				
6230	C20903 4X2 3/4T PKUP	7500 GVW 165 HP G	6.301	7.42	10.16	0.46	0.87	4.32	1.40	5.62				
6235	C20903 4X4 3/4T PKUP	7500 GVW 165 HP G	7.503	7.75	10.72	0.55	1.05	4.32	1.68	5.62				
6240	C5D042 2AX	16000 GVW 160 HP G	9.621	14.07	19.09	0.69	1.30	8.59	2.09	11.11				
6245	C6D042 2AX	20000 GVW 160 HP G	10.741	14.34	19.53	0.77	1.45	8.59	2.35	11.11				
6250	C7D042 2AX	24000 GVW 188 HP G	11.070	16.43	22.22	0.80	1.51	10.10	2.42	13.05				
6255	J8C042 2AX	27500 GVW 220 HP G	19.166	20.86	28.57	1.39	2.65	11.82	4.24	15.27				
6260	J9C042 2AX	33900 GVW 242 HP D	35.645	22.15	31.77	2.60	4.99	9.83	7.98	12.91				
6265	C7D064 3AX	37000 GVW 200 HP G	15.630	25.55	34.61	1.12	2.10	15.98	3.38	20.70				
6270	J8C064 3AX	43000 GVW 220 HP G	25.323	30.30	41.58	1.82	3.44	17.58	5.53	22.77				
6275	J9C064 3AX	44900 GVW 242 HP D	40.032	23.65	34.44	2.89	5.49	9.83	8.82	12.91				
6280	N9E042 2AX	33900 GVW 242 HP D	38.114	22.76	32.74	2.78	5.34	9.83	8.55	12.91				
6285	D9K042 2AX	33900 GVW 289 HP D	38.541	25.32	36.12	2.82	5.41	11.73	8.65	15.42				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES				ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.							
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL						
TRUCKS - HIGHWAY (CONT'D)															
XXXXXXXXXXXXXXXXXXXXXX (CHASSIS ONLY)															
GMC AND CHEVROLET (CONT'D)															
6290	M9E064 3AX	48900 GVW 289 HP D	43.538	26.89	38.83	3.16	6.03	11.73	9.67	15.42	154				
6295	D9K064 3AX	48900 GVW 289 HP D	43.918	26.94	38.88	3.19	6.11	11.73	9.78	15.42	152				
INTERNATIONAL															
6305	800 4X4 SCOUT	6200 GVW 97 HP G	6.291	5.00	6.98	0.47	0.90	2.54	1.43	3.30	30				
6310	1624 2AX	20000 GVW 147 HP G	9.894	13.16	17.88	0.71	1.35	7.90	2.18	10.21	57				
6315	1724 2AX	20500 GVW 147 HP G	10.278	13.26	18.03	0.74	1.41	7.90	2.27	10.21	65				
6320	1824 2AX	23600 GVW 189 HP G	10.911	16.44	22.22	0.78	1.48	10.15	2.40	13.12	68				
6325	1854 2AX	23600 GVW 180 HP D	16.216	10.80	15.27	1.18	2.26	5.01	3.62	6.47	74				
6330	1924 2AX	25000 GVW 190 HP G	12.779	16.99	23.04	0.93	1.76	10.20	2.82	13.19	79				
6335	1954 2AX	27000 GVW 180 HP D	20.976	12.06	17.31	1.53	2.92	5.01	4.69	6.47	100				
6340	F1954 3AX	43000 GVW 210 HP D	25.096	17.74	25.34	1.82	3.48	8.53	5.58	11.21	123				
6345	F2554 3AX	43000 GVW 210 HP D	34.541	20.26	29.34	2.51	4.81	8.53	7.71	11.21	123				
6350	F2574 3AX	50000 GVW 230 HP D	41.209	22.98	33.33	3.01	5.78	9.34	9.25	12.27	123				
6355	F5050 3AX	52000 GVW 225 HP D	42.050	22.93	33.32	3.07	5.90	9.13	9.44	12.01	138				
KENWORTH															
6365	K100 3AX 47400 GVW	72800 GCW 290 HP D	48.512	28.19	40.86	3.53	6.76	11.77	10.82	15.47	138				
6370	M900 3AX 50000 GVW	76800 GCW 290 HP D	47.441	27.91	40.44	3.44	6.59	11.77	10.58	15.47	140				
6375	C500 3AX 56000 GVW	86000 GCW 290 HP D	54.164	29.61	43.09	3.94	7.57	11.77	12.13	15.47	144				
6380	BRUTE 3AX 62000 GVW	95300 GCW 290 HP D	58.423	30.70	44.78	4.26	8.20	11.77	13.12	15.47	179				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT									
			CONDITION		STAND-BY	AVERAGE COND.	SEVERE COND.												
			AVERAGE	SEVERE															
TRUCKS - HIGHWAY (CONT'D)																			
***** (CHASSIS ONLY)																			
PETERBILT																			
6390	MOD 348 3AX 56000 GVW 250 HP D	48,656	26.18	38.19	3.54	6.77	10.15	10.84	13.34	121									
6395	MOD 352 3AX 50000 GVW 76800 GCW 350 HP D	52,188	32.21	46.35	3.80	7.30	14.21	11.69	18.68	131									
6400	MOD 359 3AX 50000 GVW 76800 GCW 350 HP D	52,224	32.22	46.36	3.81	7.31	14.21	11.70	18.68	134									
6405	MOD 381 3AX 73000 GVW 125000 GCW 350 HP D	56,116	33.20	47.90	4.09	7.87	14.21	12.60	18.68	174									
6410	MOD 383 3AX 83000 GVW 150000 GCW 350 HP D	56,343	33.26	47.99	4.11	7.90	14.21	12.65	18.68	193									
TRUCK ACCESSORIES-TRAILER B/D																			

COOK BROS CHALLENGE																			
6420	BDS 2511 19CY 25T 80,000 GVW MAX	23,125	5.59	8.36	1.54	2.60	0.00	4.20	0.00	120									
6425	BDS 2811 23CY 28T 80,000 GVW MAX	25,216	6.08	9.09	1.69	2.84	0.00	4.59	0.00	130									
6430	BDS-4011 30CY 40T 80,000 GVW MAX	27,920	6.81	10.16	1.86	3.11	0.00	5.02	0.00	150									
6435	E-400 20CY 40T 100,000 GVW MAX	36,539	8.72	13.06	2.45	4.14	0.00	6.68	0.00	170									
6440	E-550 37CY 55T OFF-HWY	57,154	13.73	20.54	3.82	6.42	0.00	10.35	0.00	370									
6445	E-550G 37CY 55T OFF-HWY W/GOOSE NECK	67,170	15.95	23.90	4.50	7.62	0.00	12.27	0.00	390									
6450	E-700 43CY 70T OFF-HWY	76,870	18.84	28.20	5.07	8.41	0.00	13.65	0.00	370									
6455	E-700G 43CY 70T OFF-HWY W/GOOSE NECK	82,944	20.20	30.23	5.50	9.15	0.00	14.81	0.00	390									
6460	DOLLY FOR GOOSE NECK TRAILERS	16,239	4.17	6.20	1.06	1.73	0.00	2.82	0.00	80									

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT	
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.			
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL		
	TRUCK ACCESSORIES-TRAILER E/D *****										
	COOK BROS CHALLENGE										
6470	SDS-26-R 20CY 28T 80,000 GVW MAX	21.082	5.16	7.70	1.41	2.35	0.00	3.79	0.00	114	
6475	SDS-28-R 21CY 28T 80,000 GVW MAX	21.647	5.29	7.89	1.45	2.42	0.00	3.90	0.00	120	
	FRUEHAUF										
6485	DDC-M2-27 20CY 25T 80,000 GVW MAX	20.618	5.04	7.53	1.37	2.30	0.00	3.72	0.00	110	
	TRUCK ACCESSORIES - DUMP-REAR *****										
	WILLIAMS W/HOIST										
6495	SCY 24M TO 26M GVW	4.302	1.32	1.97	0.32	0.62	0.00	1.00	0.00	25	
6500	AIR GATE 8CY 27M TO 30M GVW	6.749	2.03	3.04	0.50	0.97	0.00	1.55	0.00	45	
6505	AIR GATE 10CY 36000 & UP GVW	6.871	2.07	3.10	0.51	0.99	0.00	1.59	0.00	46	
6510	AIR GATE 12CY 36000 & UP GVW	6.970	2.14	3.19	0.51	1.00	0.00	1.61	0.00	47	
	TRUCK ACCESSORIES - FLATBEDS *****										
	KNAPHEIDE										
6520	CT 8' X 12'	1.230	0.41		0.09	0.18	0.00			13	
6525	CT 8' X 13.5'	1.422	0.45		0.10	0.20	0.00			16	
6530	CT 8' X 15'	1.517	0.48		0.12	0.22	0.00			17	
6535	CT 8' X 16'	1.626	0.51		0.12	0.23	0.00			19	

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.					
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP					
TRUCK ACCESSORIES-HOIST-ELECT *****													
AUTO CRANE													
6545	BACKSAVER SENIOR	CAP 1500#	2.406	0.73	0.18	0.35	0.00		3				
6550	WORKHORSE	CAP 2500#	3.013	0.88	0.22	0.43	0.00		6				
6555	MIGHTY WORKHORSE	CAP 4000#	6.447	1.82	0.48	0.93	0.00		9				
6560	MUSTANG	CAP 4000#	9.933	2.77	0.73	1.43	0.00		20				
TRUCK ACCESSORIES-CRANE-HYDR *****													
NATIONAL CRANE													
6570	SERIES 4	7.5T@5'RAD	27500 GVW	25.603	7.03	1.90	3.70	0.00	80				
6575	SERIES 6	10T@5'RAD	44000 GVW	31.686	8.69	2.35	4.58	0.00	94				
6580	SERIES 8	12T@5'RAD	60000 GVW	46.038	12.60	3.42	6.66	0.00	140				
PITMAN													
6590	HL-140CD	2AX 7T@ 4'RAD	24000 GVW	14.351	3.98	1.07	2.08	0.00	64				
6595	HL-170CD	2AX 8T@ 4'RAD	24000 GVW	18.888	5.21	1.40	2.73	0.00	85				
6600	HL-1260-1	2AX 12T@5'RAD	33000 GVW	39.618	10.85	2.94	5.73	0.00	120				

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT
			CONDITION	STAND-BY	AVERAGE COND.	SEVERE COND.			
			AVERAGE	SEVERE	OWNER-SHIP	FUEL	OWNER-SHIP	FUEL	
	TRUCK ACCESSORIES-TRAILERS FB *****								
	FRUEHAUF								
6610	PF-F2-40 40 FT 35 T 2 AX	9,973	2.65		0.64	0.96	0.00		96
	TRANSPORT								
6620	PF-BX 36 FT 35 T 2 AX	13,294	3.37		0.87	1.36	0.00		98
6625	PF-BX 40 FT 35 T 2 AX	13,441	3.40		0.89	1.38	0.00		104
	TRUCK ACCESSORIES-TRAILERS LOWBOY FB *****								
	LOAD KING								
6635	302-DR 30T 2AX 41000-49000 GW	20,058	4.72		1.35	2.19	0.00		96
6640	402-DR 40T 2AX 50000-60000 GW	26,383	6.18		1.78	2.90	0.00		108
6645	352-DF 35T 2AX 41000-49000 GW	24,952	5.79		1.69	2.76	0.00		112
6650	402-DF 40T 2AX 50000-60000 GW	27,451	6.41		1.86	3.02	0.00		117
6655	503-DF 50T 3AX 50000-60000 GW	33,743	7.99		2.27	3.67	0.00		157
6660	603-DF 60T 3AX 61000-80000 GW	40,021	9.45		2.70	4.36	0.00		180
6665	DOLLY FOR THREE-AXLE TRAILERS	14,254	3.54		0.94	1.49	0.00		60

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
TRUCK ACCESSORIES-TRAILERS-TILT												
Hyster												
6675	HP15T 15T 2AX 35000-40000 GVW	11,477	2.87		0.76	1.20	0.00			68		
6680	HP20T 20T 2AX 35000-40000 GVW	13,556	3.36		0.90	1.42	0.00			71		
6685	GHP25T 25T 2AX 35000-40000 GVW	15,435	3.77		1.03	1.64	0.00			80		
TRUCK ACCESSORIES-TRANSIT MIXER												
COOK BROS CHALLENGE (MIXER ONLY - ADD CHASSIS)												
6700	70B-MD 7 CY 40000 - 50000 GVW	20,128	5.57		1.49	2.91	0.00			63		
6705	80B-MD 8 CY 50000 - 70000 GVW	20,458	5.67		1.52	2.96	0.00			66		
6710	85B-MD 8.5 CY 55000 - 75000 GVW	20,683	5.73		1.54	2.99	0.00			68		
6715	90B-MD 9 CY 61000 - 80000 GVW	21,017	5.82		1.56	3.04	0.00			73		
TRUCK ACCESSORIES-WATER TANK												
Rosco												
6720	MFW 2000 GAL 23500 - 28000 GVW 7 HP G TRUCK MOUNTED (ADD CHASSIS)	8,306	3.06		0.62	1.20	0.61			35		
6725	MFW 2500 GAL 25000 - 34950 GVW 7 HP G TRUCK MOUNTED (ADD CHASSIS)	8,780	3.19		0.66	1.27	0.61			42		
6730	MFW 3000 GAL 29000 - 40000 GVW 7 HP G TRUCK MOUNTED (ADD CHASSIS)	9,311	3.33		0.69	1.34	0.61			46		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CNT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
TRUCKS - OFF HIGHWAY														
CATERPILLAR														
6740	769-B 35T 22-29 CY	P.S. 450 HP D	206,365	58.62	85.35	13.09	22.00	11.34	34.80	14.65	681			
6745	773 50T 30-40 CY	P.S. 600 HP D	290,254	81.60	119.04	18.40	30.89	15.12	48.88	19.53	903			
6750	777 85T 47-67 CY	P.S. 870 HP D	397,462	118.08	173.17	24.96	41.39	21.92	65.84	28.32	1225			
6755	768C PRIME MOVER TRACTOR	P.S. 450 HP D	181,442	57.33	84.18	11.31	18.57	11.34	29.68	14.65	506			
6760	772B PRIME MOVER TRACTOR	P.S. 600 HP D	272,459	81.30	119.22	17.11	28.34	15.12	45.08	19.53	705			
DJB														
(ARTICULATED FRAME)														
6770	D275 27.5T 15-24 CY	P.S. 235 HP D	163,920	42.70	62.91	10.38	17.40	5.92	27.54	7.65	410			
6775	D330 33T 17-28 CY	P.S. 255 HP D	174,027	45.23	66.56	11.03	18.53	6.43	29.32	8.30	430			
6780	D350 35T 20-31 CY	P.S. 255 HP D	185,459	48.71	72.05	11.70	19.53	6.43	30.99	8.30	460			
6785	D550 55T 32-55 CY	P.S. 450 HP D	319,330	83.26	122.84	20.19	33.82	11.34	53.58	14.65	820			
EUCLID														
6795	R25-215FD 25T 14-19 CY	P.S. 228 HP D	126,608	34.55	50.58	8.02	13.46	5.75	21.30	7.42	378			
6800	R35-302TD 35T 23-29 CY	P.S. 394 HP D	188,205	54.15	79.22	11.88	19.83	9.93	31.45	12.82	583			
6805	R50-301LD 50T 31-41 CY	P.S. 606 HP D	264,746	76.89	111.95	16.76	28.09	15.27	44.47	19.73	790			
INTERNATIONAL														
6815	330 36T 24-31 CY	P.S. 394 HP D	181,115	53.67	78.94	11.43	19.09	9.93	30.27	12.82	630			
6820	350B 50T 31-42 CY	P.S. 580 HP D	262,672	76.61	112.24	16.64	27.93	14.62	44.20	18.88	740			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
TRUCKS - OFF HIGHWAY (CONT'D)														
MACK														
6835	M-15-X	15T 11-15 CY	180 HP D	94,272	26.38	38.61	5.96	9.97	4.54	15.79	5.86	340		
6840	M-20-X	20T 13-17 CY	250 HP D	96,243	28.01	40.40	6.14	10.39	6.30	16.39	8.14	350		
6845	M-25-X	25T 16-20 CY	P.S. 250 HP D	121,549	34.34	50.15	7.70	12.90	6.30	20.43	8.14	460		
6850	M-35-AX	35T 23-29 CY	P.S. 434 HP D	172,994	51.77	75.24	10.94	18.30	10.94	29.01	14.13	630		
6855	M-45-SX	3AX45T 28-36 CY	P.S. 535 HP D	235,772	69.70	101.99	14.89	24.86	13.48	39.42	17.41	810		
6860	M-50-AX	50T 32-39 CY	P.S. 635 HP D	251,396	75.36	109.50	15.89	26.60	16.00	42.15	20.67	790		
6865	M-65-BX	65T 42-51 CY	P.S. 700 HP D	318,256	91.61	133.57	20.13	33.73	17.64	53.43	22.78	955		
6870	M-75ASX	3AX75T 44-56 CY	P.S. 800 HP D	367,123	106.52	155.82	23.22	38.87	20.16	61.57	26.04	1160		
TEREX														
6880	33-03B	22T 15-18 CY	P.S. 215 HP D	102,947	30.08	44.11	6.48	10.76	5.42	17.10	7.00	380		
6885	33-05B	30T 19-23 CY	P.S. 321 HP D	163,252	45.84	67.08	10.32	17.28	8.09	27.38	10.45	525		
6890	33-07	40T 25-32 CY	P.S. 493 HP D	217,772	63.86	93.23	13.75	22.95	12.42	36.40	16.05	756		
6895	33-09	55T 34-44 CY	P.S. 624 HP D	291,141	84.00	122.75	18.38	30.71	15.72	48.70	20.31	992		
6900	33-11C	85T 51-65 CY	P.S. 840 HP D	392,927	113.02	165.12	24.82	41.51	21.17	65.80	27.34	1227		
WABCO														
6910	HAULPAK 35C	35T 23-29 CY	P.S. 456 HP D	184,743	55.82	81.37	11.65	19.40	11.49	30.80	14.84	571		
6915	HAULPAK 50	50T 31-40 CY	P.S. 635 HP D	265,449	79.26	115.59	16.74	27.91	16.00	44.29	20.67	792		
6920	75B	75T 45-47 CY	P.S. 700 HP D	305,925	91.97	134.69	19.22	31.86	17.64	50.67	22.78	955		
6925	85C	85T 40-60 CY	P.S. 860 HP D	370,708	111.83	163.74	23.28	38.59	21.67	61.40	27.99	1181		

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT				
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.						
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL					
TRUCKS - WATER *****														
TRACTOR DRAWN - KLEIN														
6940	KT-50	5000 GAL. CAT 613B P.S. 150 HP D	92,729	26.37	37.84	5.85	9.75	5.98	15.47	7.72	310			
6945	KT-60	6000 GAL. CAT 621B P.S. 330 HP D	164,970	51.79	74.38	10.34	17.08	13.17	27.21	16.98	593			
6950	KT-80	8000 GAL. CAT 631D P.S. 450 HP D	226,726	69.11	98.85	14.32	23.93	17.95	37.94	23.15	788			
6955	KT-100	10000 GAL. CAT 631D P.S. 450 HP D	233,167	71.04	101.77	14.66	24.36	17.95	38.72	23.15	798			
6960	KT-100	10000 GAL. CAT 641B P.S. 550 HP D	273,132	85.71	123.23	17.19	28.58	21.94	45.40	28.30	951			
6965	KT-120	12000 GAL. CAT 651B P.S. 550 HP D	277,978	87.31	125.64	17.44	28.85	21.94	45.92	28.30	1097			
6970	KT-140	14000 GAL. CAT 660B P.S. 550 HP D	273,690	88.28	127.25	17.01	27.79	21.94	44.47	28.30	1067			
TRACTOR DRAWN - SOUTHWEST														
6980	STT-60	6000 GAL. CAT 621B P.S. 330 HP D	172,462	52.92	76.04	10.83	17.97	13.17	28.59	16.98	623			
6985	STT-80	8000 GAL. CAT 631D P.S. 450 HP D	234,255	70.61	101.08	14.79	24.70	17.95	39.18	23.15	848			
6990	STT-100	10000 GAL. CAT 631D P.S. 450 HP D	238,178	71.46	102.33	15.03	25.09	17.95	39.80	23.15	918			
6995	STT-120	12000 GAL. CAT 651B P.S. 550 HP D	286,475	90.02	129.81	17.86	29.33	21.94	46.86	28.30	1053			
7000	STT-140	14000 GAL. CAT 660B P.S. 550 HP D	281,483	90.00	129.85	17.48	28.52	21.94	45.68	28.30	1137			
WAGONS - BOTTOM - DUMP *****														
CATERPILLAR-ATHENY														
7010	621B/PW621B	33T 22-26CY P.S. 330 HP D	177,433	54.48	78.38	11.10	18.29	13.17	29.17	16.98	579			
7015	631D/PW631D	41T 27-32CY P.S. 450 HP D	245,336	73.21	104.95	15.45	25.71	17.95	40.83	23.15	769			
7020	768B/PW768B	72T 42-48CY P.S. 415 HP D	276,720	79.28	114.33	17.27	28.35	16.56	45.27	21.35	850			
7025	660B/PW772	100T 60-67CY P.S. 550 HP D	355,582	103.61	149.86	22.21	36.56	21.94	58.33	28.30	1218			

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES			ADJUSTABLE ELEMENTS				CWT
			CONDITION	STAND-BY	AVERAGE COND.	SEVERE COND.	OWNER-SHIP	FUEL	OWNER-SHIP	
	WAGONS - BOTTOM - DUMP (CONT'D) *****									
	CATERPILLAR-ATHey (CONT'D)									
7030	660B/PW660B 100T 60-67CY P.S. 530 HP D	355,255	102.99	148.90	22.25	36.73	21.94	58.53	28.30	1164
	EUCLID									
7040	B63-203LDT147W 63T 42-56CY P.S. 442 HP D	271,935	79.36	114.43	17.06	28.23	17.64	44.94	22.74	896
	WAGONS - REAR - DUMP *****									
	CATERPILLAR-ATHey									
7050	621B/PR621B 30T 20-24CY P.S. 330 HP B	178,526	56.27	81.56	11.18	18.46	13.17	29.42	16.98	572
7055	631D/PR631D 40T 27-32CY P.S. 450 HP D	250,865	77.28	111.91	15.78	26.23	17.95	41.67	23.15	833
	WATER BLASTER *****									
	MULLINS WATER BLASTERS									
7070	5000DH 1 - NOZZLE	95 HP D	22,872	17.25		1.92	4.06	5.59		47
7075	5200DH 2 - NOZZLE	140 HP D	30,685	24.55		2.57	5.45	8.23		52
7080	5300 3 - NOZZLE	275 HP D	56,473	46.72		4.74	10.03	16.17		128
7085	5400 4 - NOZZLE	318 HP D	60,886	52.47		5.10	10.81	18.70		145

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS		CWT	
			CONDITION	STAND-BY	AVERAGE COND.	SEVERE COND.		
			AVERAGE	SEVERE	OWNER-SHIP	FUEL	OWNER-SHIP	FUEL
WATER TANKS								

SKID MOUNTED								
7095	WST-8 8000 GAL. SOUTHWEST	10,898	2.97		0.81	1.57	0.00	128
7100	WST-10 10000 GAL. SOUTHWEST	12,710	3.46		0.94	1.83	0.00	150
7105	WST-12 12000 GAL. SOUTHWEST	15,205	4.15		1.13	2.20	0.00	183
PORTABLE (WITH WHEELS)								
7115	EWT-8 8000 GAL. SOUTHWEST	22,499	6.13		1.67	3.25	0.00	150
7120	EWT-10 10000 GAL. SOUTHWEST	25,302	6.88		1.87	3.65	0.00	170
7125	EWT-12 12000 GAL. SOUTHWEST	28,140	7.67		2.09	4.07	0.00	210
WELDERS								

ELECTRIC DRIVE - AC 3 PHASE 60 HZ								
7135	250 AMP SKID MTD	10 HP E	1,000	0.42	0.07	0.13	0.18	7
7140	300 AMP SKID MTD	20 HP E	1,357	0.74	0.10	0.18	0.36	7
7145	400 AMP SKID MTD	25 HP E	1,635	0.90	0.12	0.22	0.45	8
7150	600 AMP SKID MTD	36 HP E	2,444	1.32	0.18	0.32	0.65	15
GASOLINE ENGINE DRIVE								
7160	200 AMP W/1 AXLE TRLR	37 HP G	2,148	5.62	0.18	0.34	3.93	11
7165	250 AMP W/1 AXLE TRLR	65 HP G	3,572	9.81	0.29	0.57	6.90	17
7170	300 AMP W/1 AXLE TRLR	65 HP G	3,623	9.83	0.30	0.58	6.90	17
7175	400 AMP W/1 AXLE TRLR	69 HP G	4,202	10.55	0.34	0.67	7.32	21

TABLE 3-1 HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE (CONTINUED)

UNIT NO.	EQUIPMENT	VALUE	TOTAL HOURLY RATES		ADJUSTABLE ELEMENTS				CWT			
			CONDITION		STAND-BY	AVERAGE COND.		SEVERE COND.				
			AVERAGE	SEVERE		OWNER-SHIP	FUEL	OWNER-SHIP	FUEL			
WELDERS (CONT'D)												
88888888888888												
GASOLINE ENGINE DRIVE (CONT'D)												
7180	650 AMP W/2 AXLE TRLR	85 HP G	6,378	13.42	0.53	1.02	9.02		22			
•												
DIESEL ENGINE DRIVE												
7190	350 AMP W/2 AXLE TRLR	55 HP D	5,524	5.31	0.46	0.89	2.71		25			
7195	400 AMP W/2 AXLE TRLR	55 HP D	7,195	5.88	0.59	1.15	2.71		30			
RECTIFIER AC-DC COMB.												
7205	250 AMP W/SHOP RUNNING GEAR	19 HP E	835	0.61	0.07	0.12	0.34		4			
7210	300 AMP W/SHOP RUNNING GEAR	24 HP E	1,011	0.75	0.07	0.13	0.43		6			
7215	500 AMP W/SHOP RUNNING GEAR	30 HP E	1,431	0.98	0.11	0.19	0.54		7			
7220	650 AMP W/SHOP RUNNING GEAR	42 HP E	1,731	1.33	0.13	0.23	0.76		9			



TABLE 3-2. EQUIPMENT AGE ADJUSTMENT FACTORS FOR OWNERSHIP COSTS

The "Age Adjustment Factors for Ownership Costs" in TABLE 3-2 are used when the age of an item of equipment is other than the age of the equipment listed in TABLE 3-1. The factors given in TABLE 3-2 are multiplied by the hourly ownership costs shown in TABLE 3-1 and result in an ownership rate adjusted for the actual age of the equipment being considered. When the "life" of the equipment has exceeded the economic service life given in APPENDIX D, the age will be determined as given in paragraph 3-2.f.

Examples: Assume that a two-year old 50-ton truck crane listed in TABLE 3-1 has a total hourly rate of \$40.00 per hour and an ownership rate of \$19.00 per hour.

A. If an equivalent crane owned by a contractor had been purchased new in 1976, the total hourly rate can be determined as follows:

Total Hourly Rate	= \$40.00/Hr.
Ownership Rate	(-) \$19.00/Hr.
Ownership Adjusted for Age: (Ownership Rate)	
x (Age Adj. Factor) = (\$19.00) x (.79)	= (+) \$15.01/Hr.
Adjusted Total Hourly Rate	= \$36.01/Hr.

B. If an equivalent crane owned by a Contractor had been purchased new in 1968, the total hourly rate can be determined as follows:

Total Hourly Rate	= \$40.00/Hr.
Ownership Rate	(-) \$19.00/Hr.
Ownership adjusted for Age: (Ownership Rate)	
x (Oldest Age Adj. Factor) = (\$19.00) x (.42) = (+) \$ 7.98/Hr.	
Adjusted Total Hourly Rate	= \$28.98/Hr.

C. If an equivalent crane, manufactured in 1968, had been purchased used in 1976 by the Contractor, the crane is over-age and the rate computation would be identical to Example B.

D. If an equivalent crane, manufactured in 1976, had been purchased used in 1980 by the Contractor, the used crane is not over-age and the rate computation would be identical to Example A.

TABLE 3-2. EQUIPMENT AGE ADJUSTMENT FACTORS FOR OWNERSHIP COSTS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	YEAR PURCHASED NEW											
		1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
15	AGGREGATE SPREADERS	1.21	1.10	1.00	0.91	0.84	0.77	0.73					
30	AIR COMPRESSORS	1.20	1.10	1.00	0.87	0.83	0.74	0.73					
45	AIR TOOLS & EQUIP., TAMPERS ETC	1.21	1.10	1.00									
60	ASPHALT DISTRIBUTORS	1.22	1.11	1.00	0.90	0.83	0.76	0.71					
65	ASPHALT AND CONCRETE PAVERS	1.21	1.10	1.00	0.91	0.84	0.77	0.73					
	BACKHOE (SEE KEY NO. 570-601)												
75	BROOMS	1.28	1.15	1.00	0.90	0.81	0.74	0.68					
80	BRUSH CHIPPERS	1.28	1.15	1.00	0.90	0.81	0.75	0.68					
90	BUCKETS, CLAMSHELL & DRAGLINE	1.38	1.21	1.00	0.89	0.81	0.73	0.61					
95	BUCKETS, CONCRETE	1.38	1.21	1.00	0.89	0.81	0.73	0.61					
105	CONCRETE OR GROUT PUMP	1.29	1.15	1.00	0.89	0.81	0.74						
120	CONCRETE GUNITE EQUIPMENT & FLUID GROUTERS	1.28	1.15	1.00	0.90	0.81	0.75	0.68					
125	CONCRETE MIXERS & BUGGIES	1.28	1.15	1.00	0.90	0.81	0.75	0.68					
135	CONCRETE VIBRATORS	1.21	1.10	1.00									
140	COMPACTORS, MANUALLY OPERATED CRANE, CRAWLER TYPE	1.21	1.10	1.00	0.87								
150	0 THRU 25 TON	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.57	0.47			
165	OVER 25 TON THRU 50 TON	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.57	0.48	0.46		
170	OVER 50 TON THRU 150 TON	1.22	1.12	1.00	0.91	0.84	0.79	0.72	0.58	0.49	0.47	0.45	0.42
180	OVER 150 TON	1.22	1.11	1.00	0.91	0.84	0.79	0.72	0.59	0.50	0.48	0.46	0.43
	DRAGLINE & CLAMSHELL, CRAWLER MOUNTED												
185	0 THRU 1 CY	1.24	1.12	1.00	0.91	0.83	0.78	0.70	0.56				
190	OVER 1 CY THRU 2-1/2 CY	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.57	0.48	0.46		
195	OVER 2-1/2 CY THRU 5 CY	1.22	1.12	1.00	0.91	0.84	0.79	0.72	0.58	0.49	0.47	0.45	0.42
196	OVER 5 CY	1.22	1.11	1.00	0.91	0.84	0.79	0.72	0.59	0.50	0.48	0.46	0.43
200	CRANES, HYDRAULIC, SELF- PROPELLED	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.57	0.47	0.45	0.43	
	CRANES & HYD. EXC., TRK MTD												
210	UNDER 26 T. (THRU 1 CY)	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.57	0.48	0.46		
225	26 THRU 65 T (1 TH 2-1/2 CY)	1.22	1.12	1.00	0.91	0.84	0.79	0.72	0.58	0.49	0.47	0.45	0.42
230	66 THRU 125 T	1.22	1.11	1.00	0.91	0.84	0.79	0.72	0.59	0.50	0.48	0.46	0.43
240	OVER 125 T	1.22	1.11	1.00	0.91	0.85	0.79	0.72	0.59	0.50	0.48	0.46	0.44
255	DRILL, AUGER	1.29	1.16	1.00	0.92	0.83	0.80	0.75					
270	DRILL, BLAST HOLE	1.29	1.16	1.00	0.92	0.83	0.80	0.75					
300	DRILL, CORE	1.29	1.16	1.00	0.92	0.83	0.80	0.75					
315	DRILL, ROTARY TO 11" DIA. HOLE	1.27	1.15	1.00	0.93	0.84	0.81	0.76	0.66	0.59	0.56		
330	DRILL, ROTARY OVER 11" DIA.	1.26	1.14	1.00	0.93	0.85	0.81	0.77	0.67	0.61	0.57	0.56	0.54
345	DRILL, ROTARY OVER 11" DIA., ELECTRIC	1.26	1.14	1.00	0.93	0.85	0.81	0.77	0.67	0.61	0.57	0.56	0.54
375	FORK LIFTS	1.28	1.15	1.00	0.90	0.81	0.74	0.68					
390	GRADERS	1.26	1.13	1.00	0.92	0.82	0.75	0.69	0.54				
420	GENERATORS	1.40	1.24	1.00	0.95	0.86	0.83	0.71					
435	HOIST	1.28	1.15	1.00	0.90	0.81	0.75	0.68					
	HYD. EXCAVATOR (SEE KEY NO. 570-601)												

TABLE 3-2. EQUIPMENT AGE ADJUSTMENT FACTORS FOR OWNERSHIP COSTS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	YEAR PURCHASED NEW											
		1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
440	LIGHT PLANTS	1.30	1.16	1.00	0.89	0.80	0.73	0.66					
450	LOADER, BELT	1.31	1.16	1.00	0.89	0.79	0.72	0.66					
460	LOADER, FRONT END & LOADER F/E WITH BACKHOE, CRAWLER TYPE LOADER, WHEEL TYPE	1.27	1.14	1.00	0.91	0.83	0.74	0.69					
465	0 THRU 225 HP	1.30	1.15	1.00	0.89	0.79	0.72	0.68					
470	OVER 225 HP	1.28	1.14	1.00	0.90	0.81	0.74	0.70	0.56				
475	LOADER, FRONT END WITH BACKHOE, WHEEL TYPE	1.30	1.15	1.00	0.89	0.80	0.73	0.68					
480	PILE EXTRACTOR, PILE HAMMER & HYDRAULIC IMPACTOR	1.30	1.15	1.00	0.89								
485	PIPELAYERS PUMP, GROUT (SEE KEY NO. 105)	1.27	1.13	1.00	0.89	0.79	0.71	0.65	0.51				
495	PUMP, WATER, ENGINE DRIVE	1.28	1.15	1.00	0.90	0.81	0.75	0.68					
500	PUMP, WATER, ELECTRIC DRIVE	1.28	1.15	1.00	0.90	0.81	0.75	0.68					
510	RIPPERS	1.27	1.13	1.00	0.89	0.79	0.71						
525	ROLLERS, EXCEPT VIB. ROLLERS	1.26	1.12	1.00	0.89	0.78	0.71	0.66					
530	ROLLERS, VIBRATORY	1.27	1.13	1.00	0.88	0.76	0.69						
540	SCRAPERS, STANDARD	1.26	1.13	1.00	0.92	0.82	0.75	0.69					
542	SCRAPERS, TANDEM POWERED SCRAPERS, ELEVATING	1.26	1.13	1.00	0.92	0.82	0.75	0.69					
545	0 THRU 200 HP	1.26	1.13	1.00	0.92	0.82	0.75	0.69					
550	OVER 200 HP	1.26	1.13	1.00	0.92	0.82	0.75	0.69					
555	SCRAPERS, TRACTOR DRAWN SHOVELS, BACKHOES, & HYDRAULIC EXCAVATORS CRAWLER MOUNTED	1.25	1.13	1.00	0.92	0.82	0.76	0.70	0.55				
570	0 THRU 1 CY	1.24	1.12	1.00	0.91	0.83	0.78	0.70					
585	OVER 1 CY THRU 2-1/2 CY	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.57	0.47			
595	OVER 2-1/2 CY THRU 5 CY	1.23	1.12	1.00	0.91	0.84	0.78	0.71	0.58	0.48	0.46	0.44	
600	OVER 5 CY	1.22	1.12	1.00	0.91	0.84	0.79	0.72	0.58	0.49	0.47	0.45	0.42
601	OVER 2-1/2 CY ELECTRIC TRACTOR, CRAWLER TYPE	1.22	1.11	1.00	0.91	0.85	0.79	0.72	0.59	0.50	0.48	0.46	0.41
615	0 THRU 225 HP	1.29	1.14	1.00	0.88	0.78	0.69	0.63					
620	226 HP THRU 425 HP (PER UNIT FOR TANDEM TRACTORS)	1.27	1.13	1.00	0.89	0.79	0.71	0.65	0.51				
625	OVER 425 HP	1.26	1.12	1.00	0.89	0.80	0.72	0.67	0.53	0.43			
630	TRACTOR, BLADES, PUSH BLOCKS, PUSH PLATES & CLEARING BLADES	1.27	1.13	1.00	0.89	0.79	0.71	0.66					
645	TRACTOR, WHEEL TYPE	1.30	1.16	1.00	0.88	0.80	0.72	0.66					
650	TRENCHER	1.30	1.16	1.00	0.92	0.81	0.64	0.53					
655	TRAILERS, BOTTOM DUMP AND END DUMP	1.30	1.15	1.00	0.89	0.80	0.73	0.67					
660	TRAILERS, FLATBED, LO-BOY AND TILT	1.31	1.16	1.00	0.89	0.79	0.72	0.65					
	TRUCK ACCESSORIES FOR CHASSIS MOUNTING												

TABLE 3-2. EQUIPMENT AGE ADJUSTMENT FACTORS FOR OWNERSHIP COSTS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	YEAR PURCHASED											
		1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
670	DUMP BODIES	1.29	1.15	1.00	0.89	0.81	0.74						
675	ALL OTHER ACCESSORIES	1.29	1.15	1.00	0.89	0.81	0.74						
	TRUCK, HIGHWAY												
690	0 THRU 10,000 GVW	1.24	1.12	1.00	0.90	0.82	0.75						
695	OVER 10,000 THRU 30,000 GVW	1.24	1.12	1.00	0.90	0.82	0.74						
705	OVER 30,000 GVW	1.24	1.12	1.00	0.90	0.82	0.74						
720	TRUCK, OFF-HIGHWAY	1.30	1.16	1.00	0.90	0.83	0.78	0.73	0.56				
765	WAGON, BOTTOM DUMP & WATER	1.30	1.16	1.00	0.90	0.83	0.78	0.73	0.56				
780	WAGON, REAR DUMP	1.30	1.16	1.00	0.90	0.83	0.78	0.73	0.56				
785	WATER BLASTER	1.30	1.15	1.00	0.89								
795	WATER TANKS	1.29	1.15	1.00	0.89	0.81	0.74						
810	WELDERS	1.33	1.17	1.00	0.88								
811	WELDERS ELECTRIC POWER	1.32	1.16	1.00	0.88	0.79	0.72						

TABLE 3-3. EQUIPMENT AGE ADJUSTMENT FACTORS FOR STANDBY COSTS

The "Age Adjustment Factors for Standby Costs" in TABLE 3-3 are used when the age of a piece of equipment is other than the age of the equipment listed in TABLE 3-1. The factors given in TABLE 3-3 are multiplied by the hourly standby costs shown in TABLE 3-1 and result in a standby rate adjusted for the actual age of the equipment being considered. When the "life" of the equipment has exceeded the economic service life given in APPENDIX D, the age will be determined as given in paragraph 3-2.f.

Example: Assume that a two-year old 50-ton truck crane listed in TABLE 3-1 has an hourly standby rate of \$11.00 per hour. If an equivalent crane owned by a Contractor had been purchased new in 1976, the hourly standby rate can be determined as follows:

Hourly Standby Rate	= \$11.00/Hr.
Standby Adjusted for Age (Standby Rate) x (Age Adj. Factor)	
= (\$11.00) x (.82)	= \$ 9.02/Hr.

TABLE 3-3. EQUIPMENT AGE ADJUSTMENT FACTORS FOR STANDBY COSTS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	YEAR PURCHASED NEW											
		1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
15	AGGREGATE SPREADERS	1.18	1.09	1.00	0.92	0.86	0.80	0.77					
30	AIR COMPRESSORS	1.17	1.08	1.00	0.89	0.85	0.78	0.77					
45	AIR TOOLS & EQUIP., TAMPERS ETC	1.19	1.09	1.00									
60	ASPHALT DISTRIBUTORS	1.18	1.09	1.00	0.92	0.86	0.80	0.77					
65	ASPHALT AND CONCRETE PAVERS	1.18	1.09	1.00	0.92	0.86	0.80	0.77					
	BACKHOE (SEE KEY NO. 570-601)												
75	BROOMS	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
80	BRUSH CHIPPERS	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
90	BUCKETS, CLAMSHELL & DRAGLINE	1.32	1.18	1.00	0.91	0.84	0.77	0.67					
95	BUCKETS, CONCRETE	1.32	1.18	1.00	0.91	0.84	0.77	0.67					
105	CONCRETE OR GROUT PUMP	1.25	1.13	1.00	0.91	0.83	0.77						
120	CONCRETE GUNITE EQUIPMENT & FLUID GROUTERS	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
125	CONCRETE MIXERS & BUGGIES	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
135	CONCRETE VIBRATORS	1.19	1.09	1.00									
140	COMPACTORS, MANUALLY OPERATED CRANE, CRAWLER TYPE	1.18	1.09	1.00	0.89								
150	0 THRU 25 TON	1.20	1.10	1.00	0.92	0.86	0.81	0.75	0.62	0.54			
165	OVER 25 TON THRU 50 TON	1.20	1.10	1.00	0.92	0.86	0.81	0.75	0.63	0.55	0.53		
170	OVER 50 TON THRU 150 TON	1.19	1.10	1.00	0.92	0.86	0.82	0.75	0.64	0.56	0.54	0.52	0.50
180	OVER 150 TON	1.19	1.10	1.00	0.92	0.86	0.82	0.76	0.64	0.56	0.55	0.53	0.51
	DRAGLINE & CLAMSHELL,CRAWLER MOUNTED												
185	0 THRU 1 CY	1.20	1.11	1.00	0.92	0.86	0.81	0.74	0.62				
190	OVER 1 CY THRU 2-1/2 CY	1.20	1.10	1.00	0.92	0.86	0.81	0.75	0.63	0.55	0.53		
195	OVER 2-1/2 CY THRU 5 CY	1.19	1.10	1.00	0.92	0.86	0.82	0.75	0.64	0.56	0.54	0.52	0.50
196	OVER 5 CY	1.19	1.10	1.00	0.92	0.86	0.82	0.76	0.64	0.56	0.55	0.53	0.51
200	CRANES, HYDRAULIC, SELF- PROPELLED	1.19	1.10	1.00	0.92	0.86	0.82	0.76	0.64	0.56	0.54	0.53	
	CRANES & HYD. EXC. , TRK MTD												
210	UNDER 26 T. (THRU 1 CY)	1.20	1.10	1.00	0.92	0.86	0.81	0.75	0.63	0.55	0.53		
225	26 THRU 65 T (1 TH 2-1/2 CY)	1.19	1.10	1.00	0.92	0.86	0.82	0.76	0.64	0.56	0.54	0.52	0.50
230	66 THRU 125 T	1.19	1.10	1.00	0.92	0.86	0.82	0.76	0.64	0.56	0.55	0.53	0.51
240	OVER 125 T	1.19	1.10	1.00	0.92	0.87	0.82	0.76	0.64	0.57	0.55	0.53	0.51
255	DRILL, AUGER	1.25	1.13	1.00	0.93	0.86	0.83	0.79					
270	DRILL, BLAST HOLE	1.25	1.13	1.00	0.93	0.86	0.83	0.79					
300	DRILL, CORE	1.25	1.13	1.00	0.93	0.86	0.83	0.79					
315	DRILL, ROTARY TO 11" DIA. HOLE	1.24	1.13	1.00	0.94	0.86	0.83	0.80	0.71	0.65	0.62		
330	DRILL, ROTARY OVER 11" DIA.	1.23	1.12	1.00	0.94	0.87	0.84	0.80	0.72	0.66	0.63	0.62	0.60
345	DRILL, ROTARY OVER 11" DIA., ELECTRIC	1.23	1.12	1.00	0.94	0.87	0.84	0.80	0.72	0.66	0.63	0.62	0.57
375	FORK LIFTS	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
390	GRADERS	1.21	1.11	1.00	0.93	0.85	0.80	0.74	0.62				
420	GENERATORS	1.31	1.19	1.00	0.96	0.89	0.86	0.78					
435	HOIST HYD. EXCAVATOR (SEE KEY NO. 570-601)	1.24	1.13	1.00	0.91	0.84	0.78	0.73					

TABLE 3-3. EQUIPMENT AGE ADJUSTMENT FACTORS FOR STANDBY COSTS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	YEAR PURCHASED NEW											
		1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	
440	LIGHT PLANTS	1.24	1.12	1.00	0.91	0.84	0.78	0.73					
450	LOADER, BELT	1.24	1.12	1.00	0.91	0.84	0.78	0.73					
460	LOADER, FRONT END & LOADER F/E WITH BACKHOE, CRAWLER TYPE LOADER, WHEEL TYPE	1.22	1.12	1.00	0.92	0.86	0.79	0.75					
465	0 THRU 225 HP	1.24	1.12	1.00	0.91	0.83	0.77	0.74					
470	OVER 225 HP	1.24	1.12	1.00	0.92	0.83	0.78	0.74	0.62				
475	LOADER, FRONT END WITH BACKHOE, WHEEL TYPE	1.24	1.12	1.00	0.91	0.83	0.77	0.74					
480	PILE EXTRACTOR, PILE HAMMER & HYDRAULIC IMPACTOR	1.26	1.13	1.00	0.90								
485	PIPELAYERS PUMP, GROUT (SEE KEY NO. 105)	1.22	1.11	1.00	0.91	0.83	0.76	0.71	0.59				
495	PUMP, WATER, ENGINE DRIVE	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
500	PUMP, WATER, ELECTRIC DRIVE	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
510	RIPPERS	1.24	1.11	1.00	0.90	0.82	0.74						
525	ROLLERS, EXCEPT VIB. ROLLERS	1.22	1.10	1.00	0.91	0.81	0.75	0.71					
530	ROLLERS, VIBRATORY	1.23	1.10	1.00	0.90	0.80	0.75						
540	SCRAPERS, STANDARD	1.22	1.11	1.00	0.93	0.84	0.79	0.73					
542	SCRAPERS, TANDEM POWERED SCRAPERS, ELEVATING	1.22	1.11	1.00	0.93	0.84	0.79	0.73					
545	0 THRU 200 HP	1.22	1.11	1.00	0.93	0.84	0.79	0.73					
550	OVER 200 HP	1.22	1.11	1.00	0.93	0.84	0.79	0.73					
555	SCRAPERS, TRACTOR DRAWN SHOVELS, BACKHOES, & HYDRAULIC EXCAVATORS CRAWLER MOUNTED	1.21	1.11	1.00	0.93	0.85	0.79	0.74	0.61				
570	0 THRU 1 CY	1.21	1.11	1.00	0.92	0.86	0.81	0.74					
585	OVER 1 CY THRU 2-1/2 CY	1.20	1.10	1.00	0.92	0.86	0.81	0.75	0.62	0.54			
595	OVER 2-1/2 CY THRU 5 CY	1.20	1.10	1.00	0.92	0.86	0.81	0.75	0.63	0.55	0.54	0.52	
600	OVER 5 CY	1.19	1.10	1.00	0.92	0.86	0.82	0.75	0.64	0.56	0.54	0.52	0.50
601	OVER 2-1/2 CY ELECTRIC TRACTOR, CRAWLER TYPE	1.19	1.10	1.00	0.92	0.87	0.82	0.76	0.64	0.57	0.55	0.53	0.51
615	0 THRU 225 HP	1.23	1.11	1.00	0.91	0.82	0.75	0.71					
620	226 HP THRU 425 HP (PER UNIT FOR TANDEM TRACTORS)	1.22	1.11	1.00	0.91	0.83	0.76	0.71	0.59				
625	OVER 425 HP	1.22	1.11	1.00	0.91	0.83	0.76	0.71	0.60	0.51			
630	TRACTOR, BLADES, PUSH BLOCKS, PUSH PLATES & CLEARING BLADES	1.23	1.11	1.00	0.90	0.82	0.75	0.70					
645	TRACTOR, WHEEL TYPE	1.26	1.13	1.00	0.90	0.83	0.76	0.71					
650	TRENCHER	1.26	1.13	1.00	0.93	0.83	0.69	0.60					
655	TRAILERS, BOTTOM DUMP AND END DUMP	1.24	1.13	1.00	0.91	0.84	0.78	0.73					
660	TRAILERS, FLATBED, LO-BOY AND TILT	1.24	1.12	1.00	0.91	0.84	0.78	0.73					
	TRUCK ACCESSORIES FOR CHASSIS MOUNTING												

TABLE 3-3. EQUIPMENT AGE ADJUSTMENT FACTORS FOR STANDBY COSTS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	YEAR PURCHASED NEW											
		1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	
670	DUMP BODIES	1.25	1.13	1.00	0.91	0.83	0.77						
675	ALL OTHER ACCESSORIES	1.25	1.13	1.00	0.91	0.83	0.77						
	TRUCK, HIGHWAY												
690	0 THRU 10,000 GVW	1.21	1.10	1.00	0.92	0.84	0.78						
695	OVER 10,000 THRU 30,000 GVW	1.21	1.10	1.00	0.92	0.84	0.78						
705	OVER 30,000 GVW	1.21	1.10	1.00	0.92	0.84	0.78						
720	TRUCK, OFF-HIGHWAY	1.25	1.14	1.00	0.92	0.85	0.81	0.77	0.62				
765	WAGON, BOTTOM DUMP & WATER	1.25	1.14	1.00	0.92	0.86	0.81	0.77	0.62				
780	WAGON, REAR DUMP	1.25	1.14	1.00	0.92	0.86	0.81	0.77	0.62				
785	WATER BLASTER	1.26	1.13	1.00	0.90								
795	WATER TANKS	1.25	1.13	1.00	0.91	0.83	0.77						
810	WELDERS	1.27	1.14	1.00	0.90								
811	WELDERS ELECTRIC POWER	1.25	1.13	1.00	0.91	0.83	0.77						

TABLE 3-4. SHIFT ADJUSTMENT FACTORS FOR OWNERSHIP COSTS

The "Shift Adjustment Factors" in TABLE 3-4 are used when the working hours per week are greater than 40 hours per week. The factors given in TABLE 3-4 are multiplied by the adjusted hourly ownership cost (if adjusted for age) and result in an ownership rate adjusted for working hours other than 40 hours per week.

Example: Assume that the truck crane in Example A of TABLE 3-2 is to be worked 10 hours per day, 6 days per week. The total hourly rate for this piece of equipment can be determined as follows:

Total Hourly Rate (adjusted for age)	= \$36.01/Hr.
Ownership Rate (adjusted for age)	(-) \$15.01/Hr.
Ownership Adjusted for Work Hours (Ownership Rate) x (Work Hr Adj. Factor)	
= (\$15.01) x (.82)	= (+) \$12.31/Hr.
Adjusted Total Hourly Rate	= <u>\$33.31/Hr.</u>

TABLE 3-4 SHIFT ADJUSTMENT FACTORS FOR OWNERSHIP COSTS (CONTINUED)

Service Life From APP. D	Equipment Usage - Hours per Week												
	40	45	48	54	60	66	72	80	90	100	110	120	140
4,000	1.00	0.97	0.96	0.94	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.85	0.84
6,000	1.00	0.97	0.95	0.92	0.90	0.88	0.87	0.85	0.84	0.82	0.81	0.80	0.79
8,000	1.00	0.96	0.94	0.91	0.88	0.86	0.84	0.82	0.80	0.79	0.78	0.77	0.75
9,000	1.00	0.96	0.94	0.90	0.87	0.85	0.83	0.81	0.79	0.77	0.76	0.75	0.73
10,000	1.00	0.96	0.93	0.90	0.87	0.84	0.82	0.80	0.78	0.76	0.75	0.73	0.72
11,000	1.00	0.95	0.93	0.89	0.86	0.83	0.81	0.79	0.77	0.75	0.73	0.72	0.70
12,000	1.00	0.95	0.93	0.89	0.85	0.83	0.80	0.78	0.76	0.74	0.72	0.71	0.69
13,000	1.00	0.95	0.92	0.88	0.85	0.82	0.80	0.77	0.75	0.73	0.71	0.69	0.67
14,000	1.00	0.95	0.92	0.88	0.84	0.81	0.79	0.76	0.74	0.72	0.70	0.68	0.66
15,000	1.00	0.95	0.92	0.87	0.84	0.81	0.78	0.75	0.73	0.71	0.69	0.67	0.65
16,000	1.00	0.94	0.92	0.87	0.83	0.80	0.78	0.75	0.72	0.70	0.68	0.66	0.64
18,000	1.00	0.94	0.91	0.86	0.82	0.79	0.76	0.73	0.70	0.68	0.66	0.64	0.62
20,000	1.00	0.94	0.91	0.86	0.81	0.78	0.75	0.72	0.69	0.66	0.64	0.63	0.60
22,000	1.00	0.94	0.90	0.85	0.81	0.77	0.74	0.71	0.68	0.65	0.63	0.61	0.58
50,000	1.00	0.92	0.87	0.80	0.75	0.70	0.66	0.62	0.58	0.55	0.52	0.50	0.46

APPENDIX A

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12. Construction Equipment Manufacturer's Price Lists.
13. Defense Acquisition Regulation (DAR).

APPENDIX B

AREA FACTORS

* The area factors given in this Appendix were used to compute the hourly equipment rates shown in TABLE 3-1.

State Sales Tax Rate:	3.0 %
Working Hours Per Year:	1,600 Hrs/Yr
Labor Adjustment Factor (LAF):	1.020
Electricity Cost Per Kilowatt-Hour:	0.030 /Kw-Hr
Gasoline Cost Per Gallon:	\$ 1.310 /Gal.
Diesel Cost Per Gallon (Off-Road Use):	\$ 1.050 /GAL.
Diesel Cost Per Gallon (On-Road Use):	\$ 1.160 /Gal.
Freight Rates:	• thru 20,000 lbs. \$11.630 /Cwt. over 20,000 thru 24,000 lbs. \$10.690 /Cwt. over 24,000 thru 30,000 lbs. \$ 9.400 /Cwt. over 30,000 thru 44,000 lbs. \$ 7.700 /Cwt. over 44,000 thru 60,000 lbs. \$ 6.130 /Cwt. over 60,000 thru 9999,900 lbs. \$ 5.870 /Cwt.

APPENDIX C

GUIDE FOR SELECTING OPERATING CONDITIONS

EQUIPMENT TYPE	AVERAGE	SEVERE
Cranes, Crawler Truck	Lift less than rated capacity, intermittent duty.	Continuous lift near rated capacity, excessive swing, abrasive materials, sloped surfaces.
Depreciation Period	13,000 - 22,000 Hrs.	11,000 - 20,000 Hrs.
Shovels	Gravels, silts, well broken rock, lift less than rated capacity.	Extremely abrasive tough materials, lifting near rated capacity, impact breakout.
Depreciation Period	11,000 - 22,000 Hrs.	9,000 - 20,000 Hrs.
Draglines	Gravels, silts, pull and lift less than rated capacity.	Highly abrasive materials, impact breakout, continuous load near rated capacity.
Depreciation Period	12,000 - 20,000 Hrs.	10,000 - 18,000 Hrs.
Backhoes	Clay, earth digging, no breakout impact, easy continuous or intermittent duty.	Rock work, pull near rated capacity, uneven surface, impact breakout, abrasive materials.
Depreciation Period	11,000 - 22,000 Hrs.	9,000 - 20,000 Hrs.

GUIDE FOR SELECTING OPERATING CONDITIONS (Continued)

EQUIPMENT TYPE	AVERAGE	SEVERE
Tractors, Crawler Type	Production dozing in clays, sands, gravels and talus rock. Push-loading scrapers, borrow pit ripping, most landclearing and skidding applications. Medium impact conditions.	Heavy rock ripping. Tandem ripping. Pushloading and dozing in hard rock. Continuous high impact conditions.
Depreciation Period	10,000 - 14,000 Hrs.	8,000 - 12,000 Hrs.
Tractors, Wheel-Type	Production dozing, pushloading in clays, sands, silts, loose gravels. Shovel cleanup.	Production dozing in rock. Push-loading in rocky, bouldery borrow pits. High impact conditions.
Depreciation Period	10,000 Hrs.	8,000 Hrs.
Scrapers, Self-Propelled	Varying loading and haul road conditions. Long and short hauls. Adverse and favorable grades. Some impact. Typical road-building use on a variety of jobs.	High impact condition, such as loading ripped rock. Overloading. Continuous high total resistance conditions. Rough haul roads.
Depreciation Period	10,000 Hrs.	8,000 Hrs.
Trucks, Off Highway	Varying loading and haul road conditions. Typical road-building use on a variety of jobs.	Consistently poor haul road conditions. Extreme overloading. oversized loading equipment.
Depreciation Period	12,000 Hrs.	10,000 Hrs.

GUIDE FOR SELECTING OPERATING CONDITIONS (Continued)

<u>EQUIPMENT TYPE</u>	<u>AVERAGE</u>	<u>SEVERE</u>
Trucks, Highway	Varying loading and road conditions. Typical construction use on a variety of jobs.	Consistently poor road conditions. Extreme overloading.
Depreciation Period	8,000 Hrs.	6,000 Hrs.
Loaders, Front End Wheel Type	Continuous truck loading from stockpile. Low to medium density materials in properly sized bucket. Hopper charging in low to medium rolling resistance. Loading from bank in good digging.	Loading shot rock (large loaders). Handling high density materials with counterweighted machine. Steady loading from very tight banks. Continuous work on rough or very soft surfaces.
Depreciation Period	10,000 - 12,000 Hrs.	8,000 - 10,000 Hrs.
Loaders, Front End Crawler Type	Bank excavation, intermittent ripping, basement digging of natural bed clays, sands, silts, gravels. Some traveling. Steady full throttle operations.	Loading shot rock, cobbles. High density materials in standard bucket. Continuous work on rock surfaces. Large amount of ripping of tight, rocky materials. High impact conditions.
Depreciation Period	10,000 Hrs.	8,000 Hrs.

GUIDE FOR SELECTING OPERATING CONDITIONS (Continued)

<u>EQUIPMENT TYPE</u>	<u>AVERAGE</u>	<u>SEVERE</u>
Motor Graders	Haul road maintenance. Road construction, ditching. Loose fill spreading. Land- forming, landleveling. Summer road mainten- ance with medium to heavy winter snow removal. Elevating grader use.	Maintenance of hard packed roads with embedded rock. Heavy fill spread- ing. Ripping- scarifying of asphalt or con- crete. Continuous high load factor. High impact.
Depreciation Period	12,000 Hrs.	10,000 Hrs.

APPENDIX D

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS

TABLE LEGEND

XXXXXX8888888

C - OPERATING CONDITIONS

A - AVERAGE CONDITIONS

S - SEVERE CONDITIONS

LFE - EQUIP LIFE 1000 HRS

SLV - EQUIP SALVAGE

HP - HORSEPOWER FACTOR (%)

FOG-E - ELECTRIC FOG (%)

FOG-D - GAS FOG (%)

TABLE LEGEND

XXXXXX8888888

FOG-D - DIESEL FOG (%)

E - ELECT. CONSUMPTION (KW/HP/HR)

G - GAS CONSUMPTION (GAL/HP/HR)

D - DIESEL CONSUMPTION (GAL/HP/HR)

F-TIRE - FRONT TIRE FACTOR (%)

D-TIRE - DRIVE TIRE FACTOR (%)

T-TIRE - TRAIL TIRE FACTOR (%)

RPR - REPAIR FACTOR (%)

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	C	LFE	SLV	EQUIPMENT POWER				CARRIER POWER				FOG			TIRES			RPR
					HP	E	G	D	HP	E	G	D	E	G	D	F	D	T	
15	AGGREGATE SPREADERS	A	10	20	50 .000	.051	.030		0 .000	.000	.000		0	24	24	77	73	99	80
30	AIR COMPRESSORS	A	10	25	65 .000	.066	.038		0 .000	.000	.000		0	32	28	0	0	0	90
45	AIR TOOLS & EQUIP, TAMERS ETC	A	4	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	100
60	ASPHALT DISTRIBUTORS	A	10	30	65 .000	.066	.038		0 .000	.000	.000		0	32	28	60	44	79	85
65	ASPHALT AND CONCRETE PAVERS	A	10	20	65 .000	.066	.038		0 .000	.000	.000		0	32	28	65	40	70	90
BACKHOE (SEE KEY NO. 570-601)																			
75	BROOMS	A	10	20	65 .000	.066	.000		0 .000	.000	.000		0	24	0	77	73	99	90
80	BRUSH CHIPPERS	A	10	20	65 .000	.066	.038		0 .000	.000	.000		0	32	28	0	0	0	90
90	BUCKETS, CLAMSHELL & DRAGLINE	A	10	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
90		S	8	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	90
95	BUCKETS, CONCRETE	A	10	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
105	CONCRETE OR GROUT PUMP	A	8	20	95 .000	.097	.056		0 .000	.000	.000		0	32	28	0	0	0	90
120	CONCRETE GUNITE EQUIPMENT & FLUID GROUTERS	A	10	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
125	CONCRETE MIXERS & BUGGIES	A	10	20	70 .700	.071	.041		0 .000	.000	.000		50	32	28	0	0	0	80
135	CONCRETE VIBRATORS	A	4	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	250
140	COMPACTORS, MANUALLY OPERATED	A	6	20	90 .000	.091	.053		0 .000	.000	.000		0	24	24	0	0	0	100
CRANE, CRAWLER TYPE																			
150	0 THRU 25 TON	A	13	20	40 .000	.041	.024		0 .000	.000	.000		0	18	18	0	0	0	50
150		S	11	20	0 .000	.053	.031		0 .000	.000	.000		0	18	18	0	0	0	55
165	OVER 25 TON THRU 50 TON	A	15	20	40 .000	.041	.024		0 .000	.000	.000		0	18	18	0	0	0	60
165		S	13	20	0 .000	.053	.031		0 .000	.000	.000		0	18	18	0	0	0	65
170	OVER 50 TON THRU 150 TON	A	18	20	40 .000	.041	.024		0 .000	.000	.000		0	18	18	0	0	0	70
170		S	16	20	0 .000	.053	.031		0 .000	.000	.000		0	18	18	0	0	0	75
180	OVER 150 TON	A	20	20	40 .000	.041	.024		0 .000	.000	.000		0	18	18	0	0	0	80
180		S	18	20	0 .000	.053	.031		0 .000	.000	.000		0	18	18	0	0	0	85

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	C	LFE	SLV	EQUIPMENT POWER				CARRIER POWER				FOG			TIRES			
					HP	E	G	D	HP	E	G	D	E	G	D	F	D	T	
DRAGLINE & CLAMSHELL, CRAWLER MOUNTED																			
185	0 THRU 1 CY	A	12	20	50 .000	.051	.030		0 .000	.000	.000		0	18	18	0	0	0	70
185		S	10	20	0 .000	.066	.039		0 .000	.000	.000		0	18	18	0	0	0	80
190	OVER 1 CY THRU 2-1/2 CY	A	15	20	50 .000	.051	.030		0 .000	.000	.000		0	18	18	0	0	0	80
190		S	13	20	0 .000	.066	.039		0 .000	.000	.000		0	18	18	0	0	0	90
195	OVER 2-1/2 CY THRU 5 CY	A	18	20	50 .000	.051	.030		0 .000	.000	.000		0	18	18	0	0	0	90
195		S	16	20	0 .000	.066	.039		0 .000	.000	.000		0	18	18	0	0	0	100
196	OVER 5 CY	A	20	20	50 .000	.051	.030		0 .000	.000	.000		0	18	18	0	0	0	100
196		S	18	20	0 .000	.066	.039		0 .000	.000	.000		0	18	18	0	0	0	110
200	CRANES, HYDRAULIC, SELF-PROPELLED	A	16	25	65 .000	.066	.038		0 .000	.000	.000		0	32	28	95	90	0	70
CRANES & HYD. EXC., TRK MTD																			
210	UNDER 26 T. (THRU 1 CY)	A	15	20	65 .000	.066	.038	10 .000	.010	.006		0	30	26	95	90	0	50	
210		S	13	20	0 .000	.086	.049	0 .000	.013	.007		0	30	26	86	73	0	55	
225	26 THRU 65 T (1 TH 2-1/2 CY)	A	18	20	65 .000	.066	.038	10 .000	.010	.006		0	30	26	95	90	0	60	
225		S	16	20	0 .000	.086	.049	0 .000	.013	.007		0	30	26	86	73	0	65	
230	66 THRU 125 T	A	20	20	65 .000	.066	.038	10 .000	.010	.006		0	30	26	95	90	0	70	
230		S	18	20	0 .000	.086	.049	0 .000	.013	.007		0	30	26	86	73	0	75	
240	OVER 125 T	A	22	20	65 .000	.066	.038	10 .000	.010	.006		0	30	26	95	80	0	80	
240		S	20	20	0 .000	.086	.049	0 .000	.013	.007		0	30	26	86	73	0	85	
255	DRILL, AUGER	A	10	20	50 .000	.051	.030	0 .000	.000	.000		0	32	28	67	57	0	90	
270	DRILL, BLAST HOLE	A	10	20	0 .000	.000	.000	0 .000	.000	.000		0	0	0	0	0	0	90	
300	DRILL, CORE	A	10	20	80 .000	.081	.047	0 .000	.000	.000		0	16	24	0	0	0	90	
315	DRILL, ROTARY TO 11" DIA. HOLE	A	15	20	80 .000	.081	.047	10 .000	.010	.006		0	24	24	67	57	0	90	
330	DRILL, ROTARY OVER 11" DIA.	A	20	20	80 .000	.081	.047	0 .000	.000	.000		0	24	24	67	57	0	90	
345	DRILL, ROTARY OVER 11" DIA., ELECTRIC	A	20	20	70 .700	.000	.000	0 .000	.000	.000		50	0	0	0	0	0	45	

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	C	LFE	SLV	EQUIPMENT POWER				CARRIER POWER				FOG			TIRES			RPR
					HP	E	G	D	HP	E	G	D	E	G	B	F	D	T	
375	FORK LIFTS	A	10	20	65 .000	.066	.038		0 .000	.000	.000		0	24	24	86	77	0	90
390	GRADERS	A	12	25	60 .000	.061	.035		0 .000	.000	.000		0	16	29	86	68	0	70
390		S	10	25	0 .000	.079	.046		0 .000	.000	.000		0	16	29	60	39	0	75
420	GENERATORS	A	10	30	65 .000	.066	.038		0 .000	.000	.000		0	24	24	0	0	0	80
420		S	9	30	0 .000	.086	.049		0 .000	.000	.000		0	24	24	0	0	0	90
435	HOIST	A	10	20	65 .000	.066	.038		0 .000	.000	.000		0	24	24	0	0	0	90
	HYD. EXCAVATOR (SEE KEY NO. 570-601)																		
440	LIGHT PLANTS	A	10	30	95 .000	.097	.056		0 .000	.000	.000		0	24	24	0	0	0	80
450	LOADER, BELT	A	10	30	65 .000	.066	.038		0 .000	.000	.000		0	32	28	26	0	99	90
450		S	8	30	0 .000	.086	.049		0 .000	.000	.000		0	32	28	16	0	99	100
460	LOADER, FRONT END & LOADER F/E	A	10	25	70 .000	.071	.041		0 .000	.000	.000		0	32	38	0	0	0	110
460	WITH BACKHOE, CRAWLER TYPE	S	8	25	0 .000	.092	.054		0 .000	.000	.000		0	32	38	0	0	0	120
	LOADER, WHEEL TYPE																		
465	0 THRU 225 HP	A	10	25	65 .000	.066	.038		0 .000	.000	.000		0	32	40	60	40	0	70
465		S	8	25	0 .000	.086	.049		0 .000	.000	.000		0	32	40	41	19	0	75
470	OVER 225 HP	A	12	20	65 .000	.066	.038		0 .000	.000	.000		0	32	30	60	40	0	80
470		S	10	20	0 .000	.086	.049		0 .000	.000	.000		0	32	30	41	19	0	85
475	LOADER, FRONT END WITH	A	10	25	65 .000	.066	.038		0 .000	.000	.000		0	32	28	60	40	0	70
475	BACKHOE, WHEEL TYPE	S	8	25	0 .000	.086	.049		0 .000	.000	.000		0	32	28	41	19	0	75
480	PILE EXTRACTOR, PILE HAMMER & HYDRAULIC IMPACTOR	A	6	20	65 .000	.066	.038		0 .000	.000	.000		0	32	28	0	0	0	90
485	PIPELAYERS	A	12	25	35 .000	.000	.021		0 .000	.000	.000		0	0	32	0	0	0	40
485		S	10	25	0 .000	.000	.027		0 .000	.000	.000		0	0	32	0	0	0	45
	PUMP, GROUT (SEE KEY NO. 105)																		
495	PUMP, WATER, ENGINE DRIVE	A	10	20	90 .000	.091	.053		0 .000	.000	.000		0	32	38	0	0	0	80
500	PUMP, WATER, ELECTRIC DRIVE	A	10	20	90 .900	.000	.000		0 .000	.000	.000		45	0	0	0	0	0	40
510	RIPPERS	A	8	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
510		S	6	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	90

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	C	LFE	SLV	EQUIPMENT POWER				CARRIER POWER				FOG			TIRES			
					HP	E	G	D	HP	E	G	D	E	G	D	F	D	T	
525	ROLLERS, EXCEPT VIB. ROLLERS	A	10	20	65 .000	.066	.038		65 .000	.066	.038		0	24	24	76	64	99	90
530	ROLLERS, VIBRATORY	A	8	25	90 .000	.091	.053		90 .000	.091	.053		0	24	24	76	64	99	130
540	SCRAPERS, STANDARD	A	10	20	60 .000	.000	.035		60 .000	.000	.035		0	0	27	58	31	65	70
540		S	8	20	0 .000	.000	.046		0 .000	.000	.046		0	0	27	40	19	27	75
542	SCRAPERS, TANDEM POWERED	A	10	20	62 .000	.000	.037		62 .000	.000	.037		0	0	25	58	25	60	70
542		S	8	20	0 .000	.000	.048		0 .000	.000	.048		0	0	25	40	18	40	75
	SCRAPERS, ELEVATING																		
545	0 THRU 200 HP	A	10	20	66 .000	.000	.039		66 .000	.000	.039		0	0	34	0	25	60	85
545		S	8	20	0 .000	.000	.051		0 .000	.000	.051		0	0	34	0	18	40	90
550	OVER 200 HP	A	10	20	66 .000	.000	.039		66 .000	.000	.039		0	0	24	0	25	60	75
550		S	8	20	0 .000	.000	.051		0 .000	.000	.051		0	0	24	0	18	40	80
555	SCRAPERS, TRACTOR DRAWN	A	12	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	58	0	65	70
555		S	10	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	40	0	45	75
	SHOVELS, BACKHOES, & HYDRAULIC EXCAVATORS CRAWLER MOUNTED																		
570	0 THRU 1 CY	A	11	20	60 .000	.061	.035		0 .000	.000	.000		0	18	18	0	0	0	80
570		S	9	20	0 .000	.079	.046		0 .000	.000	.000		0	18	18	0	0	0	90
585	OVER 1 CY THRU 2-1/2 CY	A	13	20	60 .000	.061	.035		0 .000	.000	.000		0	18	18	0	0	0	90
585		S	11	20	0 .000	.079	.046		0 .000	.000	.000		0	18	18	0	0	0	100
595	OVER 2-1/2 CY THRU 5 CY	A	16	20	60 .000	.061	.035		0 .000	.000	.000		0	18	18	0	0	0	100
595		S	14	20	0 .000	.079	.046		0 .000	.000	.000		0	18	18	0	0	0	110
600	OVER 5 CY	A	18	20	60 .000	.061	.035		0 .000	.000	.000		0	18	18	0	0	0	110
600		S	16	20	0 .000	.079	.046		0 .000	.000	.000		0	18	18	0	0	0	120
601	OVER 2-1/2 CY ELECTRIC	A	22	20	50 .500	.000	.000		0 .000	.000	.000		25	0	0	0	0	0	80
601		S	20	20	0 .650	.000	.000		0 .000	.000	.000		25	0	0	0	0	0	90
	TRACTOR, CRAWLER TYPE																		
615	0 THRU 225 HP	A	10	30	70 .000	.000	.041		0 .000	.000	.000		0	0	32	0	0	0	90
615		S	8	30	0 .000	.000	.054		0 .000	.000	.000		0	0	32	0	0	0	100
620	226 HP THRU 425 HP (PER UNIT FOR TANDEM TRACTORS)	A	12	25	70 .000	.000	.041		0 .000	.000	.000		0	0	25	0	0	0	100
620		S	10	25	0 .000	.000	.054		0 .000	.000	.000		0	0	25	0	0	0	110

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	C	LFE	SLV	EQUIPMENT POWER				CARRIER POWER				FOG			TIRES			RPR
					HP	E	G	D	HP	E	G	D	E	G	R	F	D	T	
625	OVER 425 HP	A	14	20	70 .000	.000	.041		0 .000	.000	.000		0	0	22	0	0	0	115
625		S	12	20	0 .000	.000	.054		0 .000	.000	.000		0	0	22	0	0	0	125
630	TRACTOR, BLADES, PUSH BLOCKS,	A	10	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
630	PUSH PLATES & CLEARING BLADES	S	8	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	90
645	TRACTOR, WHEEL TYPE	A	10	20	65 .000	.066	.038		0 .000	.000	.000		0	24	28	60	44	0	60
645		S	8	20	0 .000	.086	.049		0 .000	.000	.000		0	24	28	46	17	0	65
650	TRENCHER	A	10	20	65 .000	.066	.038		0 .000	.000	.000		0	32	28	60	40	0	90
650		S	8	20	0 .000	.086	.049		0 .000	.000	.000		0	32	28	41	19	0	100
655	TRAILERS, BOTTOM DUMP AND	A	10	25	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
655	END DUMP	S	8	25	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	90
660	TRAILERS, FLATBED, LO-BOY AND TILT	A	10	30	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
	TRUCK ACCESSORIES FOR CHASSIS MOUNTING																		
670	DUMP BODIES	A	8	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	80
670		S	6	20	0 .000	.000	.000		0 .000	.000	.000		0	0	0	0	0	0	90
675	ALL OTHER ACCESSORIES	A	8	20	65 .000	.066	.000		0 .000	.000	.000		0	32	0	0	0	0	80
	TRUCK, HIGHWAY																		
690	O THRU 10,000 GVW	A	8	20	20 .000	.020	.012		0 .000	.000	.000		0	32	28	47	40	0	70
690		S	6	20	0 .000	.026	.015		0 .000	.000	.000		0	32	28	33	20	0	80
695	OVER 10,000 THRU 30,000 GVW	A	8	20	40 .000	.041	.024		0 .000	.000	.000		0	32	28	47	40	0	70
695		S	6	20	0 .000	.053	.031		0 .000	.000	.000		0	32	28	33	20	0	80
705	OVER 30,000 GVW	A	8	20	60 .000	.061	.035		0 .000	.000	.000		0	32	28	47	40	61	70
705		S	6	20	0 .000	.079	.046		0 .000	.000	.000		0	32	28	33	20	44	80
720	TRUCK, OFF-HIGHWAY	A	12	20	40 .000	.000	.024		0 .000	.000	.000		0	0	33	58	36	65	70
720		S	10	20	0 .000	.000	.031		0 .000	.000	.000		0	0	33	40	22	45	80
765	WAGON, BOTTOM DUMP & WATER	A	12	20	65 .000	.066	.038		0 .000	.000	.000		0	24	28	58	36	65	60
765		S	10	20	0 .000	.086	.049		0 .000	.000	.000		0	24	28	40	22	45	65
780	WAGON, REAR DUMP	A	12	20	65 .000	.066	.038		0 .000	.000	.000		0	24	28	58	36	65	70
780		S	10	20	0 .000	.086	.049		0 .000	.000	.000		0	24	28	40	22	45	80
785	WATER BLASTER	A	6	20	95 .000	.097	.056		0 .000	.000	.000		0	24	28	0	0	0	110

EQUIPMENT HOURLY EXPENSE CALCULATION FACTORS (CONTINUED)

KEY NO.	TYPE OF EQUIPMENT	C	LFE	SLV	EQUIPMENT POWER				CARRIER POWER				FOG			TIRES			RPR
					HP	E	G	D	HP	E	G	D	E	G	B	F	D	T	
795	WATER TANKS	A	8	20	0 .000	0 .000	0 .000	0	0 .000	0 .000	0 .000	0	0	0	0	0	0	90	
810	WELDERS	A	6	30	80 .000	081 .047	0 .000	0 .000	0 .000	0 .000	0 .000	0	24	24	0	0	0	90	
811	WELDERS ELECTRIC POWER	A	8	30	60 .600	000 .000	0 .000	0 .000	0 .000	0 .000	0 .000	30	0	0	0	0	0	40	

APPENDIX E

SALVAGE AND REPAIR INDEXES FOR CONSTRUCTION EQUIPMENT

CATEGORY	YEAR PURCHASE NEW												
	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969
	AGE IN YEARS												
CATEGORY	0	1	2	3	4	5	6	7	8	9	10	11	12
Air Equipment	1787	1649	1521	1354	1295	1186	1165	1028	935	920	929	936	918
Asphalt & Concrete Paving Equipment	2498	2306	2111	1941	1815	1686	1610	1451	1304	1263	1235	1163	1091
Buckets	4357	3879	3280	2963	2738	2520	2175	1838	1430	1370	1316	1188	1062
Cranes, Draslines & Clamshells - Crawler & Truck Mounted	3044	2787	2512	2301	2138	2010	1843	1522	1305	1260	1212	1147	1090
Drills	2496	2267	1993	1858	1699	1638	1559	1373	1249	1184	1160	1115	1052
Generators	3153	2858	2390	2301	2128	2053	1839	1456	1316	1283	1243	1188	1089
Graders, Motor	3289	2994	2687	2492	2259	2109	1956	1604	1361	1244	1208	1152	1101
Loaders, Track	2918	2663	2376	2188	2024	1859	1755	1445	1249	1219	1184	1135	1100
Loaders, Wheel	3260	2940	2606	2375	2156	2002	1907	1584	1362	1317	1261	1197	1144
Pile Driving Equipment	3200	2892	2562	2329	2135	1989	1852	1523	1307	1257	1218	1159	1104
Rollers	3248	2926	2653	2396	2139	1983	1872	1556	1328	1279	1230	1178	1082
Scrapers	3289	2994	2687	2492	2259	2109	1956	1604	1361	1244	1208	1152	1101
Shovels, Backhoes & Hydraulic Excavators	3044	2787	2512	2301	2138	2010	1843	1522	1305	1260	1212	1147	1090
Tractors, Crawler & Attachments	3393	3061	2750	2482	2247	2053	1916	1573	1329	1281	1236	1181	1133
Tractors, Wheel	3257	2927	2578	2319	2125	1956	1813	1498	1288	1251	1211	1152	1109
Trenchers	3503	3153	2772	2580	2300	1894	1633	1527	1384	1316	1284	1207	1113
Trucks, Highway	2537	2320	2108	1934	1775	1646	1524	1369	1230	1211	1185	1114	1062
Trucks & Wagons - Off Highway	3270	2960	2588	2364	2196	2081	1965	1568	1315	1293	1245	1190	1135
All Other Equipment	3200	2892	2562	2329	2135	1989	1852	1523	1307	1257	1218	1159	1104

TO EXTEND AGE: Add difference between 11th & 12th year for each additional year.

APPENDIX F

TIRE LIFE AND TIRE WEAR FACTORS

F-1. The tire wear factors used in this pamphlet are listed in APPENDIX D. Using the methods and tables in "Production and Cost Estimating of Material Movement with Earthmoving Equipment" by Terex Division of General Motors, the "useful life" of a new tire is the product of factors from Group A through Group G multiplied by the appropriate maximum tire life from TABLE F-1. A sample computation of the tire wear factors for off-highway haul units is given in Figure F-1.

No.	Condition	Factor	
		Average	Severe
A	Maintenance	1.0	1.0
B	Speeds	0.8	0.9
C	Curves	1.0	0.85
D	Surface Condition	0.9	0.65
E	Loads	0.9	0.9
		0.648	0.448
F	Wheel Positions		
	Trailing (T-Tire)	1.0	1.0
	Front (F-Tire)	0.9	0.9
	Driver (D-Tire)		
	(Rear Dump)	0.7	0.7
	(Bottom Dump)	0.7	0.7
	(Self-Propelled Scrapers)	0.6	0.6
G	Grades		
	Driver	0.80	0.7
TOTALS			
	Trailing (T-Tire)	0.65	0.45
	Front (F-Tire)	0.58	0.40
	Driver (D-Tire)		
	(Rear Dump)	0.36	0.22
	(Bottom Dump)	0.36	0.22
	(Self-Propelled Scrapers)	0.31	0.19

Figure F-1. Rear and Bottom Wagons (Off-Highway), Scrapers

TABLE F-1. Maximum Tire Life.**Bias Ply Tires:**

Off-highway E4, L4, & L5	7,000 Hours
All other bias ply tires	5,000 Hours

Radial Ply Tires:

Off-highway RL4	8,300 Hours
All other radial ply tires	6,000 Hours

APPENDIX G

EQUIPMENT EXTRAS

In addition to features required for safety, the following extras have been included with the major equipment listed in this pamphlet when they are not included with the basic cost and are offered by the manufacturer:

(1) Crane, Crawler-Mounted.

- (a) Power load lowering.
- (b) Independent swing and travel.
- (c) Third drum.
- (d) Torque converter (Machines 25 ton or larger.)
- (e) One-half maximum boom length (Machines 60 ton or smaller.)
- (f) Maximum boom length (Machines larger than 60 ton.)
- (g) Counterweight.

(2) Dragline and Clamshell, Crawler-Mounted.

- (a) Power load lowering.
- (b) Independent swing and travel.
- (c) Third drum.
- (d) Torque converter (Machines 1-1/2 C.Y. or larger.)
- (e) Approximately one-half maximum boom length.
- (f) Counterweight.

(3) Backhoe and Shovel, Crawler-Mounted.

- (a) Power load lowering.
- (b) Torque converter (Machines 1-1/2 C.Y. or larger.)
- (c) Counterweight.

(4) Truck Crane Less than 25 Ton.

- (a) Power load lowering.
- (b) Third drum.
- (c) Mechanical outriggers w/screw jacks.
- (d) Power steering.
- (e) Maximum boom length.
- (f) Counterweight.

(5) Truck Crane 25 Ton and Larger.

- (a) Power load lowering.
- (b) Third drum.
- (c) Hydraulic outriggers w/screw jacks.
- (d) Torque converter when available.
- (e) Power steering.
- (f) Diesel engines.
- (g) Maximum boom length.
- (h) Counterweight.

(6) Grader.

- (a) Enclosed operators' cab.
- (b) Scarifier.
- (c) Front wheel lean.
- (d) Power circle.
- (e) Hydraulic shift and tilt moldboard.
- (f) End bits.
- (g) Alternator.

(7) Belt Loader.

- (a) Power unit.
- (b) Head pulley clutch and backstop.
- (c) Belt cleaner and belt installing equip.
- (d) King pin attachment.

(8) Loader 1-1/2 C.Y. and Larger.

- (a) Reversible fan blade.
- (b) Guard, power train.
- (c) Automatic bucket positioner.
- (d) Counterweight.
- (e) Rock buckets (Machines 4 C.Y. or larger.)
- (f) Alternator.

(9) Scraper.

- (a) Control single lever.
- (b) Reversible fan blade.
- (c) Flood light.
- (d) Alternator.
- (e) Guards, power train.

(10) Tractor, Crawler.

- (a) Hydraulic controls for ripper and blade.
- (b) Guards.
- (c) Reversible fan blade.
- (d) Alternator.
- (e) Hook, front pull.
- (f) Track Grousers (Severe service for units over 200 hp.)
- (g) Blades include counterweights where required.

(11) Tractor, Wheel Dozer.

- (a) Hydraulic controls for ripper and blade.
- (b) Guards.
- (c) Reversible fan blade.
- (d) Alternator.
- (e) Blade.
- (f) Counterweight.

(12) Trucks, Off-Highway.

- (a) No-spin differential.
- (b) Tacograph.
- (c) Engine and transmission guards.
- (d) Body liners.