CECW-CE 10 September 2007

Errata Sheet

No. 1

Construction Equipment Ownership and Operating Expense Schedule
All 12 Regions (volumes)

EP 1110-1-8

31 July 2007

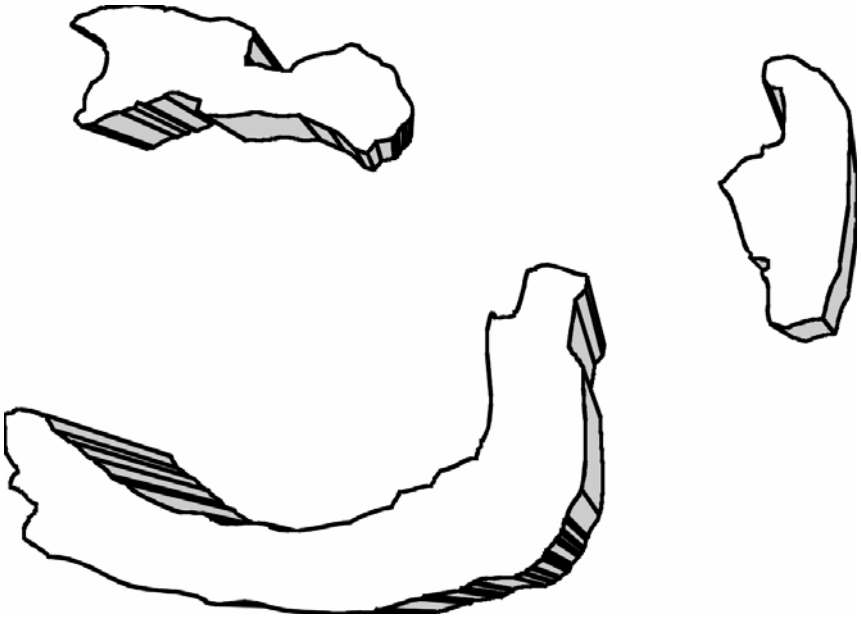
In reference to Appendix B, pages B-1 and B-2, cost per gallon: gasoline, diesel on-road, and diesel-off road prices are in error in volumes 1 through 12. The correction of these fuel prices results in recalculation of Table 2-1 and Table 2-2 in Chapter 2. As a result, Chapter 2, Tables 2-1 and 2-2 (pgs. 32-203; 205-260 respectively), and Appendix B have been replaced in the corrected 10 Sept 07 version.

US Army Corps
of Engineers®

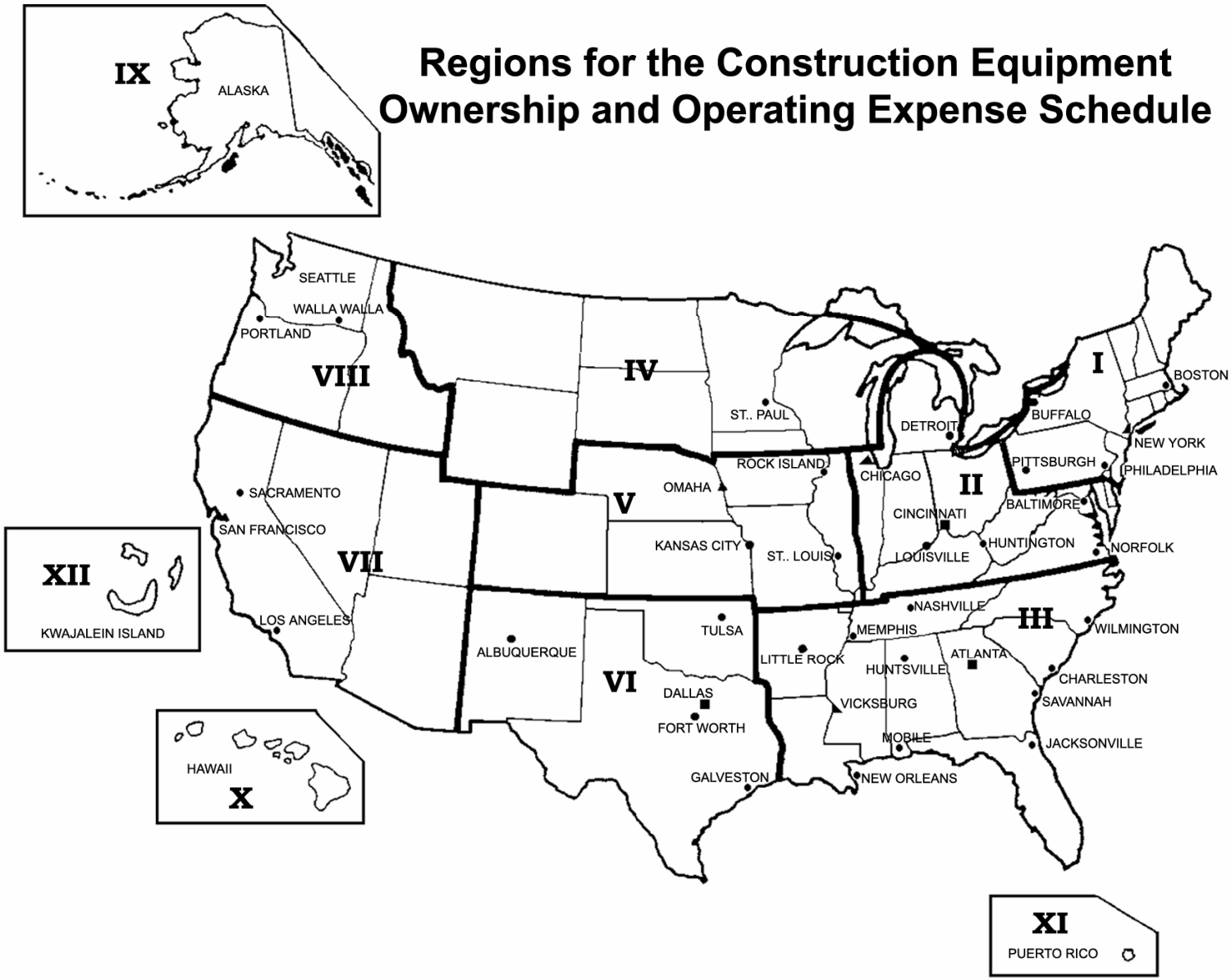
EP 1110-1-8
Volume 12
July 2007

Construction Equipment Ownership and Operating Expense Schedule

Region XII



Regions for the Construction Equipment Ownership and Operating Expense Schedule



DEPARTMENT OF ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

REPLY TO
ATTENTION OF:

CECW-EC

Pamphlet
No. 1110-1-8, Vol. 12

31 July 2007

CONSTRUCTION EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

1. Purpose. This pamphlet is authorized by and established in accordance with Federal Acquisition Regulation (FAR) 31.105 and Engineer Federal Acquisition Regulation (EFAR) SUBPART 31.105. This pamphlet establishes predetermined equipment ownership and operating expense rates for construction equipment. This pamphlet also establishes a method to calculate equipment ownership and operating expense rates for construction equipment when the predetermined rates are not considered appropriate. The overall intent of this pamphlet is to determine equipment costs that are fair and reasonable. Expense factors for calculating dredge plant and marine equipment costs are provided in chapter 4.

2. Applicability. This pamphlet applies to all USACE commands. It is applicable to all solicitations and contracts for construction expected to exceed the Simplified Acquisition Threshold of $100,000 when actual cost data for both ownership and operating costs cannot be determined. This volume is for use in Region XII, which includes the following states:

Kwajalein Island

3. References. See **APPENDIX A.**

4. Distribution Statement. Approved for public release, distribution is unlimited.

FOR THE COMMANDER:

13 Appendixes
(See Table of Contents)

YVONNE J. PRETTYMAN-BECK
Colonel, Corps of Engineers
Chief of Staff

This pamphlet supersedes EP 1110-1-8, dated 31 July 2005.

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CHAPTER 1.0 - INTRODUCTION

1.1 Use

The use of this pamphlet is for rate determination on construction contracts, dredging contracts, and negotiated procurements and relates only to contractor-owned equipment. The overall intent of the pamphlet is to determine equipment costs that are fair and reasonable.

a. This pamphlet shall be used for determining hourly equipment rates that are contained in the independent government estimate.

b. In addition, the use of this pamphlet will be required by contractors for pricing contractor-owned equipment in negotiated procurements when:

(1) Cost or pricing data is not required, as defined in Federal Acquisition Regulation (FAR) Part 15.400, *Contract Pricing*.

(2) Cost or pricing data is required and the actual cost data to support either ownership or operating costs for equipment or equipment groups of similar model and series is not available.

(3) Cost or pricing data is required and available, but all or part of the data is determined not to be in accordance with the FAR cost principles.

1.2 Decision Flow Process

A flow chart (figure 1-1) is provided at the end of this chapter to help the user better understand the process for developing an hourly equipment rate. The flow chart shows the decision points that allow the user to decide whether to use the predetermined rate tables or calculate the rate using the method shown in figure 2-1 or using CHECKRATE (also see paragraph 3.4).

1.3 How to Obtain Assistance

When assistance is needed in understanding the methodology for calculating equipment rates, contact the Chief, Cost Engineering Branch, Engineering and Construction Division, Walla Walla District, U.S. Army Corps of Engineers, (CENWW-EC-X), 509-527-7511, 509-527-7510, or visit the Web Site at http://www.nww.usace.army.mil/cost/.

1.4 How to Obtain CHECKRATE Spreadsheet

A Microsoft Excel® spreadsheet, named “CHECKRATE,” has been developed to calculate equipment rates using the methodology required by this pamphlet. The user must have Microsoft Excel® to run the application. The factors needed in the hourly cost calculations are located in the appendixes of this pamphlet. A copy of the

spreadsheet may be obtained by choosing the CHECKRATE link on the following Web Site: http://www.nww.usace.army.mil/cost/.

1.5 How to Obtain this Publication

Volumes 1-12 of this pamphlet are available in portable document format (PDF) and can be viewed or downloaded at http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/cecw.htm. Copies of the pamphlet are also available on CD-ROM (Volumes 1-12) through the Superintendent of Documents or government bookstores (see appendix A). For additional information, telephone 202-512-1800, fax 202-512-2104, toll-free 866-512-1800, or access on the Internet at http://bookstore.gpo.gov/.

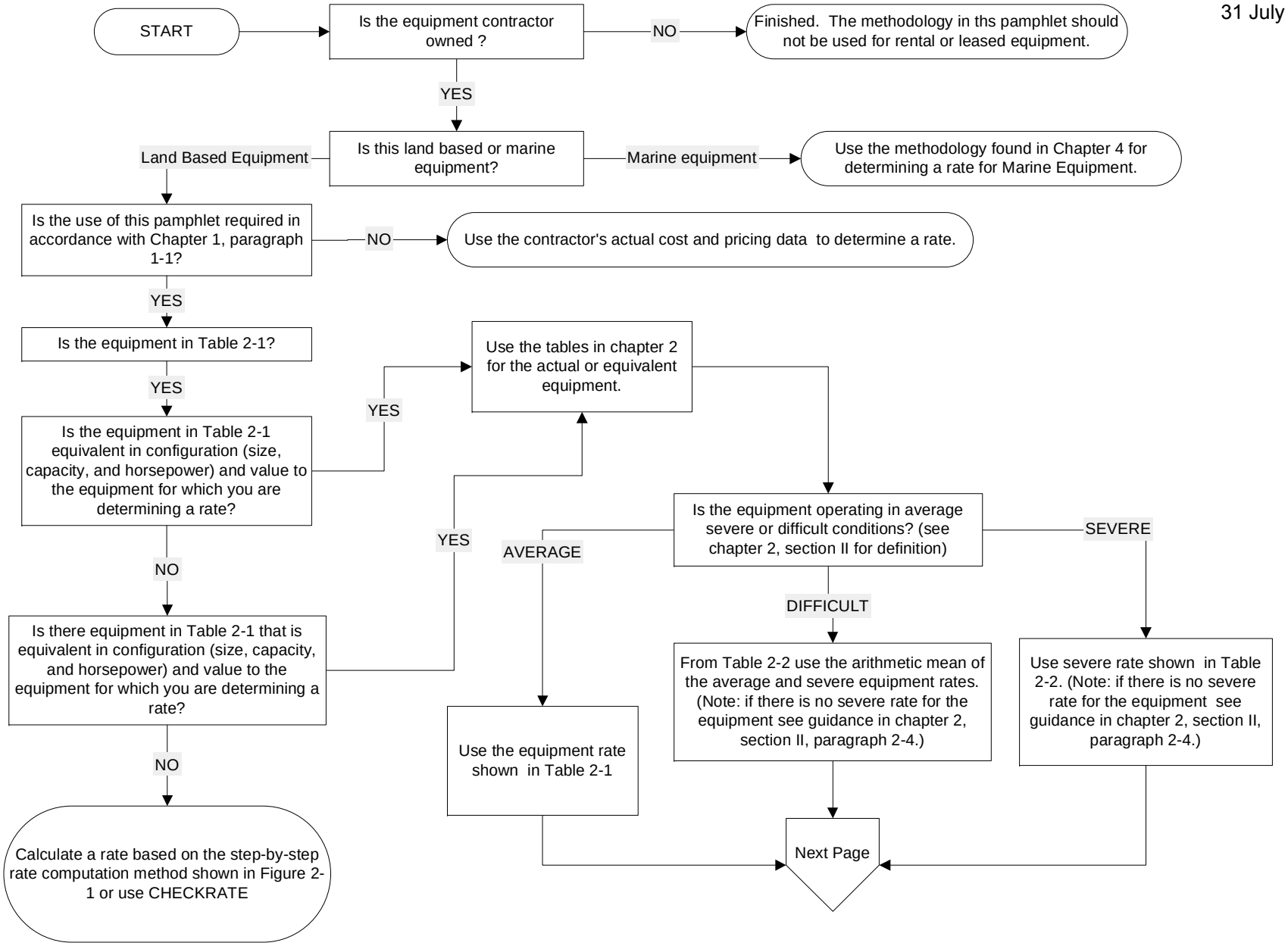

Figure 1-1. Methodology for Developing an Hourly Ownership and Operating Rate for Construction Equipment

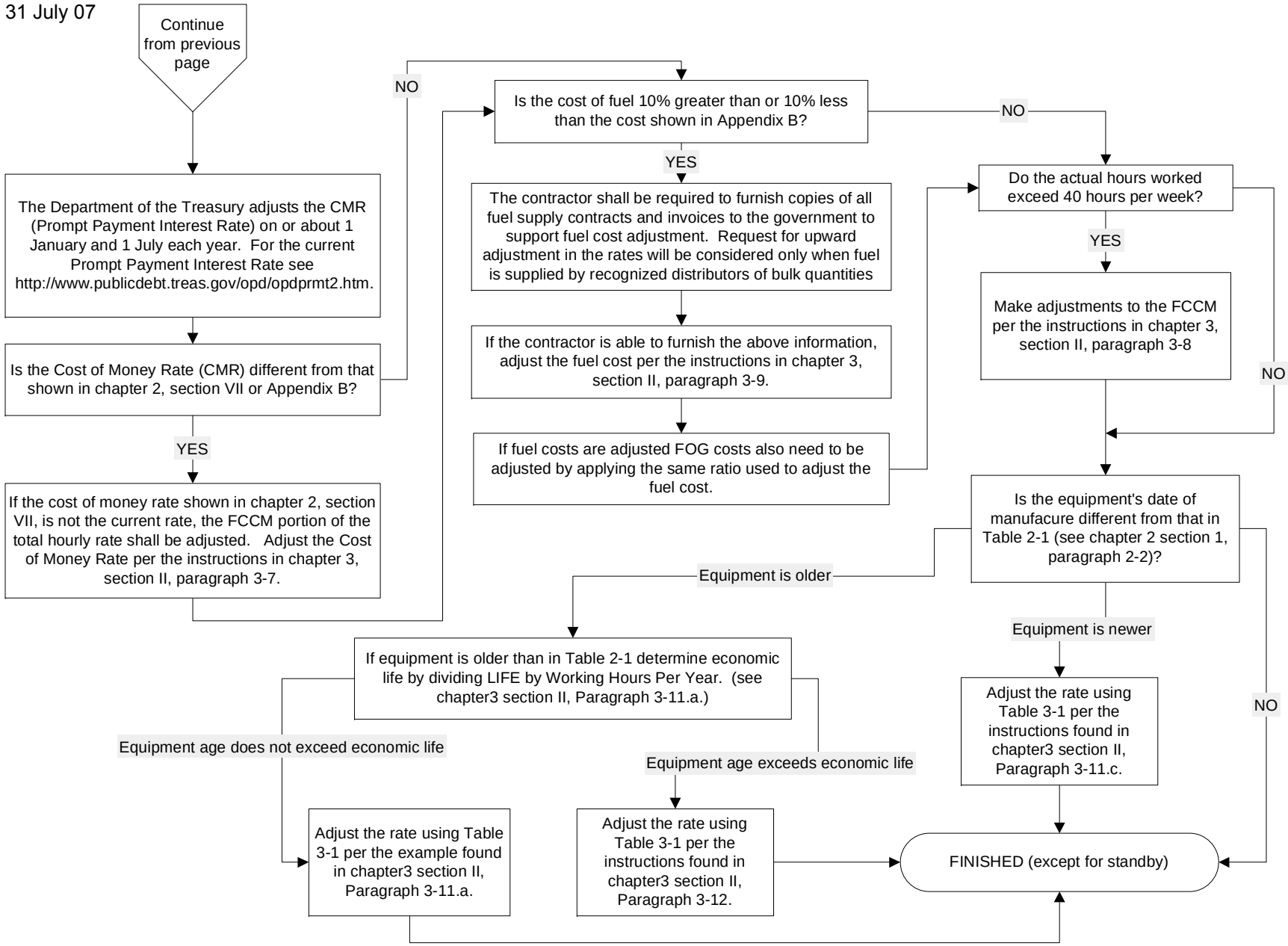

Figure 1-1. Methodology for Developing an Hourly Ownership and Operating Rate for Construction Equipment (Continued)

CHAPTER 2.0 - METHODOLOGY FOR CONSTRUCTION EQUIPMENT

SECTION I. GENERAL

2.1 Contents

This chapter provides the methodology used to compute the total hourly ownership and operating rates for construction equipment and marine equipment (except dredging plant). This detailed methodology includes the formulas and factors used to develop both total hourly rates and hourly standby rates. If the equipment is determined to be older than its estimated economic life (overage) or was purchased used, refer to chapter 3.

2.2 Basis for Equipment Rates

The hourly rates shown in table 2-1 reflect catalog list prices of equipment manufactured in 2004 (3 years old). List prices for equipment manufactured in years other than 2004 have been adjusted to a 2004 price level using economic indexes. Ownership and operating expenses are computed using area factors, found in appendix B, which are specific to each region and volume. This hourly rate methodology assumes that equipment furnished to the job is in sound, workable condition. Furthermore, the methodology applies only to equipment that prime contractors or subcontractors either own or control. These hourly rates and cost factors do not represent rental charges for those in the business of renting equipment.

2.3 Total Hourly Rate

Hourly rates for average conditions are shown in table 2-1 and are computed based on a 40-hour (hr) workweek. The hourly rate is the sum of ownership and operating costs. Table 2-2 contains all individual rate elements for both average and severe conditions. An example of the methodology used to compute the total hourly rate is shown in figure 2-1. For standby calculation, see section IX.

a. Ownership Cost Elements. The ownership portion of the rate consists of an allowance for depreciation (DEPR) and facilities capital cost of money (FCCM).

b. Operating Cost Elements. Operating costs include allowances for the following:

- Fuel
- Filters, oil, and grease (FOG) (includes servicing)
- Repairs (includes maintenance and major overhauls)

- Tire wear (replacement)
- Tire repair

c. Exclusions to Hourly Rates. Total hourly rates for owning and operating equipment do not include allowances for the following:

- Operating labor
- Mobilization and demobilization
- Field office overhead expenses
- Home office or general and administrative (G&A) overhead expenses
- Investment tax credit
- Contingency allowance
- Profit
- Parts and labor escalation

It should also be noted that replacement cost is not included in the rates, as it is not an allowable item of cost per FAR 31.105(d)(2)(i).

d. Other Ownership Elements. The following elements of cost are not included in the total hourly rates. These costs are allowable and would normally be included in the contractor's field office or home office overhead rate calculation.

(1) License fees, property taxes, storage, and insurance costs are considered indirect costs and are not included in the total hourly rates.

(2) Jobsite security, inspection fees, recordkeeping, mechanic training, and highway permits are also not included in the total hourly rates.

SECTION II. OPERATING CONDITIONS

2.4 Average, Difficult, or Severe Conditions

Operating conditions may be average, difficult, or severe. Hourly rates for both average and severe operating conditions are determined in accordance with appendix C. The rate for the difficult condition is the arithmetic mean of the average and the severe rates. When only the average rate is shown in table 2-2, the rate applies for all operating conditions or as determined by the contracting officer. Average condition rates are included in both tables 2-1 and 2-2. Only table 2-2 contains the severe condition rates.

2.5 Determination of Condition

For contract modifications, the contracting officer determines the equipment operating condition to be used. This determination is based on contract specifications, site conditions, basis of any supporting evidence, and guidance in appendix C. Evaluation of operating conditions for equipment not listed in appendix C will be

consistent with examples shown in appendix C. The operating condition of the equipment relates to the average and severe factors as detailed in appendix D.

SECTION III. EQUIPMENT SELECTION

2.6 General

Equipment shown in table 2-1 is representative of equipment that is used in general construction. Note that some equipment may require additional attachments or accessories. Each unit of equipment is grouped into a main group called a category (CAT) and a subgroup called a subcategory (SUB). This type of grouping is displayed in table 2-1 and appendix D. Also, an identification number (ID No.) is assigned to each unit of equipment. The ID No. consists of three parts. The first three characters are the CAT, the second two characters are the manufacturer's code, and the last three characters are the sequence number.

2.7 Truck Selection

Because of the large number of possible combinations of highway truck chassis and bodies, both are listed separately. For estimating purposes, use the gross vehicle weight (GVW) rating of the truck chassis to make a selection with the following conditions:

a. The combined weight of the truck chassis, truck body, and payload must not exceed the GVW rating shown for the truck chassis.

b. The gross combined weight (GCW) of the truck, trailer, and payload must not exceed the GCW rating shown.

2.8 Crawler Tractor Selection

A wide range of combinations of ripper and various blade options are available for each crawler tractor. For ease of use, all tractors include a universal blade attachment. Other blade and ripper attachments are shown separately and should be substituted for the universal blade to match actual equipment configuration. Only the hourly expense for those attachments that are required to perform the work shall be allowed.

2.9 Equipment Accessories

Equipment accessories included on the major pieces of equipment in table 2-1 are listed in appendix J.

SECTION IV. EQUIPMENT VALUE

2.10 List Price and Accessories

The total list price includes those accessories normally purchased by the contractor plus required safety features.

2.11 Discount Code (DC)

A 7.5-percent discount is used for all equipment except highway trucks that are discounted at 15 percent. The total discounted price is derived by subtracting the appropriate discount from the total list price. The identification of the discount is shown in appendix D under column heading DC. Two codes are used to identify the discount, B equals the basic discount of 7.5 percent and S equals the special discount of 15 percent.

2.12 Sales or Import Tax

Total state sales tax (which includes local taxes) or import tax is computed as a percentage of the discounted price. The average tax for the region is shown in appendix B.

2.13 Freight

Estimated allowances for freight are provided in appendix B. This allowance includes preparation and delivery. Multiply the shipping weight based on hundredweight (cwt) by the freight rate to determine freight charges.

2.14 Total Equipment Value (TEV)

Freight is added to the total discounted price (which includes sales tax) to arrive at the TEV. The estimated TEV is indicated in table 2-1 under the column heading VALUE.

SECTION V. LIFE

2.15 Economic Life (LIFE)

The expected economic life of the equipment will vary based on the type of equipment and the condition of use. It is established from manufacturers' or equipment associations' recommendations. The expected economic life in hours is given in appendix D, under the column heading LIFE, for both average and severe conditions.

2.16 Working Hours Per Year (WHPY)

Annual average operating hours have been established for equipment working within the region covered by this pamphlet. The number of WHPY as shown in

appendix B is equivalent to 1 year's use for a single shift operation. Average annual hours of use per year are determined by reducing the maximum available hours per year (40 hours per week, 52 weeks per year) to allow for lost working days due to the following factors:

- Weather
- Employee holidays
- Equipment maintenance and repairs
- Mobilization and demobilization
- Miscellaneous downtime

SECTION VI. SALVAGE VALUE

2.17 Salvage Value (SLV)

The salvage value for equipment is based on advertisements of used equipment for sale as displayed in current engineering and construction magazines, manufacturer's recommendations, and the *Green Guide Volumes I and II*, *Handbook of New and Used Construction Equipment Values*, Equipment Watch.

2.18 Salvage Value Percentage

The salvage value percentage used for each type of equipment is listed in appendix D under the heading SLV as a percentage of the equipment value. It is equal for both average and severe conditions.

SECTION VII. OWNERSHIP COST

2.19 Ownership Elements

The ownership portion of the rate consists of allowances for depreciation (DEPR) and facilities capital cost of money (FCCM). These two cost elements are computed based on the TEV. Other ownership elements may be allowed (see paragraph 2-3.d.). Total ownership rate per hour is expressed by formula, as follows:

$$\text{Ownership Rate/hr} = \text{DEPR/hr} + \text{FCCM/hr}$$

2.20 Depreciation

The straight-line method is used to compute depreciation.

a. For rubber-tired equipment, the tire cost index (TCI) must first be calculated to complete the depreciation formula.

b. Hourly depreciation is calculated by dividing the “depreciable" value (TEV less estimated salvage and tire cost) by the expected economic life of the unit of equipment in hours. Expressed by formula, depreciation cost equals the following:

$$\text{DEPR/hr} = \frac{[[(\text{TEV})(1 - \text{SLV})] - [(\text{TCI})(\text{Tire Cost})]]}{\text{LIFE}}$$

Where:

(1) TEV is the total equipment value found in table 2-1.

(2) SLV is the salvage value from appendix D.

(3) TCI is the tire cost index, which is determined by dividing the year of manufacture tire index by the present-year tire index. For table 2-1, the present year is 2007 and the year of manufacture is 2004 (3 years old). These indexes are listed as part of appendix E [see Economic Key (EK) 100, All Tires and Tubes].

(4) Tire cost is the total tire and/or conveyor belt cost. The total tire cost is the sum of the cost of all front, drive, and trailing tires. The tire cost for rubber-tired equipment is based on tire values at the time the equipment was manufactured.

(5) The LIFE is the economic life, which is based on the number of operating hours throughout the economic life of the equipment (see paragraph 2-15). Hours for LIFE are provided in appendix D.

2.21 Facilities Capital Cost of Money (FCCM)

The FCCM, as defined in FAR 31.205-10, is included in the total hourly rates. This cost is computed by multiplying a discounted cost of money rate (CMR) by the average value of equipment and prorating the result over the annual operating hours. The January 2007 CMR [5.25 percent as shown in appendix I determined by the Secretary of the Treasury pursuant to Public Law 92-41 (85 Stat. 97)] is discounted by a reduction of 25 percent to avoid duplication when applying estimated markups for overhead and profit. The discounted CMR is then 4.20 percent. The Department of the Treasury adjusts the CMR on or about 1 January and 1 July each year; these revisions are printed in the Federal Register or can be found on the Internet at http://www.treasurydirect.gov/govt/rates/tcir/tcir_opdprmt2.htm. The CMR should be adjusted to the actual period that the equipment is used. Expressed by formula, FCCM cost equals the following:

$$\text{FCCM/hr} = \frac{(\text{TEV})(\text{AVF})(\text{discounted CMR})}{(\text{WHPY})}$$

Where:

(1) TEV is the total equipment value found in table 2-1.

(2) Average Value Factor (AVF) $= [[(N - 1)(1 + SLV)] + 2] / 2N$.

(a) Number of Years (N) in Depreciation Period = LIFE/WHPY.

(b) LIFE is the economic life, which is based on the number of operating hours throughout the economic life of the equipment (see paragraph 2-15). Hours for LIFE are provided in appendix D.

(3) Discounted CMR = 5.25% (Jan – Jun 2007 rate) / 1.25 = 4.20%.

(4) WHPY = Working hours Per Year found in appendix B.

SECTION VIII. OPERATING COST

2.22 Operating Cost Elements

The total operating cost is the sum of the following five elements: fuel, FOG, repairs, tire wear, and tire repair.

2.23 Fuel Cost

Fuel costs are computed for each gas, diesel, or electric engine. When the unit of equipment has two engines, as in the case of a truck crane, this methodology treats each engine separately for fuel costs. The hourly fuel cost for each unit of equipment is shown under the column heading FUEL in tables 2-1 and 2-2. When the unit of equipment has no engine, no fuel cost will be shown. Hourly fuel costs are calculated for each engine, as expressed in the following formula:

Fuel Cost/hr = Horsepower (hp) x Fuel Cost/Gallon (gal) x Fuel Factor (gal/bhp-hr)

a. Horsepower is the engines rated horsepower. All horsepower ratings for engine-driven equipment are listed with the equipment description in table 2-1.

b. Fuel Cost/Gallon is based on values shown in appendix B. See chapter 3 for fuel cost adjustments.

c. <u>Fuel Factor - Gas or Diesel Fuel</u>. The fuel factor in gallons per brake horsepower-hour (bhp-hr) is listed in appendix D for both average and severe conditions. Fuel factors are also listed for both the engine powering the main equipment (prime engine) and the engine providing power to the carrier vehicle. For severe conditions, the fuel consumption rate is 30 percent greater than the average condition rate. Gas or diesel fuel factors are computed by using the following formula:

$$\text{Fuel Factor (Gal/bhp - hr)} = \frac{\text{Horsepower Factor (HPF) x lbs Fuel per bhp - hr}}{\text{lbs of Fuel per Gal}}$$

Where:

(1) The HPF is the horsepower factor used in the fuel and electricity consumption formulas and represents an average percent of full-rated horsepower being used by the engine. The fuel consumption factors, which are shown in appendix D under column headings Fuel Factor-Equipment and Fuel Factor-Carrier, are computed based on the HPF shown under these column headings. This HPF is an estimate of the engine load under average working conditions. 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. Periods spent at idle, travel in reverse, traveling empty, close maneuvering at part throttle, and operating downhill are examples of conditions that reduce the HPF. Professional judgment regarding cycle time and equipment loading is applied to determine this average HPF. Normal field application can also vary according to: operator efficiency, type of material, type of work cycle, and overall jobsite efficiency. This pamphlet provides an estimated average HPF, not a specific factor.

(2) Pounds (lbs) fuel per bhp-hr is an average based on a variety of engine applications from manufacturer engine data. The following represent an average of the normal application of equipment and are indicative of engine fuel consumption industry wide. Pounds fuel (consumed) per bhp-hr is based on the following averages and is used consistently throughout this pamphlet:

Gasoline = 0.60 lbs per bhp-hr
Diesel = 0.36 lbs per bhp-hr

(3) Pounds fuel per gallon is the factor that determines the weight of the fuel consumed. The following are used as constants in this pamphlet:

Gasoline = 6 lbs per gal
Diesel = 7 lbs per gal

d. Fuel Factor - Electricity. Assuming that an electric motor uses 1 kilowatt (kW) per horsepower (considering all inefficiencies), and using the same HPF for gas or diesel fuel consumption, the electricity consumption is computed by the following formula:

$$\text{Fuel Factor (kW/hr)} = \text{HPF x 1 kW per electric hp - hr}$$

e. Fuel and Electricity Cost. The cost per gallon for gasoline and diesel fuel used to compute the hourly fuel cost is shown in appendix B. The hourly fuel cost for all gasoline-powered equipment, diesel-powered highway trucks, and truck crane carriers includes an allowance for Federal and state road taxes, sales taxes, and rental for fuel storage tanks and pumps. Cost per kilowatt-hour used to compute electricity cost are also shown in appendix B.

2.24 Filters, Oil, and Grease (FOG) Cost

The FOG cost is computed as a percentage of the hourly fuel costs.

a. The FOG contains items of cost for routine servicing of the equipment, which includes the following:

- Base wages for servicing labor
- Fringe benefits and labor burden costs for servicing
- Service truck, tools, and fuel truck allowance
- Shop allowance when shop servicing is required
- Other equipment costs for servicing
- FOG material allowance
- Taxes and shipping for FOG supplies
- Handling and disposal of hazardous materials and oil

b. The hourly FOG cost is calculated for each engine using the following formula:

$$\text{FOG Cost/hr} = \text{FOG Factor x Fuel Cost/hr x LAF}$$

Where:

(1) The FOG Factor is the percent allowance expressed as a decimal factor under each fuel type heading E (electricity), G (gas), or D (diesel). See appendix D.

(2) Fuel cost/hr is a calculated value shown under the column heading FUEL in tables 2-1 and 2-2.

(3) The LAF (labor adjustment factor) is a decimal factor to account for regional variations in labor and parts costs. This factor is provided in appendix B.

c. The FOG percentage allowance includes the cost for servicing. For equipment that is normally serviced by an oiler assigned to the unit of equipment, the FOG percentage is reduced. This reduction applies to the following equipment: cranes, draglines, hydraulic excavators, and shovels (except equipment under category numbers C75, C80.01, C85.11, C85.12, C85.21, C90.01, H25.11, H25.12, H30.01, H30.02, and M10.32).

d. When a unit of equipment has no engine (therefore no fuel costs calculated) and the equipment requires some type of fuel (*i.e.*, propane, kerosene), an alternative hourly fuel and FOG allowance may be used in lieu of the regularly calculated fuel and FOG hourly costs. A FOG allowance may also be added when the equipment has no engine and has parts that require FOG. The alternative fuel allowance is added to the alternative FOG allowance for a total alternative fuel and FOG cost. (See figure 2-1, 5.c.)

2.25 Repair Cost

a. The repair cost accounts for equipment repairs, maintenance, and major overhauls (including undercarriage wear, ground engaging tools, and designated attachments) performed in either the field or the shop. Where tire cost is the cost of the tires when the equipment was manufactured, use the same TCI and tire cost as shown in the depreciation calculation (see section 2-20). The estimated hourly rate for repairs is computed as follows:

$$\text{Repair Cost/hr} = \frac{[(\text{TEV}) - [(\text{TCI})(\text{Tire Cost})]] \text{ x RF}}{\text{LIFE}}$$

Where:

(1) TEV is the total equipment value found in table 2-1.

(2) TCI is the tire cost index, which is determined by dividing the year of manufacture tire index by the present-year tire index. For table 2-1, the present year is 2007 and the year of manufacture is 2004 (3 years old). These indexes are listed as part of appendix E [see Economic Key (EK) 100, All Tires and Tubes].

(3) Tire cost is the total tire and/or conveyor belt cost. The total tire cost is the sum of the cost of all front, drive, and trailing tires. The tire cost for rubber-tired equipment is based on tire values at the time the equipment was manufactured.

(4) Repair factor (RF) is calculated as follows:

$$\text{RF} = \text{RCF x EAF x LAF}$$

Where:

(a) The RCF (repair cost factor) is shown in appendix D. This factor varies depending on the operating condition of the equipment (average or severe).

(b) The EAF (economic adjustment factor) is used to adjust the RCF to current price levels. The EAF is equal to the economic index for the present year divided by the economic index for the year of manufacture. Indexes listed in appendix E are used to develop the EAF. Economic indexes are determined as follows:

Economic Index for the Present Year. This is the economic index for the present year (2007 for table 2-1 calculations). Obtain the economic index from appendix E. The index is located in the column with the present year and the row with the type of equipment in question. When the column for the present year has not been included, the index can be estimated using a straight-line projection.

Economic Index for the Year of Manufacture. This is the economic index for the year the equipment was manufactured (2004 for

table 2-1 calculations). Obtain the economic index from appendix E. The index is located in the column with the year of manufacture and the row with the type of equipment in question. When the actual age of the equipment is beyond the last year of its economic life, the equipment is considered overage. Economic life is determined by dividing hours of LIFE (from appendix D) by WHPY (appendix B).

(5) The LIFE is the economic life, which is based on the number of operating hours throughout the economic life of the equipment (see paragraph 2-15). Hours for LIFE are provided in appendix D.

b. Items Included in the Repair Cost Factor. The estimated percentage allowances for the RCF are shown in appendix D under the column heading RCF and are expressed as decimal factors. These RCFs (for both the average and severe conditions) compensate for the following cost elements:

(1) Mechanic's labor includes base wages, fringe benefits, supervision, travel, and all other costs for labor associated with craft workers engaged in the direct repair of equipment either in the field or the shop.

(2) Repair parts and supplies include those items that are required for all repairs and major overhauls complete with applicable sales taxes and freight charges.

(3) Service trucks and other equipment used during field or shop repair and maintenance work including tools.

(4) Supporting repair facilities include field and main repair shops, complete with parts and supplies inventory, and shop overhead.

2.26 Tire Wear Cost

a. Tires included on rubber-tired equipment are generally the type and ply rating recommended as standard tires by the equipment manufacturer. Tire costs include both tire wear (replacement) and tire repair as individual elements of cost. Conveyor belt wear is also included under this cost element. The belt wear is treated like tire wear. The wear factors are listed in the front tire wear factor column in appendix D. Belt life and cost are listed in appendix F.

b. The formula for calculating tire wear applies to each tire position: front (FT), drive (DT), and trailing (TT). However, all tires performing the drive function are considered drive tires and are listed in the drive position. The total hourly tire wear cost for each unit of equipment is the sum of the hourly cost for each position. The total hourly tire wear 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. This hourly allowance for determining tire wear cost is expressed in the following formula:

$$\text{Tire Wear Cost/hr} = \frac{\text{Tire Cost Factor x Current Tire Cost}}{\text{Tire Life Factor x Tire Wear Factor x Maximum Tire Life}}$$

Where:

(1) Tire Cost Factor is estimated at 1.5, which represents the purchase of the original tire plus one recap. It has been estimated that a recap costs approximately 50 percent of the new tire cost.

(2) Current Tire Cost is the estimated cost that applies to all tires on the equipment in that position. For example, four new drive tires valued at $500 each would result in an amount of $2,000 for total drive tire cost. The size and cost of each tire used in the pamphlet are listed for information in appendix F.

(3) Tire Life Factor is estimated at 1.8, which represents the original tire life plus one recap. It has been estimated that a recap lasts approximately 80 percent of the life of a new tire.

(4) Tire Wear Factor is based on the position of the tire, type of equipment, and condition of use. Tire wear factors have been developed and are listed in appendix D. These factors will provide a percentage reduction to the maximum tire life. Appendix G contains the methodology used to develop these factors and a computation example for a rear dump wagon.

(5) Maximum Tire Life expressed in hours is shown for various new tire types in appendix F. The tire life is estimated from information provided by Goodyear Tire and Rubber Company and by using the method and tables in *Production and Cost Estimating of Material Movement with Earthmoving Equipment,* Terex Corporation, Hudson, Ohio.

2.27 Tire Repair Cost

It has been estimated that tire repairs are 15 percent of the total hourly tire wear cost. The LAF is used to adjust the tire repair cost to account for regional variations in labor and parts costs. This cost element has been calculated and listed separately in table 2-2. It is expressed as a formula as follows:

$$\text{Tire Repair Cost} = \text{Total Hourly Tire Wear Cost x } 0.15 \text{ x LAF}$$

SECTION IX. STANDBY HOURLY RATE

2.28 Standby Hourly Rate

The standby rate is computed by allowing the full FCCM hourly cost (based on a 40 hour workweek) plus one-half of the hourly depreciation. It is expressed as a formula, as follows:

$$\text{Standby Rate/hr} = (\text{DEPR/hr x } 0.50) + \text{FCCM/hr}$$

a. Paid standby shall not exceed 40 hours per week (7 calendar days) (based on a 40 hour workweek) per unit of equipment. Actual operating hours during a week will be credited against the 40 hours maximum standby allowance.

b. Standby costs will not be allowed during periods when the equipment would have otherwise been in idle status.

c. When the equipment is purchased used, standby will be computed on the basis that the equipment was purchased new by the contractor in the year it was actually manufactured. Refer to chapter 3 for rate adjustments.

SECTION X. RATE CALCULATION EXAMPLE

2.29 Computation Example

Figure 2-1 is an example of how the total hourly rates in table 2-1 are computed. A blank Equipment Rate Computation Worksheet is included in appendix A and can be copied as needed.

a. When an hourly rate for a specific unit of equipment is not included in this pamphlet and a rate must be computed, the methodology contained in chapter 2 shall be followed. However, when a unit of equipment is not included in this pamphlet and the necessary factors to compute a rate are not found in appendix D, please contact the Chief, Cost Engineering Branch, Engineering and Construction Division, Walla Walla District, U.S. Army Corps of Engineers, for assistance as explained in chapter 1. A Microsoft Excel® spreadsheet **(CHECKRATE)** is also available for rate computation (see chapter 1).

b. See chapter 3 for further guidance on the procedure for rate adjustments.

Example: *The piece of equipment shown in this example is based on a known piece of equipment for illustration purposes only.*

USE THIS WORKSHEET TO COMPUTE A HOURLY RATE FOR EQUIPMENT THAT IS NOT IN THIS PAMPHLET OR IS IN THE PAMPHLET BUT NOT EQUIVALENT IN SIZE, CAPACITY, HORSEPOWER OR VALUE.*(See Appendix A for a blank*
Region 12

1. EQUIPMENT INFORMATION AND EXPENSE FACTORS

ID No: **C90LB001**

a. Equipment Specification Data:

(1)	Equipment Description:	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 150 TON / 260' BOOM, 8X4
(2)	Model and Series:	HC-238H II
(3)	Present Year or Year of Use:	2007
(4)	Year Manufactured:	2004
(5)	Horsepower - Equipment:	207
(6)	Horsepower - Carrier:	430
(7)	Fuel - **Equipment**: 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel — **Enter number from 0 to 6 ==>** 3	**D-off**
	- **Carrier**: 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel — **Enter number from 0 to 6 ==>** 4	**D-on**
(8)	Shipping Weight (cwt):	1,913 cwt

(9) Tire size and number of tires: (Cost of tires based on present year, see 1.a.(3) and App. F):

	Size/Ply	App F Code	No.	Unit Price	Cost
(a) Front (FT):	14-25/20	ANMB1	4	$1,327	$5,308
(b) Drive (DT):	14-25/20	ANMB1	8	$1,327	$10,616
(c) Trailing (TT):			0	$0	$0
(d) Total Tire Cost:					$15,924

(10) List Price + Accessories:
[at Year (yr) of Manufacture] $1,327,898 OR actual purchase price: $0

USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:

b.	Category and Subcategory Number:	C90	0.04
c.	Hourly Expense Calculation Factors:		
(1)	Economic Key (EK):		20
(2)	Condition (C): **A**=Average **D**=Difficult **S**=Severe	A	AVERAGE
(3)	Discount Code (DC): **B** = 7.5% (0.075) or **S** = 15.0% (0.15)	B	0.075
(4)	Life in Hours (LIFE):		20,000
(5)	Salvage Value Percentage (SLV):		0.20
(6)	Fuel Factor - Equipment [Electric (E) Gas (G) Diesel (D)]:		0.024
(7)	Fuel Factor - Carrier (E G D):		0.005
(8)	Filter, Oil, and Grease (FOG) Factor (E G D):		0.110
(9)	Tire Wear Factor:		
	(a) Front (FT):		0.66
	(b) Drive (DT):		0.58
	(c) Trailing (TT):		0.73
(10)	Repair Cost Factor (RCF):		0.90

Figure 2-1. Equipment Rate Computation Worksheet **Page 1 of 6**

Region 12

2. EQUIPMENT VALUE

a. List Price + Accessories: *[at Year (yr) of Manufacture]* = $1,327,898

(1) Discount: (List Price + Accessories) x (Discount Code)

	(List Price)	+	(Accessories)	x	(Discount Code)	
	1.a.(10)				[1.c.(3)]	
	($1,327,898	+	$0.00)	x	(0.075)	= -($99,592)

(2) Subtotal [2.a.] - [2.a.(1)] Subtotal = $1,228,306

(3) Sales or Import Tax: (Subtotal) x (Tax Rate)

(Subtotal)	x	(Tax Rate)		
[2.a.(2)]		[Appendix B]		
($1,228,306)	x	(4.40%)	=	$54,045

(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)] Subtotal = $1,282,351

b. Freight: (Shipping Weight) x (Freight Rate per cwt)

(Shipping Weight)	x	(Freight Rate per cwt)		
[1.a.(8)]		[Appendix B]		
(1,913 cwt)	x	($8.09 /cwt)	=	$15,476

c. **TOTAL EQUIPMENT VALUE (TEV):** **TOTAL[2.]:** **= $1,297,827**
[(2.a.(4)] + [(2.b)]
(*See chapter 3 for used and overage equipment rate adjustments.)*

3. DEPRECIATION PERIOD (N)

a. (LIFE) / (Working Hours Per Year (WHPY)) = N

(LIFE)	/	(Working Hours Per Year (WHPY))	=	N
[1.c.(4)]		[Appendix B]		
(20,000 hr)	/	(1,390 hr/yr)	=	14.39 yrs (N)

4. OWNERSHIP COST

a. Depreciation

(1) Tire Cost Index (TCI):

(Tire Index, Year of Manufacture, 1.a.(4))	/	(Tire Index, Present Year or Year of Use, 1.a.(3))	=	Tire Cost Index (TCI)
[Appendix E, EK=100]		[Appendix E, EK=100]		
(2614)	/	(3058)	=	0.855 (TCI)

(2)

[(TEV)	x	[1.0-(SLV)]	-	[(TCI)	x	(Tire Cost)]]	/	(LIFE)		
[2.c.]		[1.c.(5)]		[4.a.(1)]		[1.a.(9)(d)]		[1.c.(4)]		
[($1,297,827)	x	[1.0-(0.20)]	-	[(0.855)	x	($15,924)]]	/	(20,000 hr)	=	$51.23 /hr

Figure 2-1. Equipment Rate Computation Worksheet **Page 2 of 6**

Region 12

4. <u>OWNERSHIP COST</u> (Continued)

b. Facilities Capital Cost of Money (FCCM):

(1)	[[(N) - 1.0] [3.a.]	x	[1.0 + (SLV)] [1.c.5.]	+	2.0]	/	[2.0 x (N)] [3.a.]	=	Avg Value Factor (AVF)
	[[(14.39 yr) - 1.0]	x	[1.0 + (0.20)]	+	2.0]	/	[2.0 x (14.39 yr)]	=	0.628 (AVF)
(2)	(TEV) [2.c.]	x	(AVF) [4.b.(1)]	x	(Adjusted Cost-of-Money) [Appendix B]	/	(WHPY) [Appendix B]		
	($1,297,827)	x	(0.628)	x	(4.20%)	/	(1,390 hr/yr)	=	$24.63 /hr

c. **TOTAL HOURLY OWNERSHIP COST:** **TOTAL [4.]: = $75.86 /hr**
[4.a.(2)] + [4.b.(2)]

5. <u>OPERATING COST</u>

a. Fuel Costs:

(1) Equipment:

(Fuel Factor) [1.c.(6)]	x	(Horsepower (hp)) [1.a.(5)]	x	(Fuel Cost per Gallon (gal)) [Appendix B]		
(0.024)	x	(207 hp)	x	($1.94 /gal)	=	$9.64 /hr

(2) Carrier:
[1.c.(4)]

(Fuel Factor) [1.c.(7)]	x	(hp) [1.a.(6)]	x	(Fuel Cost per gal) [Appendix B]		
(0.005)	x	(430 hp)	x	($1.94 /gal)	=	$4.17 /hr

(3) Total Hourly Fuel Cost: **Total [5.a.] = $13.81 /hr**
[(5.a (1)] + [5.a (2)]

b. FOG Cost:

(1) Equipment:

(FOG Factor) [1.c.(8)]	x	(Equipment Hourly Fuel Cost) [5.a.(1)]	x	(Labor Adjustment Factor (LAF)) [Appendix B]		
(0.110)	x	($9.64 /hr)	x	($ 1.10 /hr)	=	$1.17 /hr

Figure 2-1. Equipment Rate Computation Worksheet **Page 3 of 6**

Region 12

5. OPERATING COST (Continued)

(2) Carrier:

(FOG Factor)	x	(Carrier Hourly Fuel Cost)	x	(LAF)		
[1.c.(8)]		[5.a.(2)]		[Appendix B]		
(0.110)	x	($4.17 /hr)	x	(1.10)	=	$0.51 /hr

(3) Total Hourly FOG Cost: **Total [5.b.]** = **$1.68 /hr**
[(5.b.(1)] + [5.b.(2)]

c. Alternative Fuel/FOG Cost: **Total [5.c.]** = **$0.00 hr**
(See chapter 2, paragraph 2.24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):
(EK is from [1c. (1)])

(Economic Index, Present Year or Year of Use,1.a.(3))	/	(Economic Index, Year of Manufacture, 1.a.(4))		
[Appendix E, EK=1.c.(1)]		[Appendix E, EK=1.c.(1)]		
(6661)	/	(5869)	=	1.135 (EAF)

(See table 3-1 for last year of economic life.)

(2) Repair Factor (RF):

(RCF)	x	(EAF)	x	(LAF)	=	Repair Factor (RF)
[1.c.(10)]		[5.d.(1)]		[Appendix B]		
(0.90)	x	(1.135)	x	(1.10)	=	1.124 (RF)

(3) Repair Cost:

[(TEV)	-	[(TCI)	x	(Tire Cost)]]	x	(RF)	/	(LIFE)
[2.c.]		[4.a.(1)]		[1.a.(9)(d)]		[5.d.(2)]		[1.c.(4)]
[($1,297,827)	-	[(0.855)	x	($15,924)]]	x	(1.124)	/	(20,000)

(4) Total Hourly Repair Cost: **Total [5.d.]** = **$72.17 /hr**

Figure 2-1. Equipment Rate Computation Worksheet **Page 4 of 6**

Region 12

5. OPERATING COST (Continued)

e. Tire Wear Cost: *(Use current price levels. See Appendix F.)*

(1) Front Tires (FT):

[1.5 x (FT Cost)]	/	[1.8 x (FT Wear Factor)	x	(Maximum Tire Life Hours)]		
[1.a.(9)(a)]		[1.c.(9)(a)]		[Appendix F]		
[1.5 x ($5,308)]	/	[1.8 x (0.66)	x	(2,500 hr)]	=	$2.68 /hr

(2) Drive Tires (DT):

[1.5 x (DT Cost)]	/	[1.8 x (DT Wear Factor)	x	(Maximum Tire Life Hours)]		
[1.a.(9)(b)]		[1.c.(9)(b)]		[Appendix F]		
[1.5 x ($10,616)]	/	[1.8 x (0.58)	x	(2,500 hr)]	=	$6.10 /hr

(3) Trailing Tires (TT):

[1.5 x (TT Cost)]	/	[1.8 x (TT Wear Factor)	x	(Maximum Tire Life Hours)]		
[1.a.(9)(c)]		[1.c.(9)(c)]		[Appendix F]		
[1.5 x ($0.00)]	/	[1.8 x (0.73)	x	(0 hr)]	=	$0.00 /hr

(4) Total Tire Wear Cost: **Total [5.e.] = $8.78 /hr**
[Sum 5.e.(1) through 5.e.(3)]

f. Tire Repair Cost:

(Total Tire Wear Cost per Hour)	x	0.15 x (LAF)	
[5.e.(4)]		[Appendix B]	
($8.78 /hr)	x	0.15 x (1.10)	**Total [5.f.] = $1.45 /hr**

g. TOTAL HOURLY OPERATING COST: **Total [5.] = $97.89 /hr**
[Sum 5.a. through 5.f.]

Figure 2-1. Equipment Rate Computation Worksheet **Page 5 of 6**

Region 12

6. HOURLY RATES

a. Total Hourly Rate: [*based on 40 hours per week (wk)*]

(Ownership Cost) [4.c.]	+	(Operating Cost) [5.g.]		
($75.86 /hr)	+	($97.89 /hr)	=	**$173.75 /hr**

b. Other Work Shifts Hourly Rate:

(Refer to Chapter 3, Adjustments to Rates, for methodology.)

[(Depreciation) [4.a.(2)]	+	[(FCCM) [4.b.(2)]	x	(40 hr/wk) / (Work hr/wk) (example:60 hr/wk)	+	(Operating Cost)] [5.g.]		
[($51.23 /hr)	+	[($24.63 /hr)	x	(40 hr/wk) / (60 hr/wk)] (example:60 hr/wk)	+	($97.89 /hr)]	=	**$165.54 /hr**

c. Standby Hourly Rate:

(Refer to Chapter 2, paragraph 2.28 for guidance on use.)

[(Depreciation) [4.a.(2)]	x 0.50]	+	(FCCM) [4.b.(2)]		
[($51.23 /hr)	x 0.50]	+	($24.63 /hr)	=	**$50.25 /hr**

(Refer to Chapter 3, paragraph 3.12 for guidance for overage equipment.)

See Chapter 3 if rate adjustments are necessary.

Figure 2-1. Equipment Rate Computation Worksheet **Page 6 of 6**

Table 2-1. Hourly Equipment Ownership and Operating Expense

EXPLANATION OF TABLE HEADINGS

Example unit of equipment: Link Belt, Model HC-238H II, 150 Ton, 260'-boom.

CAT: C90 is the category number and identifies it as Cranes, Mechanical, Lattice Boom, Truck Mounted (from appendix D).

ID No.: C90LB001 is the unique identification number for the above Link Belt crane. AM equals the manufacturer (see appendix H). 001 equals the numeric order of this unit of equipment within the manufacturer's listing.

MODEL: HC-238H II is the equipment model number.

EQUIPMENT DESCRIPTION: Specific information for each particular unit of equipment is described, such as "150 ton with a 260-foot boom" for the Link Belt crane.

ENGINE HORSEPOWER AND FUEL TYPE: The amount of horsepower and type of fuel used is stated for the main and carrier engines. The Link Belt crane carrier has a 430-horsepower engine, and the crane has a 207-horsepower engine. Both engines are diesel (D).

VALUE (TEV): This column reflects the predetermined "equipment cost" used to compute the rates and is based on equipment purchased new in 2004.

TOTAL HOURLY RATES ($/HR): All ownership and operating expenses for the average condition are included. All cost elements, including fuel, are totaled in the AVERAGE column. The STANDBY column includes the hourly allowance for equipment on legitimate standby status (see section 2-27 for more information).

ADJUSTABLE ELEMENTS: This column shows ownership elements and fuel costs used to develop the average total hourly rates so they can be adjusted as indicated in chapter 3. Operating costs may be determined by subtracting the ownership cost elements (DEPR plus FCCM) from the total hourly rate for the average condition.

CWT: The shipping weight of the equipment is stated in hundredweight.

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A10	**AGGREGATE / CHIP SPREADERS**											
	SUBCATEGORY 0.10		**SELF-PROPELLED**									
			ROSCO, A LeeBoy COMPANY									
	A10RS003	SPRH	CHIP SPREADER, SELF PROPELLED, 10' WIDE, 1.70 CY, 2WD	152 HP D-off		$99,034	37.04	6.81	9.62	2.00	12.09	149
	A10RS004	SPRH	CHIP SPREADER, SELF PROPELLED, 11' WIDE, 1.80 CY, 2WD	152 HP D-off		$99,701	37.21	6.87	9.69	2.02	12.09	153
	A10RS005	SPRH	CHIP SPREADER, SELF PROPELLED, 12' WIDE, 2.03 CY, 2WD	152 HP D-off		$100,239	37.33	6.90	9.74	2.03	12.09	159
	A10RS006	SPRH	CHIP SPREADER, SELF PROPELLED, 13' WIDE, 2.28 CY, 2WD	152 HP D-off		$100,395	37.37	6.91	9.76	2.03	12.09	153
	A10RS007	SPRH	CHIP SPREADER, SELF PROPELLED, 15' WIDE, 2.53 CY, 2WD	152 HP D-off		$101,627	37.67	7.00	9.88	2.06	12.09	159
	A10RS008	SPREADPRO	CHIP SPREADER, SELF PROPELLED, 16' WIDE, 4.50 CY, 4WD	205 HP D-off		$194,167	64.35	13.43	18.99	3.93	16.31	158
	SUBCATEGORY 0.20		**TOWED & TAILGATE**									
			AMERICAN ROAD MACHINERY, INC.									
	A10AR001	TG-505C	CHIP SPREADER, TAILGATE, 8' WIDE (ADD DUMP TRUCK)			$3,830	1.07	0.34	0.51	0.08	0.00	5
	A10AR002	ODELL 900	CHIP SPREADER, TOWED, 8' WIDE, 3 CY (ADD DUMP TRUCK)			$9,737	2.91	0.85	1.30	0.20	0.00	22
			SEALMASTER, INC.									
	A10SE001	R-1 E2310	CHIP SPREADER, TAILGATE, 8' WIDE, 1.13 CY (ADD DUMP TRUCK)			$12,133	3.38	1.06	1.62	0.25	0.00	21
	A10SE002	R-1 E2500	CHIP SPREADER, TOWED, 8' WIDE, 1.13 CY (ADD DUMP TRUCK)			$14,388	4.01	1.26	1.92	0.30	0.00	30

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A15	**AIR COMPRESSORS, PORTABLE**											
	SUBCATEGORY 0.10		**ROTARY SCREW**									
			INGERSOLL RAND ROTARY-REC COMPRESSOR DIV									
	A15IA001	P175WJD	AIR COMPRESSOR, 175 CFM, 100 PSI (ADD HOSE)	56 HP D-off		$20,647	9.30	1.22	1.62	0.41	4.72	21
	A15IA002	HP300WCU	AIR COMPRESSOR, 300 CFM, 150 PSI (ADD HOSE)	110 HP D-off		$44,445	18.98	2.65	3.53	0.88	9.27	38
	A15IA003	VHP400WCU	AIR COMPRESSOR, 400 CFM, 200 PSI (ADD HOSE)	174 HP D-off		$53,363	26.83	3.16	4.20	1.06	14.66	53
	A15IA004	HP450WCU	AIR COMPRESSOR, 450 CFM, 150 PSI (ADD HOSE)	174 HP D-off		$53,363	26.83	3.16	4.20	1.06	14.66	53
	A15IA005	XP525WCU	AIR COMPRESSOR, 525 CFM, 125 PSI (ADD HOSE)	174 HP D-off		$53,363	26.83	3.16	4.20	1.06	14.66	53
	A15IA006	XHP650WCAT	AIR COMPRESSOR, 650 CFM, 350 PSI (ADD HOSE)	300 HP D-off		$118,137	51.25	7.00	9.32	2.34	25.27	136
	A15IA007	XHP750WCAT	AIR COMPRESSOR, 750 CFM, 300 PSI (ADD HOSE)	300 HP D-off		$123,771	52.32	7.34	9.77	2.45	25.27	136
	A15IA008	VHP825WCU	AIR COMPRESSOR, 825 CFM, 200 PSI (ADD HOSE)	335 HP D-off		$93,402	49.87	5.52	7.34	1.85	28.22	96
	A15IA009	XP1000WCAT	AIR COMPRESSOR, 1,000 CFM, 125 PSI (ADD HOSE)	310 HP D-off		$93,625	47.53	5.54	7.36	1.86	26.11	104
	A15IA010	XHP1070WCAT	AIR COMPRESSOR, 1,070 CFM, 350 PSI (ADD HOSE)	400 HP D-off		$166,319	69.96	9.89	13.17	3.30	33.70	152
			SULLAIR CORPORATION									
	A15SR006	125DPQJD	AIR COMPRESSOR, 125 CFM, 100 PSI (ADD HOSE)	76 HP D-off		$13,695	9.88	0.81	1.07	0.27	6.40	24
	A15SR007	130DPQJD	AIR COMPRESSOR, 130 CFM, 100 PSI (ADD HOSE)	77 HP D-off		$13,750	9.98	0.81	1.07	0.27	6.49	26
	A15SR004	185	AIR COMPRESSOR, 185 CFM, 100 PSI (ADD HOSE)	78 HP D-off		$14,920	10.31	0.89	1.17	0.30	6.57	24
	A15SR005	250	AIR COMPRESSOR, 250 CFM, 100 PSI (ADD HOSE)	80 HP D-off		$19,694	11.40	1.17	1.55	0.39	6.74	26
	A15SR008	375HDPQJD	AIR COMPRESSOR, 375 CFM, 150 PSI (ADD HOSE)	123 HP D-off		$31,536	17.80	1.86	2.46	0.63	10.36	42

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A15			***SULLAIR CORPORATION (continued)***										
	A15SR009	425DPQJD	AIR COMPRESSOR, 425 CFM, 100 PSI (ADD HOSE)	124 HP	D-off		$31,536	17.91	1.86	2.46	0.63	10.45	42
	A15SR010	600HDTQCA	AIR COMPRESSOR, 600 CFM, 150 PSI (ADD HOSE)	230 HP	D-off		$58,039	33.13	3.41	4.51	1.15	19.38	100
	A15SR011	750HHDTQCA	AIR COMPRESSOR, 750 CFM, 175 PSI (ADD HOSE)	300 HP	D-off		$66,201	41.35	3.90	5.17	1.31	25.27	103
	A15SR002	900XH	AIR COMPRESSOR, 900 CFM, 350 PSI (ADD HOSE)	440 HP	D-off		$145,393	69.86	8.60	11.44	2.88	37.07	157
	A15SR012	1050DTQCA	AIR COMPRESSOR, 1,050 CFM, 100 PSI (ADD HOSE)	300 HP	D-off		$65,238	41.16	3.84	5.09	1.29	25.27	105
	A15SR013	1300HDTQCA	AIR COMPRESSOR, 1,300 CFM, 150 PSI (ADD HOSE)	450 HP	D-off		$121,483	66.18	7.21	9.59	2.41	37.91	156
	A15SR014	1600HDTQCA	AIR COMPRESSOR, 1,600 CFM, 100 PSI (ADD HOSE)	450 HP	D-off		$129,466	67.84	7.62	10.10	2.57	37.91	162
	A15SR015	1900DTQCA	AIR COMPRESSOR, 1,900 CFM, 100 PSI (ADD HOSE)	525 HP	D-off		$125,994	74.33	7.41	9.82	2.50	44.23	164
			NO SPECIFIC MANUFACTURER										
	A15XX019	85G	AIR COMPRESSOR, 85 CFM, 100 PSI (ADD HOSE)	30 HP	G		$8,867	8.37	0.52	0.68	0.18	5.79	14
	A15XX020	85D	AIR COMPRESSOR, 85 CFM, 100 PSI (ADD HOSE)	30 HP	D-off		$16,906	6.12	1.01	1.33	0.34	2.53	24
	A15XX021	100G	AIR COMPRESSOR, 100 CFM, 100 PSI (ADD HOSE)	50 HP	G		$11,776	13.36	0.69	0.91	0.23	9.66	17
	A15XX022	100D	AIR COMPRESSOR, 100 CFM, 125 PSI (ADD HOSE)	35 HP	D-off		$17,202	6.65	1.02	1.35	0.34	2.95	17
	A15XX023	125G	AIR COMPRESSOR, 125 CFM, 100 PSI (ADD HOSE)	65 HP	G		$12,424	16.82	0.74	0.97	0.25	12.55	20
	A15XX024	130	AIR COMPRESSOR, 130 CFM, 100 PSI (ADD HOSE)	50 HP	D-off		$19,349	8.47	1.14	1.52	0.38	4.21	18
	A15XX025	160G	AIR COMPRESSOR, 160 CFM, 125 PSI (ADD HOSE)	60 HP	G		$13,591	15.94	0.80	1.06	0.27	11.59	23
	A15XX026	175D	AIR COMPRESSOR, 175 CFM, 100 PSI (ADD HOSE)	70 HP	D-off		$21,768	10.84	1.29	1.71	0.43	5.90	27
	A15XX027	175G	AIR COMPRESSOR, 175 CFM, 125 PSI (ADD HOSE)	90 HP	G		$14,134	22.69	0.83	1.10	0.28	17.38	24
	A15XX028	185D	AIR COMPRESSOR, 185 CFM, 100 PSI (ADD HOSE)	80 HP	D-off		$22,224	11.88	1.32	1.75	0.44	6.74	24

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A15			***NO SPECIFIC MANUFACTURER (continued)***										
	A15XX029	185G	AIR COMPRESSOR, 185 CFM, 125 PSI (ADD HOSE)	70 HP	G		$15,240	18.47	0.90	1.19	0.30	13.52	23
	A15XX030	250	AIR COMPRESSOR, 250 CFM, 100 PSI (ADD HOSE)	85 HP	D-off		$29,395	13.72	1.74	2.32	0.58	7.16	31
	A15XX031	300	AIR COMPRESSOR, 300 CFM, 125 PSI (ADD HOSE)	110 HP	D-off		$42,778	18.67	2.55	3.40	0.85	9.27	37
	A15XX032	375	AIR COMPRESSOR, 375 CFM, 125 PSI (ADD HOSE)	115 HP	D-off		$39,084	18.48	2.30	3.06	0.77	9.69	37
	A15XX033	450	AIR COMPRESSOR, 450 CFM, 125 PSI (ADD HOSE)	170 HP	D-off		$52,763	26.41	3.10	4.09	1.05	14.32	89
	A15XX034	600	AIR COMPRESSOR, 600 CFM, 150 PSI (ADD HOSE)	250 HP	D-off		$72,811	37.84	4.29	5.69	1.44	21.06	99
	A15XX035	750	AIR COMPRESSOR, 750 CFM, 125 PSI (ADD HOSE)	275 HP	D-off		$77,354	41.11	4.56	6.06	1.53	23.17	93
	A15XX036	825	AIR COMPRESSOR, 825 CFM, 125 PSI (ADD HOSE)	275 HP	D-off		$83,385	42.25	4.92	6.54	1.65	23.17	104
	A15XX037	900	AIR COMPRESSOR, 900 CFM, 125 PSI (ADD HOSE)	310 HP	D-off		$88,857	46.62	5.25	6.98	1.76	26.11	93
	A15XX038	1200	AIR COMPRESSOR, 1,200 CFM, 125 PSI (ADD HOSE)	360 HP	D-off		$135,004	60.19	8.02	10.67	2.68	30.33	150
	A15XX039	1300	AIR COMPRESSOR, 1,400 CFM, 150 PSI (ADD HOSE)	460 HP	D-off		$141,629	71.02	8.39	11.16	2.81	38.75	180
	A15XX040	1600	AIR COMPRESSOR, 1,600 CFM, 150 PSI (ADD HOSE)	500 HP	D-off		$151,868	76.78	9.00	11.98	3.01	42.12	151
	SUBCATEGORY 0.20		**SHOP TYPE**										
			NO SPECIFIC MANUFACTURER										
	A15XX041	80/15	AIR COMPRESSOR, 22 CFM, 80 GAL (ADD HOSE)	5 HP	E		$2,204	1.50	0.12	0.16	0.04	0.76	3
	A15XX042	80/25	AIR COMPRESSOR, 28 CFM, 80 GAL (ADD HOSE)	7 HP	E		$2,954	2.08	0.17	0.21	0.06	1.06	3
	A15XX043	120/35	AIR COMPRESSOR, 41 CFM, 120 GAL (ADD HOSE)	10 HP	E		$4,440	3.00	0.24	0.31	0.08	1.52	4
	A15XX044	120/55	AIR COMPRESSOR, 58 CFM, 120 GAL (ADD HOSE)	15 HP	E		$5,191	4.27	0.29	0.37	0.10	2.27	4
	A15XX045	120/90	AIR COMPRESSOR, 89 CFM, 120 GAL (ADD HOSE)	25 HP	E		$7,373	6.92	0.40	0.52	0.14	3.79	4

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A15			***NO SPECIFIC MANUFACTURER (continued)***									
	A15XX046	120/112	AIR COMPRESSOR, 103 CFM, 120 GAL (ADD HOSE)	30 HP E		$9,049	8.34	0.49	0.64	0.17	4.55	5
A20	**AIR HOSE, TOOLS & EQUIPMENT**											
	SUBCATEGORY 0.10		**AIR DRILL HOSE**									
			NO SPECIFIC MANUFACTURER									
	A20XX001		AIR HOSE, 0.75", 100', HARDROCK			$1,218	0.99	0.20	0.33	0.03	0.00	1
	A20XX002		AIR HOSE, 1.00", 100', HARDROCK			$1,408	1.14	0.22	0.38	0.03	0.00	1
	A20XX003		AIR HOSE, 1.25", 100', HARDROCK			$1,750	1.43	0.28	0.48	0.04	0.00	1
	A20XX004		AIR HOSE, 1.50", 100', HARDROCK			$2,277	1.85	0.36	0.62	0.05	0.00	1
	A20XX005		AIR HOSE, 2.00", 100', HARDROCK			$3,233	2.63	0.51	0.88	0.07	0.00	2
	A20XX006		AIR HOSE, 2.50", 100', HARDROCK			$3,971	3.23	0.63	1.08	0.09	0.00	3
	A20XX007		AIR HOSE, 3.00", 100', HARDROCK			$4,908	3.99	0.78	1.33	0.11	0.00	4
	A20XX008		AIR HOSE, 4.00", 100', HARDROCK			$6,568	5.33	1.03	1.78	0.14	0.00	6
	SUBCATEGORY 0.20		**SANDBLAST HOSE**									
			CLEMCO INDUSTRIES CORPORATION									
	A20CM017		SANDBLAST HOSE, 0.75"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			$465	0.41	0.08	0.13	0.01	0.00	1
	A20CM018		SANDBLAST HOSE, 1.00"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			$501	0.44	0.08	0.14	0.01	0.00	1
	A20CM020		SANDBLAST HOSE, 1.25"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			$488	0.42	0.08	0.13	0.01	0.00	1
	A20CM019		SANDBLAST HOSE, 1.50"ID, 100' LONG USE AS SAND BLASTING ACCESSORY			$591	0.51	0.09	0.16	0.01	0.00	1
	SUBCATEGORY 0.30		**SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS**									
			CHICAGO PNEUMATIC TOOL CO.									
	A20CK002	CP-0009F	ROTARY / CHIP HAMMER, 8 LB, AIR (ADD 30 CFM COMPRESSOR & BIT COSTS)	20 CFM A		$931	0.44	0.09	0.14	0.02	0.00	1

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A20			***CHICAGO PNEUMATIC TOOL CO. (continued)***									
	A20CK001	CP-0014RR	ROTARY / CHIP HAMMER, 15 LB, AIR (ADD 30 CFM COMPRESSOR & BIT COSTS)	32 CFM A		$1,613	0.76	0.15	0.24	0.03	0.00	1
	A20CK003	CP-0022	ROCK DRILL, 30 LB, AIR (ADD 50 CFM COMPRESSOR & BIT COSTS)	56 CFM A		$1,786	0.85	0.18	0.27	0.04	0.00	1
	A20CK005	CP-0069	ROCK DRILL, 55 LB, AIR (ADD 140 CFM COMPRESSOR & BIT COSTS)	130 CFM A		$2,242	1.06	0.21	0.34	0.04	0.00	1
	A20CK006	CP-0111-THLA	BREAKER-FOUR BOLT, 25 LB (ADD 50 CFM COMPRESSOR & BIT COSTS)	45 CFM A		$1,237	0.58	0.12	0.19	0.02	0.00	1
	A20CK008	CP-1230-S1.25	BREAKER-FOUR BOLT, 60 LB (ADD 65 CFM COMPRESSOR & BIT COSTS)	63 CFM A		$1,357	0.64	0.13	0.20	0.03	0.00	1
	A20CK010	CP-1240-S1.25	BREAKER-FOUR BOLT, 90 LB (ADD 90 CFM COMPRESSOR & BIT COSTS)	81 CFM A		$1,469	0.69	0.14	0.22	0.03	0.00	1
			CLEMCO INDUSTRIES CORPORATION									
	A20CM010	PACKAGE TWO	SANDBLASTER, 2 CF CAP, W/0.50" D X 25'L HOSE (ADD 100 CFM COMPRESSOR & NOZZLE COST)	100 CFM A		$3,304	1.63	0.32	0.50	0.07	0.00	4
	A20CM011	PACKAGE FOUR	SANDBLASTER, 4 CF CAP, W/1.00"D X 25'L HOSE (ADD 170 CFM COMPRESSOR & NOZZLE COST)	170 CFM A		$3,686	1.80	0.35	0.55	0.07	0.00	5
	A20CM012	PACKAGE SIX	SANDBLASTER, 6 CF CAP, W/1.25"D X 25'L HOSE (ADD 200 CFM COMPRESSOR & NOZZLE COST)	200 CFM A		$3,965	2.00	0.38	0.59	0.08	0.00	6
	A20CM013		SANDBLASTER, 60 CF CAP, W/1.25"D X 50'L HOSE (ADD 450 CFM COMPRESSOR & NOZZLE COST)	450 CFM A		$17,961	8.60	1.65	2.59	0.35	0.00	30
	A20CM014		SANDBLASTER, 120 CF CAP, W/1.25"D X 50'L HOSE (ADD 700 CFM COMPRESSOR & NOZZLE COST)	700 CFM A		$22,836	10.79	2.03	3.16	0.45	0.00	35
	A20CM015		SANDBLASTER, 160 CF CAP, W/1.25"D X 50'L HOSE (ADD 900 CFM COMPRESSOR & NOZZLE COST)	900 CFM A		$25,918	12.30	2.31	3.60	0.51	0.00	45
	A20CM016		SANDBLAST ABRASIVE STORAGE HOPPER, 700 CF, 8' DEEP,10' WIDE & 23' HIGH (ADD SAND BLASTER & ACCESSORIES)			$14,406	7.10	1.36	2.16	0.28	0.00	69

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			WACKER CORPORATION									
	A20WC002	EHB11/BL/110	BREAKER/DRILL, 40 LB, ELECTRIC (ADD 2 KW GENERATOR & BIT COSTS)	2 HP E		$1,503	1.26	0.15	0.23	0.03	0.26	1
	A20WC004	BH 23	BREAKER/DRIVER, 65 LB, W/POWER UNIT (ADD BIT COSTS)	4 HP G		$3,995	2.66	0.38	0.60	0.08	0.67	1
			NO SPECIFIC MANUFACTURER									
	A20XX021	STANDARD 25-30 LBS	PAVEMENT BREAKER, 25-30 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM A		$1,130	0.53	0.11	0.17	0.02	0.00	1
	A20XX022	SILENCED 35-45 LBS	PAVEMENT BREAKER, 35-45 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM A		$1,316	0.63	0.13	0.20	0.03	0.00	1
	A20XX023	SILENCED 60-65 LBS	PAVEMENT BREAKER, 60-65 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM A		$1,581	0.75	0.15	0.24	0.03	0.00	1
	A20XX024	SILENCED 80-90 LBS	PAVEMENT BREAKER, 80-90 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM A		$1,631	0.76	0.15	0.24	0.03	0.00	1
	A20XX025	55DRY	ROCK DRILL, DRY, 55 LB, HAND HELD (ADD 100 CFM COMPRESSOR & BIT COSTS)	100 CFM A		$2,298	1.09	0.22	0.34	0.05	0.00	1
A25	**ASPHALT PAVING DISTRIBUTORS**											
	SUBCATEGORY 0.00		**ASPHALT PAVING DISTRIBUTORS**									
			ROSCO, A LeeBoy COMPANY									
	A25RS006	MAXIMIZER 11	ASPHALT DISTRIBUTOR, 1,900 GAL, 400 GPM, TRUCK MTD (ADD 32,000 GVW TRUCK)			$54,251	19.93	5.14	8.14	1.07	0.00	70
	A25RS008	MAXIMIZER 11	ASPHALT DISTRIBUTOR, 3,000 GAL, 400 GPM, TRUCK MTD (ADD 42,000 GVW TRUCK)			$62,409	23.38	5.91	9.36	1.23	0.00	97
			NO SPECIFIC MANUFACTURER									
	A25XX001	1100G	ASPHALT DISTRIBUTOR, 1,100 GAL, 400 GPM, TRUCK MTD (ADD 32,000 GVW TRUCK)			$45,870	16.51	4.35	6.88	0.91	0.00	64
	A25XX002	2600G	ASPHALT DISTRIBUTOR, 2,600 GAL, 400 GPM, TRUCK MTD (ADD 32,000 GVW TRUCK)			$53,606	20.05	5.08	8.04	1.06	0.00	89

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A25			***NO SPECIFIC MANUFACTURER (continued)***									
	A25XX003	3600G	ASPHALT DISTRIBUTOR, 3,600 GAL, 400 GPM, TRUCK MTD (ADD 42,000 GVW TRUCK)			$58,725	22.41	5.57	8.81	1.16	0.00	104
A30	**ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT**											
	SUBCATEGORY 0.10		**SELF PROPELLED**									
			BARBER-GREENE COMPANY									
	A30BG007	BG230	ASPHALT FINISHER, 8' WIDE SCREED, WHEEL, W/15' 6" SCREED EXTENSION, 190 CF HOPPER	98 HP D-off		$272,820	87.11	19.36	28.02	5.35	7.80	314
	A30BG004	BG225C	ASPHALT FINISHER, 8' WIDE SCREED, CRAWLER, W/15' 6" SCREED EXTENSION, 177 CF HOPPER	112 HP D-off		$307,127	97.94	22.34	32.63	6.02	8.91	336
	A30BG009	BG240C	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, W/19' 6" SCREED EXTENSION, 215 CF HOPPER	139 HP D-off		$296,371	96.35	21.05	30.48	5.81	11.06	377
	A30BG005	BG245C	ASPHALT FINISHER, 10' WIDE SCREED, CRAWLER, W/19' 6" SCREED EXTENSION, 215 CF HOPPER	158 HP D-off		$356,005	115.83	25.90	37.83	6.98	12.57	374
	A30BG003	BG260C	ASPHALT FINISHER, 10' WIDE SCREED, WHEEL, W/19' 6" SCREED EXTENSION, 215 CF HOPPER	158 HP D-off		$355,511	115.81	25.03	36.12	6.97	12.57	382
			BLAW KNOX CONSTRUCTION EQUIPMENT CORP.									
	A30BK010	PF-150	ASPHALT PAVER/FINISHER, 8' WIDE SCREED, WHEEL, 107 CF HOOPER	47 HP D-off		$141,509	44.29	9.99	14.42	2.78	3.74	154
	A30BK011	PF-161	ASPHALT PAVER/FINISHER, 8' WIDE SCREED, WHEEL, 181 CF HOPPER	107 HP D-off		$248,368	79.53	17.58	25.42	4.87	8.51	210
	A30BK013	PF-3172	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, WHEEL, 182 CF HOPPER	145 HP D-off		$263,370	87.28	18.66	26.99	5.16	11.54	299
	A30BK015	PF-3200	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, WHEEL, 225 CF HOPPER	184 HP D-off		$301,935	101.95	21.46	31.07	5.92	14.64	340
	A30BK017	PF-5500	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, CRAWLER, 218 CF HOPPER	184 HP D-off		$318,466	106.12	23.17	33.84	6.25	14.64	340
	A30BK018	PF-5510	ASPHALT PAVER/FINISHER, 10' WIDE SCREED, CRAWLER, 218 CF HOPPER	184 HP D-off		$327,539	108.66	23.82	34.80	6.42	14.64	320

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A30			***BLAW KNOX CONSTRUCTION EQUIPMENT CORP. (continued)***									
	A30BK019	RW 100 A	ASPHALT PAVER, SHOULDER PAVING MACHINE, 1'-10' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 72.5 CF HOPPER	105 HP D-off		$194,443	64.07	13.96	20.29	3.81	8.35	245
	A30BK020	RW 195 D	ASPHALT PAVER, SHOULDER PAVING MACHINE, 2'-10' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 73 CF HOPPER	173 HP D-off		$249,852	85.93	17.99	26.18	4.90	13.76	330
	A30BK021	TITAN 325 EPM	ASPHALT PAVER, 32.8' WIDE, CRAWLER W/DUAL TAMPER SCREED, 270 CF HOPPER	176 HP D-off		$323,259	106.75	23.52	34.35	6.34	14.00	399
	A30BK022	PF-2181	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 2 WHEEL DRIVE, 182 CF HOPPER	145 HP D-off		$246,492	82.54	17.43	25.20	4.83	11.54	283
	A30BK023	PF-4410	ASPHALT PAVER, 8' WIDE SCREED, CRAWLER, 155 CF HOPPER	145 HP D-off		$277,294	91.03	20.17	29.46	5.44	11.54	269
			CATERPILLAR INC. (MACHINE DIVISION)									
	A30CA013	AP-650B	ASPHALT PAVER, 8' WIDE SCREED, CRAWLER, 177 CF HOPPER	121 HP D-off		$259,721	83.93	18.89	27.60	5.09	9.63	402
	A30CA002	AP-800C	ASPHALT PAVER, 8' WIDE+2' EXT. PAVEMASTER SCREED, WHEEL, 195 CF HOPPER	107 HP D-off		$257,250	82.03	18.22	26.36	5.04	8.51	319
	A30CA014	AP-900B	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, 215 CF HOPPER	153 HP D-off		$271,364	90.56	19.23	27.82	5.32	12.17	378
	A30CA008	AP-1000B	ASPHALT PAVER, 10' - 12' WIDE PAVEMASTER SCREED, WHEEL, 215 CF HOPPER	174 HP D-off		$299,639	100.29	21.19	30.62	5.88	13.84	468
	A30CA015	AP-1050B	ASPHALT PAVER, 10' WIDE EXTEND-A-MAT SCREED, CRAWLER, 215 CF HOPPER	174 HP D-off		$432,658	137.32	31.47	45.97	8.48	13.84	415
	A30CA016	AP-1055B	ASPHALT PAVER, 10' WIDE SCREED, CRAWLER, 215 CF HOPPER	173 HP D-off		$336,269	110.13	24.46	35.73	6.59	13.76	413
	A30CA009	AP-1050B	ASPHALT PAVER, 10' - 24' WIDE PAVEMASTER SCREED, CRAWLER, 215 CF HOPPER	173 HP D-off		$366,556	118.65	26.67	38.95	7.19	13.76	418
			CHAMPION ROAD MACHINERY - SUPERPAC CO.									
	A30CH001	780WB	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 190 CF HOPPER	110 HP D-off		$239,734	77.37	16.95	24.50	4.70	8.75	265
	A30CH002	880WB	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 190 CF HOPPER	152 HP D-off		$260,940	87.22	18.49	26.73	5.12	12.09	315
	A30CH003	880RTB	ASPHALT PAVER, 8' WIDE SCREED, CRAWLER-RUBBER TRACK, 190 CF HOPPER	152 HP D-off		$263,134	87.67	19.14	27.96	5.16	12.09	282

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
A30			***CHAMPION ROAD MACHINERY - SUPERPAC CO. (continued)***										
	A30CH004	1010WB	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, 205 CF HOPPER	152 HP	D-off		$274,626	90.99	19.42	28.05	5.39	12.09	305
	A30CH005	1110WB	ASPHALT PAVER, 10' WIDE SCREED, WHEEL, 225 CF HOPPER	173 HP	D-off		$299,838	100.26	21.20	30.64	5.88	13.76	343
	A30CH006	1110RTB SWIFTRACK	ASPHALT PAVER, 10' WIDE SCREED, CRAWLER-RUBBER TRACK, 225 CF HOPPER	200 HP	D-off		$348,846	116.09	25.37	37.06	6.84	15.91	402
			CEDARAPIDS INC., A TEREX COMPANY										
	A30EJ001	CR351	ASPHALT PAVER, 8' WIDE FASTACH SCREED, WHEEL, 145 CF HOPPER	130 HP	D-off		$202,735	68.62	14.31	20.66	3.98	10.34	263
	A30EJ002	CR361	ASPHALT PAVER, 8' WIDE FASTACH SCREED, CRAWLER, 145 CF HOPPER	130 HP	D-off		$225,140	75.01	16.38	23.92	4.42	10.34	253
	A30EJ003	CR451	ASPHALT PAVER, 10' WIDE FASTACH SCREED, WHEEL, 229 CF HOPPER	172 HP	D-off		$235,558	82.06	16.61	23.97	4.62	13.68	315
	A30EJ004	CR461	ASPHALT PAVER, 10' WIDE FASTACH SCREED, CRAWLER, 219 CF HOPPER	172 HP	D-off		$260,044	88.60	18.92	27.63	5.10	13.68	356
	A30EJ005	CR551	ASPHALT PAVER, 10' WIDE FASTACH SCREED, WHEEL, 267 CF HOPPER	172 HP	D-off		$263,683	89.66	18.16	25.98	5.17	13.68	341
	A30EJ006	CR561	ASPHALT PAVER, 10' WIDE FASTACH SCREED, CRAWLER, 267 CF HOPPER	172 HP	D-off		$288,339	96.56	20.97	30.64	5.65	13.68	389
			GEHL COMPANY										
	A30GC002	1448	ASPHALT PAVER, 8' WIDE SCREED, WHEEL, 80 CF HOPPER	25 HP	D-off		$34,891	12.08	2.49	3.62	0.68	1.99	67
	A30GC004	1648	ASPHALT PAVER, 9' WIDE SCREED, CRAWLER, 120 CF HOPPER	41 HP	D-off		$50,044	17.77	3.64	5.32	0.98	3.26	85
	SUBCATEGORY 0.20		**TOWED**										
			MIDLAND MACHINERY CO										
	A30MP001	SP-8	ASPHALT PAVER, SHOULDER PAVING MACHINE, 1'-8' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 80 CF HOPPER	80 HP	D-off		$120,528	30.57	7.21	9.64	2.39	5.80	185
	A30MP002	SP-10	ASPHALT PAVER, SHOULDER PAVING MACHINE, 1'-10' WIDE, BITUMINOUS & AGGREGATE, WHEEL, 80 CF HOPPER	100 HP	D-off		$157,312	39.54	9.41	12.58	3.12	7.25	275

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.30		**SLURRY SEAL PAVERS (Cold mix)**									
			NO SPECIFIC MANUFACTURER									
	A30XX001	MINIMAC	ASPHALT PAVER, SLURRY SEAL PAVER 8' WIDE, SELF PROPELLED, WHEEL, 80 CF HOPPER	110 HP D-off		$130,995	27.62	6.84	8.56	2.56	7.46	130
	A30XX002	MACROPAVER 12B	ASPHALT PAVER, SLURRY SEAL PAVER 8' WIDE, TRUCK MTD, 12 CF HOPPER (ADD 40,000 GVW TRUCK)	110 HP D-off		$160,439	31.26	8.48	10.70	3.13	7.46	175
	SUBCATEGORY 0.40		**MISCELLANEOUS ROAD EQUIPMENT**									
			BLAW KNOX CONSTRUCTION EQUIPMENT CORP.									
	A30BK024	MC-330	ASPHALT PAVER, MOBILE CONVEYOR, 60" WIDE BELT, WHEEL (ADD ASPHALT PAVER UNIT)	184 HP D-off		$313,799	78.05	18.44	24.43	6.22	13.35	430
			CATERPILLAR INC. (MACHINE DIVISION)									
	A30CA007	BG-650	ASPHALT PAVER, ASPHALT WINDROW ELEVATOR, WHEEL (ADD ASPHALT PAVER UNIT)	107 HP D-off		$109,833	30.71	6.47	8.57	2.18	7.76	171
			LEE-BOY									
	A30LD001	3000	ASPHALT PAVER, ASPHALT FORCE FEED LOADER, 30" WIDE BELT, WINDROW OR LOOSE, WHEEL (ADD ASPHALT PAVER UNIT)	110 HP D-off		$126,069	34.47	7.33	9.66	2.50	7.98	198
			ROADTEC									
	A30RT001	SB-1500	ASPHALT PAVER, ASPHALT MATERIAL TRANSFER VEHICLE, 15 TON HOPPER, 600 TPH, 65" WIDE CONVEYOR, WHEEL	275 HP D-off		$450,049	112.23	26.91	35.98	8.92	19.95	600
	A30RT002	SB-2500B	ASPHALT PAVER, ASPHALT MATERIAL TRANSFER VEHICLE, 25 TON HOPPER, 1000 TPH, 69" WIDE CONVEYOR, WHEEL	275 HP D-off		$472,176	116.68	28.21	37.70	9.36	19.95	790

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A35	**ASPHALT PAVING KETTLES**												
	SUBCATEGORY 0.00		**ASPHALT PAVING KETTLES**										
			AEROIL PRODUCTS COMPANY, INC.										
	A35AE001	KEB-80KE	ASPHALT/PAVEMENT KETTLE, 80 GAL, TRAILER W/PUMP & HOSE	5 HP	G		$9,163	5.79	0.77	1.15	0.19	0.84	9
	A35AE002	KEB-115KE	ASPHALT/PAVEMENT KETTLE, 115 GAL, TRAILER W/PUMP & HOSE	5 HP	G		$9,512	6.61	0.80	1.20	0.20	0.84	11
	A35AE003	KEB-170KE	ASPHALT/PAVEMENT KETTLE, 170 GAL, TRAILER W/PUMP & HOSE	5 HP	G		$10,238	7.20	0.87	1.32	0.21	0.84	15
	A35AE004	KEB-260KE	ASPHALT/PAVEMENT KETTLE, 260 GAL, TRAILER W/PUMP & HOSE	5 HP	G		$11,240	8.43	0.97	1.45	0.24	0.84	19
	A35AE005	KEB-360KE	ASPHALT/PAVEMENT KETTLE, 360 GAL, TRAILER W/PUMP & HOSE	5 HP	G		$12,344	10.94	1.04	1.56	0.26	0.84	20
A40	**ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS**												
	SUBCATEGORY 0.00		**ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS**										
			CATERPILLAR INC. (MACHINE DIVISION)										
	A40CA008	PM-465	ASPHALT COLD PLANER, 75" W X 10" D, CRAWLER (ADD CUTTING TEETH COSTS)	500 HP	D-off		$431,620	215.54	37.82	57.55	9.04	52.65	505
	A40CA009	PM-565B	ASPHALT COLD PLANER, 83" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	625 HP	D-off		$606,257	293.53	53.11	80.83	12.69	65.81	735
			CMI CORPORATION - BID-WELL DIVISION										
	A40CW001	PR-1050	ASPHALT PROFILER, MAX 12.5' W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP	D-off		$763,464	371.20	66.89	101.80	15.99	84.24	1,205
			ROADTEC										
	A40RT001	RX-20B	ASPHALT COLD PLANER, 40" W X 10" D, WHEEL (ADD CUTTING TEETH COSTS)	230 HP	D-off		$295,575	133.02	25.15	37.92	6.19	24.22	324
	A40RT002	RX-25	ASPHALT COLD PLANER, 52" W X 8" D, CRAWLER (ADD CUTTING TEETH COSTS)	250 HP	D-off		$385,558	169.12	33.78	51.41	8.07	26.33	420

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A40			*ROADTEC (continued)*									
	A40RT003	RX-45B	ASPHALT COLD PLANER, 78" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	460 HP D-off		$473,739	226.00	41.51	63.17	9.92	48.44	617
	A40RT004	RX-60B	ASPHALT COLD PLANER, 86" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP D-off		$605,751	314.19	53.07	80.77	12.68	84.24	918
	A40RT005	RX-68B	ASPHALT COLD PLANER, 98" W X 12" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP D-off		$644,302	328.13	56.45	85.91	13.49	84.24	830
	A40RT006	RX-70B	ASPHALT COLD PLANER, 150" W X 8" D, CRAWLER (ADD CUTTING TEETH COSTS)	800 HP D-off		$713,587	353.16	62.51	95.14	14.94	84.24	920
A45	**ASPHALT RECYCLERS & SEALERS**											
	SUBCATEGORY 0.00		**ASPHALT RECYCLERS & SEALERS**									
			AEROIL PRODUCTS COMPANY, INC.									
	A45AE001	HEPR-52V	ASPHALT RESURFACER-PATCHER, 4' WIDE, 17.3 SF, 600,000 BTU INFRA-RED HEATER, TRAILER MTD			$8,200	10.37	0.82	1.27	0.18	0.00	11
	A45AE002	HEPR-96V	ASPHALT RESURFACER-PATCHER, 8' WIDE, 32.0 SF, 1,200,000 BTU INFRA-RED HEATER, TRAILER MTD			$15,903	20.63	1.59	2.50	0.34	0.00	16
	A45AE003	HEPR-120V	ASPHALT RESURFACER-PATCHER, 10' WIDE, 40.0 SF, 1,420,000 BTU INFRA-RED HEATER, TRAILER MTD			$18,704	24.39	1.88	2.95	0.40	0.00	17
			ROSCO, A LeeBoy COMPANY									
	A45RS001	RA-2000	ASPHALT SPRAY PATCHER, 300 GAL, ARTICULATED BOOM - 17' R, TRAILER MTD	80 HP D-off		$42,864	24.31	4.30	6.76	0.92	5.80	60
	A45RS002	RA-300	ASPHALT SPRAY PATCHER, 400 GAL, TELESCOPIC BOOM - 22' EXT, TRUCK MTD	210 HP D-on		$137,360	73.39	13.94	21.98	2.95	15.23	179
			SEALMASTER, INC.									
	A45SE003	SP300 DUAL	ASPHALT SEALCOATER, 320 GAL, 75 GPM, 108" WIDE DUAL SPRAY, SQUEEGEE, SELF PROPELLED	30 HP D-off		$34,754	18.48	3.49	5.48	0.75	2.18	43

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
A45			***SEALMASTER, INC. (continued)***										
	A45SE004	TR-1000	ASPHALT SEALCOATER, 1000 GAL, 50 GPM, 88" WIDE SPRAY BAR, TRAILER MTD	13 HP	G		$23,203	12.22	2.28	3.55	0.50	2.18	52
B10	**BATCH PLANTS, ASPHALT & CONCRETE**												
	SUBCATEGORY 0.20		**CONCRETE**										
			CEMEN TECH										
	B10CC007	MCD2-50HT	BATCH PLANT, CONCRETE DISPENSER, 15 CY/HR MAX, W/TWO AGGREGATE BINS, 2 CY/ 1 CY CEMENT BIN/ 7' LONG SLOPING 8" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 2 CY LOAD, TRAILER MTD	18 HP	G		$42,767	18.18	2.95	4.16	0.87	3.02	80
	B10CC008	MCD5-100H	BATCH PLANT, CONCRETE DISPENSER, 30 CY/HR MAX, W/TWO AGGREGATE BINS, 5.5 CY/ 1.9 CY CEMENT BIN/ 9' LONG SLOPING 9" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 5 CY LOAD, TRUCK MTD	163 HP	G		$115,786	66.79	7.92	11.15	2.34	27.31	132
	B10CC009	MCD8-100H	BATCH PLANT, CONCRETE DISPENSER, 30 CY/HR MAX, W/TWO AGGREGATE BINS, 9.3 CY/ 3.1 CY CEMENT BIN/ 9' LONG SLOPING 12" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 8 CY LOAD, TRUCK MTD	200 HP	G		$130,974	78.45	8.85	12.39	2.65	33.51	194
	B10CC010	MCD8-150H	BATCH PLANT, CONCRETE DISPENSER, 60 CY/HR MAX, W/TWO AGGREGATE BINS, 9.6 CY/ 3.1 CY CEMENT BIN/ 9' LONG SLOPING 12" DIA SCREW WET MIXER/DELIVERER/ 250 GAL WATER TANK/ & METERING PUMP, 8 CY LOAD, TRUCK MTD	200 HP	G		$141,092	81.49	9.56	13.40	2.86	33.51	204
	B10CC012	210 BBL	BATCH PLANT, SILO, CEMENT, 830 CF, 210 BARREL (BATCH PLANT ATTACHMENT)	18 HP	G		$19,483	9.59	1.37	1.95	0.39	3.02	35
	B10CC011	HS-240	BATCH PLANT, SILO, CEMENT, 38 TON HORIZONTAL 240 BARREL (BATCH PLANT ATTACHMENT)	20 HP	E		$19,919	10.49	1.40	1.99	0.40	2.63	45
	B10CC013	300 BBL	BATCH PLANT, SILO, CEMENT, 1,200 CF, 300 BARRL (BATCH PLANT ATTACHMENT)	18 HP	G		$23,617	10.78	1.66	2.36	0.48	3.02	48

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B10			***CEMEN TECH (continued)***										
	B10CC014		BATCH PLANT, CEMENT LOADING AUGER, 6" DIA, 19' LONG (BATCH PLANT ATTACHMENT)	5 HP	E		$6,090	3.19	0.43	0.61	0.12	0.66	10
			CON-E-CO										
	B10CL025	MTM 12	BATCH PLANT, CONCRETE MIXER, 12 CY, TILT DRUM, 11.67' DIA, REMOVABLE AXLES, TRAILER MTD (ADD DRY BATCH PLANT)	200 HP	E		$247,030	107.97	17.25	24.50	5.00	26.26	130
	B10CL021	VERSA-PLANT 10	BATCH PLANT, CONCRETE AGGREGATE DRY, 40CY/HR, 10 CY AGGREGATE BATCHER, W/30" X 40' LOADING CONVEYOR, SCALES & WATER METER INCLUDED, TRAILER MTD (ADD 5 KW GENERATOR, WATER TANK & WET BATCHER)	35 HP	E		$78,310	28.37	5.34	7.50	1.59	4.60	190
	B10CL015	PLP MODEL 12	BATCH PLANT, CONCRETE AGGREGATE DRY, 200 CY/HR, W/TWO AGGREGATE BINS, 81 TON, 60 CY/ 36"X20' CONVEYOR/ 3 BIN 12 CY AGGREGATE BATCHER/ 30"X33.5' LOADING CONVEYOR/ & 475 BARREL, 88 TON CEMENT SILO, TRAILER MTD (ADD 110 KW GENERATOR)	30 HP	E		$146,157	48.41	9.98	14.04	2.96	3.94	380
	B10CL005	LO-PRO 10	BATCH PLANT, CONCRETE AGGREGATE DRY, 275 CY/HR, W/TWO AGGREGATE BINS, 65 TON, 50 CY/ 36"X20' CONVEYOR/ 10 CY AGGREGATE BATCHER/ 36"X36' LOADING CONVEYOR/ & 215 BARREL, 35 TON CEMENT SILO, TRAILER MTD (ADD 140 KW GENERATOR)	120 HP	E		$269,819	99.99	18.65	26.37	5.46	15.76	410
	B10CL006	LO-PRO 12	BATCH PLANT, CONCRETE AGGREGATE DRY, 275 CY/HR, W/TWO AGGREGATE BINS, 65 TON, 50 CY/ 36"X20' CONVEYOR/ 12 CY AGGREGATE BATCHER/ 36"X36' LOADING CONVEYOR/ & 215 BARREL, 35 TON CEMENT SILO, TRAILER MTD (ADD 140 KW GENERATOR)	120 HP	E		$274,388	101.24	18.96	26.82	5.55	15.76	426
	B10CL027		BATCH PLANT, CEMENT SILO, 1,910 CF, 475 BARREL (BATCH PLANT ATTACHMENT)				$20,809	5.73	1.46	2.08	0.42	0.00	144
	B10CL042		BATCH PLANT, SCREW CONVEYOR, 6" DIA, 10' LONG (CEMENT SILO ATTACHMENT)	5 HP	E		$2,922	1.81	0.21	0.29	0.06	0.66	5
	B10CL045		BATCH PLANT, SCREW CONVEYOR, 6" DIA, 20' LONG (CEMENT SILO ATTACHMENT)	10 HP	E		$3,809	3.05	0.27	0.38	0.08	1.31	11

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B10			***CON-E-CO (continued)***										
	B10CL036		BATCH PLANT, SCREW CONVEYOR, 9" DIA, 10' LONG (CEMENT SILO ATTACHMENT)	8 HP	E		$3,250	2.50	0.24	0.33	0.07	1.05	9
	B10CL040		BATCH PLANT, SCREW CONVEYOR, 9" DIA, 20' LONG (CEMENT SILO ATTACHMENT)	20 HP	E		$4,549	5.26	0.32	0.45	0.09	2.63	16
	B10CL032		BATCH PLANT, SCREW CONVEYOR, 12" DIA, 10' LONG (CEMENT SILO ATTACHMENT)	10 HP	E		$3,877	3.07	0.28	0.39	0.08	1.31	10
	B10CL034		BATCH PLANT, SCREW CONVEYOR, 12" DIA, 20' LONG (CEMENT SILO ATTACHMENT)	20 HP	E		$7,755	6.15	0.55	0.78	0.16	2.63	20
			EXCEL MACHINERY LTD.										
	B10EM001	EXCEL PORT-A-PUG	BATCH PLANT, CONCRETE CONTINUOUS PUGG MILL MIXER, 400 CY/HR MAX, W/12 CY AGGREGATE STORAGE BIN/ 48"X18' METERING CONVEYOR/ CEMENT SILO, 44 TON, 34.8 CY/ 30" X 37' CONVEYOR, TRAILER MTD (ADD 200 KW GENERATOR)	25 HP	G		$362,432	106.54	24.96	35.23	7.34	4.19	590
	B10EM002		BATCH PLANT, CEMENT SILO, 45 TON HORIZONTAL 300 BARREL (BATCH PLANT ATTACHMENT)	10 HP	E		$23,135	9.14	1.47	1.99	0.47	1.31	45
	B10EM003		BATCH PLANT, CEMENT SILO, 2,200 CF (BARREL CAP 550 MAX / 450 MIN) W/DRIVE-THRU TYPE UNDERSTRUCTURE (BATCH PLANT ATTACHMENT)				$27,547	7.59	1.94	2.75	0.56	0.00	222
			ROSS COMPANY										
	B10RC007	BANDIT 5	BATCH PLANT, CONCRETE AGGREGATE DRY, 100 CY/HR, W/TWO AGGREGATE BINS, 65 TON, 48 CY/ 36" X 20' CONVEYOR/ 2 BIN 5 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 257 BARREL, 48 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	15 HP	E		$132,981	41.86	9.13	12.88	2.69	1.97	3,000
	B10RC032	RUSTLER III	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/TWO AGGREGATE BINS, 28 TON, 21 CY/ 2 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 400 BARREL, 75 TON CEMENT SILO, TRAILER MTD (ADD 130 KW GENERATOR)	50 HP	E		$189,707	66.30	12.97	18.25	3.84	6.57	536

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			REGION 12										
B10			***ROSS COMPANY (continued)***										
	B10RC006	RUSTLER II	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE BINS, 71 TON, 52 CY/ 36" X 20' CONVEYOR/ 3 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ 375 BARREL, 70 TON CEMENT SILO, TRAILER MTD (ADD 130KW GENERATOR)	46 HP	E		$176,775	61.82	12.06	16.96	3.58	5.97	489
	B10RC008	BANDIT 12 BTR	BATCH PLANT, CONCRETE AGGREGATE DRY, 200 CY/HR, W/THREE AGGREGATE BINS, 65 TON, 48 CY/ 36" X 20' CONVEYOR/ 3 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 720 BARREL, 134 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	30 HP	E		$147,681	48.93	10.17	14.35	2.99	3.94	250
	B10RC027		BATCH PLANT, CONCRETE MIXER, 4.5 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	40 HP	E		$131,190	46.16	9.22	13.12	2.66	5.25	34
	B10RC028		BATCH PLANT, CONCRETE MIXER, 6.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	60 HP	E		$147,460	54.91	10.37	14.75	2.99	7.88	45
	B10RC029		BATCH PLANT, CONCRETE MIXER, 8.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	80 HP	E		$166,785	64.48	11.72	16.68	3.38	10.50	60
	B10RC030		BATCH PLANT, CONCRETE MIXER, 10.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	100 HP	E		$181,851	73.90	12.78	18.19	3.68	13.13	75
	B10RC031		BATCH PLANT, CONCRETE MIXER, 12.0 CY, TILT DRUM, SKID MTD (ADD DRY BATCH PLANT)	120 HP	E		$192,140	80.98	13.50	19.21	3.89	15.76	90
	B10RC016	MOBILE MIXER	BATCH PLANT, CONCRETE MIXER, 4.5CY, TILT DRUM TYPE, REVOLVING LIFT STAND, TRAILER MTD (ADD DRY BATCH PLANT & POWER)	75 HP	E		$215,503	79.41	14.78	20.83	4.36	9.85	420
			STEPHENS MANUFACTURING CO., INC.										
	B10SN031	DC-12	BATCH PLANT, CONCRETE AGGREGATE DRY, 100 CY/HR, W/2 BIN 12 CY BATCHER/ 24" X 41' LOADING CONVEYOR/ & 311 BARREL, 58 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	15 HP	E		$48,706	17.24	3.05	4.12	0.99	1.97	340

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B10			***STEPHENS MANUFACTURING CO., INC. (continued)***										
	B10SN033	DC COLT	BATCH PLANT, CONCRETE AGGREGATE DRY, 100 CY/HR, W/2 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 311 BARREL, 58 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	30 HP	E		$90,937	32.04	6.02	8.35	1.84	3.94	340
	B10SN032	MUSTANG 5	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE STORAGE BINS, 29.6 TON, 40 CY/ 3 BIN 5 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 251 BARREL, 47 TON CEMENT SILO, TRAILER MTD (ADD 115 KW GENERATOR)	30 HP	E		$107,348	36.80	7.16	9.97	2.17	3.94	420
	B10SN034	STALLION	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE BIN STORAGE, 65 TON, 48 CY/ 2 BIN 10 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 374 BARREL, 70 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	20 HP	E		$104,424	33.75	6.95	9.68	2.11	2.63	360
	B10SN036	MUSTANG 10	BATCH PLANT, CONCRETE AGGREGATE DRY, 160 CY/HR, W/3 AGGREGATE BIN STORAGE, 75 TON, 55 CY/ 2 BIN 10 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 351 BARREL, 65 TON CEMENT SILO, TRAILER MTD (ADD 115 KW GENERATOR)	45 HP	E		$139,679	48.73	9.44	13.21	2.83	5.91	500
	B10SN035	THOROUGH-BRED	BATCH PLANT, CONCRETE AGGREGATE DRY, 180 CY/HR, W/4 AGGREGATE BIN STORAGE, 65 TON, 48 CY/ 2 BIN 12 CY BATCHER/ 30" X 33.5' LOADING CONVEYOR/ & 374 BARREL, 70 TON CEMENT SILO, TRAILER MTD (ADD 100 KW GENERATOR)	20 HP	E		$114,532	36.69	7.67	10.69	2.32	2.63	300
	SUBCATEGORY 0.30		**PUGMILL**										
			KOLBERG - PIONEER, INC										
	B10KB001	52 PORTABLE PUGMILL	BATCH PLANT, PUGMILL, CONTINUOUS MIXER, 48" DIA TWIN SHAFT X 6' LONG, W/9 CY FEEDER HOPPER/ 36" X 11.5' BELT FEEDER/ 30" X 27' CONVEYOR/ WATER OR ASPHALT PUMP & METER (ADD 95 KW GENERATOR & ANY MATERIAL FEEDS)	95 HP	E		$131,409	48.38	7.72	10.23	2.60	12.47	190

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER		VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
B10			***KOLBERG - PIONEER, INC (continued)***											
	B10KB002	52S PORTABLE PUGMILL	BATCH PLANT, PUGMILL, CONTINUOUS MIXER, 48" DIA TWIN SHAFT X 8' LONG, W/13 CY FEEDER HOPPER/ TWO - 36" X 11.5' BELT FEEDERS/ 2ND 11 CY FEEDER HOPPER/ 30" X 27' CONVEYOR/ WATER OR ASPHALT PUMP & METER (ADD 220 KW GENERATOR & ANY MATERIAL FEEDS)	220 HP	E			$232,300	96.02	13.74	18.27	4.60	28.89	230
B15	**BROOMS, STREET SWEEPERS & FLUSHERS**													
	SUBCATEGORY 0.00		**BROOMS, STREET SWEEPERS & FLUSHERS**											
			BROCE MANUFACTURING COMPANY											
	B15BM001	RJ-350	BROOM, 8' BROOM PATH, PAVEMENT, SELF PROPELLED	80 HP	D-off			$27,927	13.71	2.10	3.14	0.53	5.80	45
			ELGIN SWEEPER COMPANY											
	B15EC002	PELICAN P	STREET SWEEPER, 10' BROOM PATH, 3.5 CY HOPPER, 180 GAL WATER TANK, SELF PROPELLED	100 HP	D-off			$110,949	36.67	8.26	12.29	2.11	7.25	128
	B15EC001	EAGLE F	STREET SWEEPER, 10' BROOM PATH, 4.5 CY HOPPER, 280 GAL WATER TANK, DUAL ENGINE, SELF PROPELLED	49 HP	D-off	170 HP	D-on	$167,123	49.70	12.40	18.46	3.17	5.94	150
			FIVE STAR MANUFACTURING CO/ELGIN SWEEPER											
	B15FS001	BROOM BEAR FL42H	STREET SWEEPER, 12' BROOM PATH, 4.5 CY HOPPER, 350 GAL WATER TANK, SELF PROPELLED	230 HP	D-off			$157,844	59.29	11.86	17.71	3.00	16.68	213
			M-B COMPANIES, INC.											
	B15MB001	MT	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, PTO DRIVE (ADD 45-100 HP TRACTOR)					$6,822	1.85	0.52	0.77	0.13	0.00	10
	B15MB002	HT	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, PTO DRIVE (ADD 45-100 HP TRACTOR)					$8,736	2.38	0.66	0.98	0.17	0.00	12

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B15			***M-B COMPANIES, INC. (continued)***									
	B15MB003	53T	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, TOWED, HYDRAULIC (ADD TOWING UNIT)			$12,552	3.43	0.92	1.36	0.24	0.00	18
	B15MB004	53MH	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 152 GAL WATER TANK, TOWED (ADD TOWING UNIT)	18 HP G		$14,426	7.03	1.06	1.57	0.27	3.02	17
			ROSCO, A LeeBoy COMPANY									
	B15RS005	CHALLENGER II	STREET SWEEPER, 7' BROOM PATH, W/SPRINKLER AND 125 GAL WATER TANK, SELF PROPELLED	80 HP D-off		$46,373	18.46	3.45	5.13	0.88	5.80	75
	B15RS001	RB-48	STREET SWEEPER, 8' BROOM PATH, W/SPRINKLER AND 150 GAL WATER TANK, SELF PROPELLED	80 HP D-off		$35,584	15.70	2.65	3.94	0.68	5.80	52
			TERRAMITE CONSTRUCTION EQUIPMENT									
	B15TB001	TSS36	STREET SWEEPER, 6' BROOM PATH, W/SPRINKLER AND 2 - 50 GAL WATER TANKS, SELF PROPELLED	37 HP D-off		$22,024	8.68	1.64	2.43	0.42	2.68	34
	B15TB002	TSS38	STREET SWEEPER, 8' BROOM PATH, W/SPRINKLER AND 180 GAL WATER TANK, SELF PROPELLED	37 HP D-off		$22,159	8.72	1.65	2.45	0.42	2.68	34
			WALDON, INC.									
	B15WD001	SWEEPMASTER 250	BROOM, 7.5' BROOM PATH, PAVEMENT, SELF PROPELLED	80 HP D-off		$26,988	13.49	2.00	2.97	0.51	5.80	48
	B15WD002	SWEEPMASTER 250	BROOM, 90" BROOM PATH, PAVEMENT, W/SPRINKLER AND 180 GAL WATER TANK, SELF PROPELLED	80 HP D-off		$28,333	13.85	2.11	3.13	0.54	5.80	48
B20	**BRUSH CHIPPERS**											
	SUBCATEGORY 0.00		**BRUSH CHIPPERS**									
			BANDIT INDUSTRIES, INC.									
	B20BN001	65	BRUSH CHIPPER, 6" CAPACITY, DISC TYPE, TRAILER MTD	25 HP G		$10,112	7.56	0.75	1.12	0.19	4.19	20

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B20			***BANDIT INDUSTRIES, INC. (continued)***										
	B20BN002	90W-XP	BRUSH CHIPPER, 9" CAPACITY, DISC TYPE, TRAILER MTD	37 HP	G		$16,098	11.50	1.20	1.78	0.31	6.20	32
	B20BN003	200XP	BRUSH CHIPPER, 12" CAPACITY, DISC TYPE, TRAILER MTD	71 HP	G		$20,617	19.27	1.53	2.28	0.39	11.90	58
	B20BN004	254	BRUSH CHIPPER, 14" CAPACITY, DISC TYPE, TRAILER MTD	125 HP	D-off		$31,129	18.71	2.32	3.46	0.59	9.07	78
	B20BN005	1290	BRUSH CHIPPER, 12" CAPACITY, DRUM TYPE, TRAILER MTD	70 HP	G		$17,671	18.28	1.32	1.95	0.34	11.73	44
	B20BN006	1690	BRUSH CHIPPER, 16" CAPACITY, DRUM TYPE, TRAILER MTD	119 HP	G		$19,523	28.21	1.45	2.16	0.37	19.94	44
	B20BN007	1890	BRUSH CHIPPER, 18" CAPACITY, DRUM TYPE, TRAILER MTD	125 HP	D-off		$35,582	19.90	2.61	3.85	0.68	9.07	78
			MORBARK, INC.										
	B20MQ001	2070XL	BRUSH CHIPPER, 10" CAPACITY, DRUM TYPE, TRAILER MTD	86 HP	D-off		$19,852	12.45	1.49	2.21	0.38	6.24	40
	B20MQ003	13	BRUSH CHIPPER, 13" CAPACITY, DRUM TYPE, TRAILER MTD	125 HP	D-off		$27,820	17.81	2.08	3.09	0.53	9.07	68
	B20MQ004	2400XL	BRUSH CHIPPER, 18" CAPACITY, DRUM TYPE, TRAILER MTD	125 HP	D-off		$32,745	19.14	2.41	3.58	0.62	9.07	94
	B20MQ005	22 RXL	BRUSH CHIPPER, LOG CHIPPER, 22" CAPACITY, DISC TYPE, TRAILER MTD	650 HP	D-off		$343,233	147.97	25.62	38.21	6.51	47.15	700
B25	**BUCKETS, CLAMSHELL**												
	SUBCATEGORY 0.00		**BUCKETS, CLAMSHELL**										
			HAWCO MANUFACTURING COMPANY, LLC										
	B25HB001	HD-050	BUCKET, CLAMSHELL, 0.5 CY, HEAVY DUTY/DIGGING				$16,712	4.03	1.26	1.88	0.32	0.00	30
	B25HB003	HD-100	BUCKET, CLAMSHELL, 1.0 CY, HEAVY DUTY/DIGGING				$26,845	6.46	2.02	3.02	0.51	0.00	48
	B25HB005	HD-150	BUCKET, CLAMSHELL, 1.5 CY, HEAVY DUTY/DIGGING				$34,920	8.41	2.63	3.93	0.66	0.00	66
	B25HB007	HD-200	BUCKET, CLAMSHELL, 2.0 CY, HEAVY DUTY/DIGGING				$41,224	9.92	3.10	4.64	0.78	0.00	78

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B25			***HAWCO MANUFACTURING COMPANY, LLC (continued)***									
	B25HB008	HD-250	BUCKET, CLAMSHELL, 2.5 CY, HEAVY DUTY/DIGGING			$48,053	11.57	3.62	5.41	0.91	0.00	91
	B25HB009	HD-300	BUCKET, CLAMSHELL, 3.0 CY, HEAVY DUTY/DIGGING			$52,976	12.76	3.99	5.96	1.01	0.00	103
	B25HB010	HD-350	BUCKET, CLAMSHELL, 3.5 CY, HEAVY DUTY/DIGGING			$56,095	13.50	4.22	6.31	1.06	0.00	131
	B25HB011	HD-400	BUCKET, CLAMSHELL, 4.0 CY, HEAVY DUTY/DIGGING			$57,756	13.91	4.35	6.50	1.10	0.00	145
	B25HB012	HD-450	BUCKET, CLAMSHELL, 4.5 CY, HEAVY DUTY/DIGGING			$61,252	14.74	4.61	6.89	1.16	0.00	165
	B25HB013	HD-500	BUCKET, CLAMSHELL, 5.0 CY, HEAVY DUTY/DIGGING			$63,295	15.23	4.76	7.12	1.20	0.00	173
	B25HB014	HD-550	BUCKET, CLAMSHELL, 5.5 CY, HEAVY DUTY/DIGGING			$66,087	15.90	4.97	7.43	1.25	0.00	178
	B25HB015	HD-600	BUCKET, CLAMSHELL, 6.0 CY, HEAVY DUTY/DIGGING			$68,670	16.53	5.17	7.73	1.30	0.00	199
			NO SPECIFIC MANUFACTURER									
	B25XX001	1/4SSN	BUCKET, CLAMSHELL, 0.2 CY, SQUARE NOSE, STANDARD			$7,558	1.82	0.57	0.85	0.14	0.00	14
	B25XX002	1/2SSN	BUCKET, CLAMSHELL, 0.5 CY, SQUARE NOSE, STANDARD			$11,285	2.71	0.85	1.27	0.21	0.00	27
	B25XX003	3/4SSN	BUCKET, CLAMSHELL, 0.7 CY, SQUARE NOSE, STANDARD			$13,938	3.35	1.05	1.57	0.26	0.00	35
	B25XX004	1SSN	BUCKET, CLAMSHELL, 1.0 CY, SQUARE NOSE, STANDARD			$15,328	3.68	1.15	1.72	0.29	0.00	43
	B25XX005	1-1/4SSN	BUCKET, CLAMSHELL, 1.2 CY, SQUARE NOSE, STANDARD			$17,843	4.30	1.35	2.01	0.34	0.00	49
	B25XX006	1-1/2SSN	BUCKET, CLAMSHELL, 1.5 CY, SQUARE NOSE, STANDARD			$20,203	4.86	1.52	2.27	0.38	0.00	64
	B25XX007	1-3/4SSN	BUCKET, CLAMSHELL, 1.7 CY, SQUARE NOSE, STANDARD			$21,556	5.19	1.63	2.43	0.41	0.00	67
	B25XX008	2SSN	BUCKET, CLAMSHELL, 2.0 CY, SQUARE NOSE, STANDARD			$25,159	6.06	1.90	2.83	0.48	0.00	76
	B25XX009	2-1/2SSN	BUCKET, CLAMSHELL, 2.5 CY, SQUARE NOSE, STANDARD			$26,590	6.39	2.00	2.99	0.50	0.00	92
	B25XX010	3SSN	BUCKET, CLAMSHELL, 3.0 CY, SQUARE NOSE, STANDARD			$28,319	6.82	2.14	3.19	0.54	0.00	98

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B25			*NO SPECIFIC MANUFACTURER (continued)*									
	B25XX011	3-1/2SSN	BUCKET, CLAMSHELL, 3.5 CY, SQUARE NOSE, STANDARD			$29,753	7.16	2.24	3.35	0.56	0.00	108
	B25XX012	4SSN	BUCKET, CLAMSHELL, 4.0 CY, SQUARE NOSE, STANDARD			$33,211	8.00	2.50	3.74	0.63	0.00	119
	B25XX013	4-1/2SSN	BUCKET, CLAMSHELL, 4.5 CY, SQUARE NOSE, STANDARD			$44,490	10.71	3.35	5.01	0.84	0.00	145
	B25XX014	5SSN	BUCKET, CLAMSHELL, 5.0 CY, SQUARE NOSE, STANDARD			$47,470	11.43	3.57	5.34	0.90	0.00	154
	B25XX015	5-1/2SSN	BUCKET, CLAMSHELL, 5.5 CY, SQUARE NOSE, STANDARD			$56,976	13.71	4.29	6.41	1.08	0.00	158
	B25XX016	6SSN	BUCKET, CLAMSHELL, 6.0 CY, SQUARE NOSE, STANDARD			$57,542	13.85	4.33	6.47	1.09	0.00	166
	B25XX017	6-1/2SSN	BUCKET, CLAMSHELL, 6.5 CY, SQUARE NOSE, STANDARD			$62,105	14.95	4.68	6.99	1.18	0.00	177
	B25XX018	7SSN	BUCKET, CLAMSHELL, 7.0 CY, SQUARE NOSE, STANDARD			$59,163	14.24	4.45	6.66	1.12	0.00	185
	B25XX019	7-1/2SSN	BUCKET, CLAMSHELL, 7.5 CY, SQUARE NOSE, STANDARD			$65,999	15.88	4.96	7.42	1.25	0.00	192
B30	**BUCKETS, CONCRETE**											
	SUBCATEGORY 0.10		**GENERAL PURPOSE, MANUAL TRIP**									
			GAR-BRO MANUFACTURING COMPANY									
	B30GB018	413-G	BUCKET, CONCRETE, GENERAL PURPOSE, 0.5 CY			$2,989	0.73	0.23	0.35	0.05	0.00	4
	B30GB001	433-G	BUCKET, CONCRETE, GENERAL PURPOSE, 1.0 CY			$3,778	0.93	0.30	0.45	0.07	0.00	6
	B30GB002	442-G	BUCKET, CONCRETE, GENERAL PURPOSE, 1.5 CY			$4,940	1.22	0.39	0.59	0.09	0.00	8
	B30GB003	462-G	BUCKET, CONCRETE, GENERAL PURPOSE, 2.0 CY			$6,092	1.50	0.47	0.72	0.11	0.00	10
	B30GB004	493-G	BUCKET, CONCRETE, GENERAL PURPOSE, 3.0 CY			$8,806	2.17	0.69	1.05	0.16	0.00	14
	B30GB005	4123-G	BUCKET, CONCRETE, GENERAL PURPOSE, 4.0 CY			$10,525	2.59	0.82	1.25	0.19	0.00	18

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.20		**LAYDOWN**									
			GAR-BRO MANUFACTURING COMPANY									
	B30GB006	425-A	BUCKET, CONCRETE, LAYDOWN, 1.0 CY, HEAVY DUTY AIR GATE			$19,348	4.92	1.51	2.30	0.36	0.00	26
	B30GB007	465-A	BUCKET, CONCRETE, LAYDOWN, 2.0 CY, HEAVY DUTY AIR GATE			$20,910	5.31	1.62	2.48	0.38	0.00	32
	B30GB008	495-A	BUCKET, CONCRETE, LAYDOWN, 3.0 CY, HEAVY DUTY AIR GATE			$23,345	5.93	1.82	2.77	0.43	0.00	40
	B30GB009	4125-A	BUCKET, CONCRETE, LAYDOWN, 4.0 CY, HEAVY DUTY AIR GATE			$26,698	6.78	2.08	3.17	0.49	0.00	51
	B30GB010	4155-A	BUCKET, CONCRETE, LAYDOWN, 5.0 CY, HEAVY DUTY AIR GATE			$33,130	8.42	2.58	3.93	0.61	0.00	73
	SUBCATEGORY 0.30		**LOWBOY**									
			CAMLEVER									
	B30CR001	LB-375	BUCKET, CONCRETE, LOWBOY, 0.38 CY, AIR GATE			$4,195	1.10	0.33	0.50	0.08	0.00	2
	B30CR002	LB-050	BUCKET, CONCRETE, LOWBOY, 0.5 CY, AIR GATE			$4,497	1.17	0.35	0.53	0.08	0.00	2
	B30CR003	LB-075	BUCKET, CONCRETE, LOWBOY, 0.75 CY, AIR GATE			$4,864	1.28	0.38	0.58	0.09	0.00	3
	B30CR004	LB-100	BUCKET, CONCRETE, LOWBOY, 1.0 CY, AIR GATE			$5,051	1.32	0.39	0.60	0.09	0.00	5
	B30CR005	LB-150	BUCKET, CONCRETE, LOWBOY, 1.5 CY, AIR GATE			$5,949	1.56	0.47	0.71	0.11	0.00	6
	B30CR009	LXB-150	BUCKET, CONCRETE, LOWBOY, 1.5 CY, AIR GATE			$6,256	1.63	0.48	0.74	0.11	0.00	6
	B30CR006	LB-200	BUCKET, CONCRETE, LOWBOY, 2.0 CY, AIR GATE			$7,008	1.84	0.55	0.83	0.13	0.00	8
	B30CR010	LXB-200	BUCKET, CONCRETE, LOWBOY, 2.0 CY, AIR GATE			$7,286	1.91	0.57	0.87	0.13	0.00	6
	B30CR011	LXB-300	BUCKET, CONCRETE, LOWBOY, 3.0 CY, AIR GATE			$8,622	2.26	0.67	1.02	0.16	0.00	6
	B30CR012	LXB-400	BUCKET, CONCRETE, LOWBOY, 4.0 CY, AIR GATE			$9,947	2.60	0.77	1.18	0.18	0.00	6

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.40		**LOW SLUMP**									
			GAR-BRO MANUFACTURING COMPANY									
	B30GB011	440-A	BUCKET, CONCRETE, LOW SLUMP, 1.0 CY, AIR GATE			$15,303	4.01	1.19	1.82	0.28	0.00	20
	B30GB012	450-A	BUCKET, CONCRETE, LOW SLUMP, 1.5 CY, AIR GATE			$15,872	4.15	1.23	1.88	0.29	0.00	21
	B30GB013	460-A	BUCKET, CONCRETE, LOW SLUMP, 2.0 CY, AIR GATE			$16,487	4.32	1.28	1.96	0.30	0.00	24
	B30GB014	493-A	BUCKET, CONCRETE, LOW SLUMP, 3.0 CY, AIR GATE			$21,881	5.73	1.70	2.60	0.40	0.00	49
	B30GB015	4139-A	BUCKET, CONCRETE, LOW SLUMP, 4.0 CY, AIR GATE			$22,684	5.94	1.77	2.69	0.42	0.00	52
	B30GB016	4200-A	BUCKET, CONCRETE, LOW SLUMP, 6.0 CY, AIR GATE			$32,641	8.56	2.54	3.88	0.60	0.00	78
	B30GB017	4250-A	BUCKET, CONCRETE, LOW SLUMP, 8.0 CY, AIR GATE			$39,224	10.28	3.05	4.66	0.72	0.00	90
B35	**BUCKETS, DRAGLINE**											
	SUBCATEGORY 0.10		**LIGHT WEIGHT**									
			HENDRIX MANUFACTURING COMPANY, INC.									
	B35HE001	LS	BUCKET, DRAGLINE, 0.75 CY, LIGHT WEIGHT/PERFORATED			$7,757	1.87	0.59	0.87	0.15	0.00	15
	B35HE002	LS	BUCKET, DRAGLINE, 1.0 CY, LIGHT WEIGHT/PERFORATED			$9,096	2.18	0.68	1.02	0.17	0.00	18
	B35HE003	LS	BUCKET, DRAGLINE, 1.5 CY, LIGHT WEIGHT/PERFORATED			$12,892	3.10	0.97	1.45	0.24	0.00	26
	B35HE004	LS	BUCKET, DRAGLINE, 2.0 CY, LIGHT WEIGHT/PERFORATED			$15,570	3.75	1.18	1.75	0.30	0.00	32
	B35HE005	LS	BUCKET, DRAGLINE, 2.5 CY, LIGHT WEIGHT/PERFORATED			$17,834	4.30	1.35	2.01	0.34	0.00	37
	B35HE006	LS	BUCKET, DRAGLINE, 3.0 CY, LIGHT WEIGHT/PERFORATED			$22,237	5.35	1.67	2.50	0.42	0.00	46
	B35HE007	LS	BUCKET, DRAGLINE, 3.5 CY, LIGHT WEIGHT/PERFORATED			$24,184	5.82	1.82	2.72	0.46	0.00	50

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			REGION 12									
B35			***HENDRIX MANUFACTURING COMPANY, INC. (continued)***									
	B35HE008	LS	BUCKET, DRAGLINE, 4.0 CY, LIGHT WEIGHT/PERFORATED			$31,748	7.64	2.39	3.57	0.60	0.00	65
	B35HE009	LS	BUCKET, DRAGLINE, 4.5 CY, LIGHT WEIGHT/PERFORATED			$33,308	8.02	2.51	3.75	0.63	0.00	69
	B35HE010	LS	BUCKET, DRAGLINE, 5.0 CY, LIGHT WEIGHT/PERFORATED			$38,582	9.29	2.90	4.34	0.73	0.00	85
	B35HE011	LS	BUCKET, DRAGLINE, 6.0 CY, LIGHT WEIGHT/PERFORATED			$41,771	10.05	3.14	4.70	0.79	0.00	92
	B35HE012	LS	BUCKET, DRAGLINE, 7.0 CY, LIGHT WEIGHT/PERFORATED			$45,691	11.00	3.44	5.14	0.87	0.00	101
	B35HE013	LS	BUCKET, DRAGLINE, 8.0 CY, LIGHT WEIGHT/PERFORATED			$50,633	12.19	3.81	5.70	0.96	0.00	112
	B35HE014	LS	BUCKET, DRAGLINE, 9.0 CY, LIGHT WEIGHT/PERFORATED			$57,936	13.95	4.36	6.52	1.10	0.00	128
	B35HE015	LS	BUCKET, DRAGLINE, 10.0 CY, LIGHT WEIGHT/PERFORATED			$62,974	15.15	4.73	7.08	1.19	0.00	139
	B35HE016	LS	BUCKET, DRAGLINE, 12.0 CY, LIGHT WEIGHT/PERFORATED			$75,219	18.11	5.66	8.46	1.43	0.00	166
	B35HE017	LS	BUCKET, DRAGLINE, 14.0 CY, LIGHT WEIGHT/PERFORATED			$86,538	20.83	6.51	9.74	1.64	0.00	191
			SAUERMAN									
	B35SA001	SC-1050-K	BUCKET, DRAGLINE, 1.0 CY, CRESCENT			$17,035	4.10	1.28	1.92	0.32	0.00	15
	B35SA003	SC-1070-K	BUCKET, DRAGLINE, 2.0 CY, CRESCENT			$25,569	6.16	1.93	2.88	0.49	0.00	25
	B35SA004	SC-1090-K	BUCKET, DRAGLINE, 3.0 CY, CRESCENT			$35,084	8.45	2.65	3.95	0.67	0.00	36
	B35SA005	SC-1100-K	BUCKET, DRAGLINE, 4.0 CY, CRESCENT			$44,020	10.60	3.32	4.95	0.84	0.00	49
	B35SA006	SC-1110-K	BUCKET, DRAGLINE, 5.0 CY, CRESCENT			$51,891	12.49	3.90	5.84	0.98	0.00	58
	B35SA007	SC-1120-K	BUCKET, DRAGLINE, 6.0 CY, CRESCENT			$58,415	14.06	4.40	6.57	1.11	0.00	68
	B35SA008	SC-1130-K	BUCKET, DRAGLINE, 8.0 CY, CRESCENT			$69,027	16.62	5.20	7.77	1.31	0.00	88
	B35SA009	SC-1140-K	BUCKET, DRAGLINE, 10.0 CY,CRESCENT			$87,522	21.07	6.59	9.85	1.66	0.00	106
	B35SA010	SC-1150-K	BUCKET, DRAGLINE, 12.0 CY,CRESCENT			$106,875	25.73	8.04	12.02	2.03	0.00	132
			NO SPECIFIC MANUFACTURER									
	B35XX001	6-1/2L	BUCKET, DRAGLINE, 6.5 CY, LIGHT WEIGHT			$27,915	6.72	2.10	3.14	0.53	0.00	94

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B35			***NO SPECIFIC MANUFACTURER (continued)***									
	B35XX002	7-1/2L	BUCKET, DRAGLINE, 7.5 CY, LIGHT WEIGHT			$31,395	7.56	2.37	3.53	0.60	0.00	106
	B35XX003	8-1/2L	BUCKET, DRAGLINE, 8.5 CY, LIGHT WEIGHT			$34,698	8.35	2.61	3.90	0.66	0.00	116
	B35XX004	9-1/2L	BUCKET, DRAGLINE, 9.5 CY, LIGHT WEIGHT			$39,568	9.52	2.98	4.45	0.75	0.00	132
	B35XX005	11L	BUCKET, DRAGLINE, 11.0 CY, LIGHT WEIGHT			$44,422	10.69	3.34	5.00	0.84	0.00	148
	B35XX006	13L	BUCKET, DRAGLINE, 13.0 CY, LIGHT WEIGHT			$54,594	13.14	4.11	6.14	1.04	0.00	178
	SUBCATEGORY 0.20		**MEDIUM WEIGHT**									
			HENDRIX MANUFACTURING COMPANY, INC.									
	B35HE018	TS	BUCKET, DRAGLINE, 0.75 CY, MEDIUM WEIGHT			$8,392	1.81	0.58	0.84	0.16	0.00	17
	B35HE019	TS	BUCKET, DRAGLINE, 1.0 CY, MEDIUM WEIGHT			$9,607	2.07	0.66	0.96	0.18	0.00	19
	B35HE020	TS	BUCKET, DRAGLINE, 1.5 CY, MEDIUM WEIGHT			$13,720	2.96	0.95	1.37	0.26	0.00	28
	B35HE021	TS	BUCKET, DRAGLINE, 2.0 CY, MEDIUM WEIGHT			$17,323	3.73	1.19	1.73	0.32	0.00	36
	B35HE022	TS	BUCKET, DRAGLINE, 2.5 CY, MEDIUM WEIGHT			$19,973	4.31	1.37	2.00	0.37	0.00	41
	B35HE023	TS	BUCKET, DRAGLINE, 3.0 CY, MEDIUM WEIGHT			$23,866	5.16	1.65	2.39	0.45	0.00	49
	B35HE024	TS	BUCKET, DRAGLINE, 3.5 CY, MEDIUM WEIGHT			$26,323	5.68	1.81	2.63	0.49	0.00	54
	B35HE025	TS	BUCKET, DRAGLINE, 4.0 CY, MEDIUM WEIGHT			$34,108	7.36	2.35	3.41	0.64	0.00	70
	B35HE026	TS	BUCKET, DRAGLINE, 4.5 CY, MEDIUM WEIGHT			$34,840	7.51	2.39	3.48	0.65	0.00	72
	B35HE027	TS	BUCKET, DRAGLINE, 5.0 CY, MEDIUM WEIGHT			$42,282	9.13	2.91	4.23	0.79	0.00	93
	B35HE028	TS	BUCKET, DRAGLINE, 6.0 CY, MEDIUM WEIGHT			$43,717	9.44	3.01	4.37	0.82	0.00	96
	B35HE029	TS	BUCKET, DRAGLINE, 7.0 CY, MEDIUM WEIGHT			$50,412	10.88	3.46	5.04	0.94	0.00	111

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B35			***HENDRIX MANUFACTURING COMPANY, INC. (continued)***									
	B35HE030	TS	BUCKET, DRAGLINE, 8.0 CY, MEDIUM WEIGHT			$55,547	11.98	3.82	5.55	1.04	0.00	122
	B35HE031	TS	BUCKET, DRAGLINE, 9.0 CY, MEDIUM WEIGHT			$67,599	14.59	4.65	6.76	1.27	0.00	149
	B35HE032	TS	BUCKET, DRAGLINE, 10.0 CY, MEDIUM WEIGHT			$72,030	15.54	4.95	7.20	1.35	0.00	159
	B35HE033	TS	BUCKET, DRAGLINE, 12.0 CY, MEDIUM WEIGHT			$91,770	19.81	6.31	9.18	1.72	0.00	202
	B35HE034	TS	BUCKET, DRAGLINE, 14.0 CY, MEDIUM WEIGHT			$102,261	22.08	7.04	10.23	1.92	0.00	225
			NO SPECIFIC MANUFACTURER									
	B35XX007	6-1/2M	BUCKET, DRAGLINE, 6.5 CY, MEDIUM WEIGHT			$31,482	6.80	2.17	3.15	0.59	0.00	101
	B35XX008	7-1/2M	BUCKET, DRAGLINE, 7.5 CY, MEDIUM WEIGHT			$36,015	7.77	2.47	3.60	0.67	0.00	117
	B35XX009	8-1/2M	BUCKET, DRAGLINE, 8.5 CY, MEDIUM WEIGHT			$38,780	8.38	2.67	3.88	0.73	0.00	126
	B35XX010	9-1/2M	BUCKET, DRAGLINE, 9.5 CY, MEDIUM WEIGHT			$46,164	9.96	3.17	4.62	0.86	0.00	152
	B35XX011	11M	BUCKET, DRAGLINE, 11.0 CY, MEDIUM WEIGHT			$51,061	11.03	3.52	5.11	0.96	0.00	169
	B35XX012	13M	BUCKET, DRAGLINE, 13.0 CY, MEDIUM WEIGHT			$64,666	13.96	4.45	6.47	1.21	0.00	211
	SUBCATEGORY 0.30		**HEAVY WEIGHT**									
			HENDRIX MANUFACTURING COMPANY, INC.									
	B35HE035	MH-S	BUCKET, DRAGLINE, 2.75 CY, HEAVY WEIGHT			$31,376	6.14	1.99	2.82	0.58	0.00	69
	B35HE036	MH-S	BUCKET, DRAGLINE, 3.0 CY, HEAVY WEIGHT			$32,740	6.42	2.09	2.95	0.61	0.00	72
	B35HE037	MH-S	BUCKET, DRAGLINE, 3.5 CY, HEAVY WEIGHT			$36,829	7.21	2.34	3.31	0.68	0.00	81
	B35HE038	MH-S	BUCKET, DRAGLINE, 4.0 CY, HEAVY WEIGHT			$50,018	9.80	3.18	4.50	0.93	0.00	110

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B35			***HENDRIX MANUFACTURING COMPANY, INC. (continued)***									
	B35HE039	MH-S	BUCKET, DRAGLINE, 4.5 CY, HEAVY WEIGHT			$55,933	10.96	3.56	5.03	1.04	0.00	123
	B35HE040	MH-S	BUCKET, DRAGLINE, 5.0 CY, HEAVY WEIGHT			$57,744	11.32	3.67	5.20	1.07	0.00	127
	B35HE041	MH-S	BUCKET, DRAGLINE, 6.0 CY, HEAVY WEIGHT			$61,838	12.12	3.94	5.57	1.15	0.00	136
	B35HE042	MH-S	BUCKET, DRAGLINE, 7.0 CY, HEAVY WEIGHT			$79,574	15.58	5.05	7.16	1.47	0.00	175
	B35HE043	MH-S	BUCKET, DRAGLINE, 8.0 CY, HEAVY WEIGHT			$81,847	16.04	5.21	7.37	1.52	0.00	180
	B35HE044	MH-S	BUCKET, DRAGLINE, 9.0 CY, HEAVY WEIGHT			$106,403	20.85	6.76	9.58	1.97	0.00	234
	B35HE045	MH-S	BUCKET, DRAGLINE, 10.0 CY, HEAVY WEIGHT			$110,456	21.64	7.02	9.94	2.05	0.00	243
	B35HE046	MH-S	BUCKET, DRAGLINE, 12.0 CY, HEAVY WEIGHT			$131,363	25.73	8.34	11.82	2.43	0.00	289
	B35HE047	MH-S	BUCKET, DRAGLINE, 14.0 CY, HEAVY WEIGHT			$139,175	27.27	8.85	12.53	2.58	0.00	309
			NO SPECIFIC MANUFACTURER									
	B35XX013	3/4H	BUCKET, DRAGLINE, 0.75 CY, HEAVY WEIGHT			$7,864	1.55	0.51	0.71	0.15	0.00	20
	B35XX014	1H	BUCKET, DRAGLINE, 1.0 CY, HEAVY WEIGHT			$8,841	1.73	0.56	0.80	0.16	0.00	23
	B35XX015	1-1/2H	BUCKET, DRAGLINE, 1.5 CY, HEAVY WEIGHT			$13,157	2.57	0.83	1.18	0.24	0.00	35
	B35XX016	2H	BUCKET, DRAGLINE, 2.0 CY, HEAVY WEIGHT			$15,048	2.95	0.96	1.35	0.28	0.00	42
	B35XX017	2-1/2H	BUCKET, DRAGLINE, 2.5 CY, HEAVY WEIGHT			$16,466	3.22	1.04	1.48	0.30	0.00	48
	B35XX018	5-1/2H	BUCKET, DRAGLINE, 5.5 CY, HEAVY WEIGHT			$35,346	6.92	2.24	3.18	0.65	0.00	113
	B35XX019	6-1/2H	BUCKET, DRAGLINE, 6.5 CY, HEAVY WEIGHT			$37,794	7.40	2.40	3.40	0.70	0.00	125
	B35XX020	7-1/2H	BUCKET, DRAGLINE, 7.5 CY, HEAVY WEIGHT			$42,565	8.34	2.71	3.83	0.79	0.00	135
	B35XX021	8-1/2H	BUCKET, DRAGLINE, 8.5 CY, HEAVY WEIGHT			$46,506	9.11	2.96	4.19	0.86	0.00	159

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
B35			*NO SPECIFIC MANUFACTURER (continued)*									
	B35XX022	9-1/2H	BUCKET, DRAGLINE, 9.5 CY, HEAVY WEIGHT			$58,418	11.45	3.71	5.26	1.08	0.00	181
	B35XX023	11H	BUCKET, DRAGLINE, 11.0 CY, HEAVY WEIGHT			$62,647	12.28	3.98	5.64	1.16	0.00	198
C05	**CHAIN SAWS**											
	SUBCATEGORY 0.00		**CHAIN SAWS**									
			OLYMPYK CHAIN SAWS									
	C05OL001	941	CHAIN SAW, 16"-18" BAR	2 HP G		$315	1.25	0.08	0.14	0.01	0.53	1
	C05OL002	962	CHAIN SAW, 16"-24" BAR	5 HP G		$490	2.23	0.12	0.22	0.01	1.08	1
	C05OL003	970	CHAIN SAW, 16"-36" BAR	5 HP G		$592	2.59	0.16	0.27	0.02	1.20	1
	C05OL004	980	CHAIN SAW, 16"-42" BAR	6 HP G		$644	2.82	0.17	0.29	0.02	1.31	1
C10	**COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER**											
	SUBCATEGORY 0.10		**COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES**									
			COMPACTION AMERICA									
	C10BO001	BT 60/4	COMPACTOR, RAMMER, TAMPER, 11" X 13.2" SHOE, 2,630 LBS IMPACT	3 HP G		$4,086	3.36	0.58	0.97	0.09	0.69	2
	C10BO003	BP 10/36-2	COMPACTOR, VIBROPLATE, 14.2" X 22" PLATE, 2,250 LBS IMPACT	4 HP G		$2,242	2.44	0.32	0.53	0.05	0.92	2
	C10BO004	BP 18/45-2	COMPACTOR, VIBROPLATE, 17.7" X 22" PLATE, 4,050 LBS IMPACT	6 HP G		$2,488	3.10	0.35	0.59	0.05	1.38	2
	C10BO007	BPR 30/38D-3	COMPACTOR, VIBROPLATE, 22.8" X 31.1" PLATE, REVERSIBLE, 7,200 LBS IMPACT	4 HP D-off		$10,114	6.83	1.41	2.40	0.21	0.40	5
	C10BO008	BPR 55/65D	COMPACTOR, VIBROPLATE, 25.6" X 35.4" PLATE, REVERSIBLE, 11,250 LBS IMPACT	9 HP D-off		$13,810	9.74	1.93	3.28	0.29	0.91	10
			WACKER CORPORATION									
	C10WC003	DS 70	COMPACTOR, RAMMER, 13" X 13" SHOE, 3,550 LBS IMPACT	4 HP D-off		$4,793	3.47	0.67	1.14	0.10	0.40	2
	C10WC006	BPU 2540 A	COMPACTOR, VIBROPLATE, 19.5" X 25.5" PLATE, REVERSIBLE, 5,600 LBS IMPACT	8 HP G		$4,500	4.89	0.63	1.07	0.09	1.84	3

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
C10			***WACKER CORPORATION (continued)***										
	C10WC007	BPU 3545A	COMPACTOR, VIBROPLATE, 23.5" X 35.5" PLATE, REVERSIBLE, 7,550 LBS IMPACT	9 HP	G		$8,993	7.99	1.26	2.14	0.19	2.07	7
	C10WC008	DPU 4045H	COMPACTOR, VIBROPLATE, 24" X 35.5" PLATE, REVERSIBLE, 9,000 LBS IMPACT	9 HP	D-off		$12,781	9.09	1.79	3.04	0.27	0.91	7
	C10WC015	DPU 7060	COMPACTOR, VIBROPLATE, 25.5" X 42" PLATE, REVERSIBLE, 15,600 LBS IMPACT	14 HP	D-off		$22,854	16.02	3.20	5.43	0.48	1.41	15
	SUBCATEGORY 0.20		**ROLLERS, VIBRATORY**										
			COMPACTION AMERICA										
	C10BO009	BW 55E	COMPACTOR, ROLLER, VIBRATORY, 22"W X 15.7"DIA, SINGLE SMOOTH DRUM, WALK BEHIND, 2,273 LBS IMPACT	4 HP	G		$5,773	4.54	0.75	1.23	0.13	0.92	3
	C10BO015	BW65S-2	COMPACTOR, ROLLER, VIBRATORY, 25.6"W X 15.7"DIA, DOUBLE SMOOTH DRUMS, WALK BEHIND, 2,655 LBS IMPACT	5 HP	D-off		$13,358	8.68	1.71	2.84	0.29	0.50	13
	C10BO011	BW 65H	COMPACTOR, ROLLER, VIBRATORY, 25.6"W X 15.7"DIA, DOUBLE SMOOTH DRUMS, WALK BEHIND, 1,980 LBS IMPACT	8 HP	D-off		$15,558	10.35	2.00	3.31	0.34	0.80	16
	C10BO016	BW75S-2	COMPACTOR, ROLLER, VIBRATORY, 29.5"W X 18.9"DIA, DOUBLE SMOOTH DRUMS, WALK BEHIND, 4,455 LBS IMPACT	9 HP	D-off		$19,515	12.88	2.51	4.15	0.43	0.91	20
	C10BO013	BMP851	COMPACTOR, TRENCH ROLLER, VIBRATORY, 33.5"W X 19.7"DIA, DOUBLE TAMPING FOOT DRUMS, WALK BEHIND, 18,000 LBS IMPACT	19 HP	D-off		$41,129	27.12	5.27	8.74	0.90	1.91	45
			RAMMAX MACHINERY CO.										
	C10RX001	P23/16FM	COMPACTOR, TRENCH ROLLER, VIBRATORY, 23"W X 14.6"DIA, QUAD PADFOOT DRUMS, WALK BEHIND, 7,875 LBS IMPACT	8 HP	D-off		$26,868	17.23	3.45	5.71	0.59	0.80	16
	C10RX002	P33/24FMR	COMPACTOR, TRENCH ROLLER, VIBRATORY, 33"W X 21.7"DIA, QUAD PADFOOT DRUMS, WALK BEHIND, 15,652 LBS IMPACT	14 HP	D-off		$37,217	24.19	4.77	7.91	0.81	1.41	30
	C10RX003	P47/40KM	COMPACTOR, TRENCH ROLLER, VIBRATORY, 47"W X 22"DIA, QUAD PADFOOT DRUMS, RIDE ON, 21,600 LBS IMPACT	33 HP	D-off		$62,498	41.68	8.01	13.28	1.37	3.32	66

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
			WACKER CORPORATION										
	C10WC010	RSS800A	COMPACTOR, ROLLER, VIBRATORY, 28"W X 22"DIA, SINGLE SMOOTH DRUM, WALK BEHIND, 3,400 LBS IMPACT	11 HP	G		$12,185	10.22	1.57	2.59	0.27	2.53	11
	C10WC017	RD7H	COMPACTOR, ROLLER, VIBRATORY,25.5"W X 16.5"DIA, DOUBLE SMOOTH DRUM, WALK BEHIND, 2,925 LBS IMPACT	9 HP	D-off		$16,203	10.85	2.07	3.44	0.35	0.91	16
	C10WC019	RT 56-SC	COMPACTOR, ROLLER, VIBRATORY, 22"W X 20"DIA, DOUBLE SMOOTH DRUM, WALK BEHIND, 7,000/14,000 LBS IMPACT	20 HP	D-off		$37,667	25.12	4.82	8.00	0.82	2.01	31
	C10WC016	RT 82-SC	COMPACTOR, TRENCH ROLLER, VIBRATORY, 32"W X 20"DIA, DOUBLE TAMPING FOOT DRUMS, WALK BEHIND, 7,000/14,000 LBS IMPACT	20 HP	D-off		$38,204	25.45	4.89	8.12	0.83	2.01	33
C15	**CONCRETE CLEANERS / ABRASIVE BLASTERS**												
	SUBCATEGORY 0.10		**WALK BEHIND**										
			US FILTER/BLASTRAC										
	C15BL001	1-8 & TURBO VAC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 8" PATH (ADD 4 KVA GENERATOR & BLAST MEDIA COST)	2 HP	E		$8,857	5.39	1.09	1.77	0.20	0.28	2
	C15BL003	1-10D & 6-54 DC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 10" PATH (ADD 30 KVA GENERATOR & BLAST MEDIA COST)	10 HP	E		$42,408	25.04	5.19	8.48	0.95	1.41	7
	C15BL004	1-15D & 6-54-DC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 15" PATH (ADD 30 KVA GENERATOR & BLAST MEDIA COST)	15 HP	E		$49,626	30.06	6.08	9.93	1.11	2.12	8
	C15BL005	2-20D & 8-54-DC	CONCRETE BLASTER CLEANING SYSTEM, WALK BEHIND, 20" PATH (ADD 75 KVA GENERATOR & BLAST MEDIA COST)	30 HP	E		$72,744	45.27	8.90	14.55	1.62	4.24	12
			EQUIPMENT DEVELOPMENT CO., INC. (EDCO)										
	C15ED002	CPM-8	CONCRETE GRINDER, WALK BEHIND, TRAFFIC LINE REMOVER, 8" CUTTING PATH	9 HP	G		$4,313	4.02	0.53	0.86	0.10	1.61	2
	C15ED001	TLR-7	CONCRETE GRINDER, WALK BEHIND, TRAFFIC LINE REMOVER, 7" CUTTING WIDTH	11 HP	G		$6,326	5.44	0.78	1.27	0.14	1.97	5

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.20		**TRUCK/TRAILER MOUNTED**									
			US FILTER/BLASTRAC									
	C15BL006	4800	CONCRETE BLASTER, SELF PROPELLED, 48" PATH	350 HP D-off		$7,064	43.52	0.50	0.71	0.14	36.86	255
			NO SPECIFIC MANUFACTURER									
	C15XX001		CONCRETE CLEANER/ABRASIVE BLASTER, TRUCK MOUNTED, GINDER/BLASTER, 4" - 16" CLEANING PATH WIDTH	86 HP D-on	180 HP D-off	$119,592	52.92	8.30	11.76	2.42	19.17	138
C20	**CONCRETE BUGGIES**											
	SUBCATEGORY 0.00		**CONCRETE BUGGIES**									
			WACKER CORPORATION									
	C20WC002	WB 16A	CONCRETE BUGGY, 16 CF BUCKET, 2,500 LBS, WALK & RIDE, 4X2	13 HP G		$10,347	7.08	1.17	1.87	0.23	2.33	13
			NO SPECIFIC MANUFACTURER									
	C20XX001	10G	CONCRETE BUGGY, 10 CF BUCKET, 1,500 LBS	8 HP G		$7,269	4.74	0.82	1.32	0.16	1.43	10
C25	**CONCRETE FINISHERS/SCREEDS/SPREADERS**											
	SUBCATEGORY 0.10		**FINISHERS/TROWELS**									
			ALLEN ENGINEERING CORP.									
	C25AJ015	PRO 900	CONCRETE TROWEL, RIDING, 2 - 36" DIA ROTORS, 8 BLADES	20 HP G		$10,973	8.30	1.12	1.76	0.24	3.58	7
	C25AJ016	PRO 1050	CONCRETE TROWEL, RIDING, 2 - 42" DIA ROTORS, 8 BLADES	20 HP G		$11,514	8.49	1.17	1.84	0.25	3.58	8
	C25AJ018	PRO 1200	CONCRETE TROWEL, RIDING, 2 - 46" DIA ROTORS, 8 BLADES	25 HP G		$13,366	10.23	1.36	2.14	0.29	4.47	10
	C25AJ019	SUPER PRO 400	CONCRETE TROWEL, RIDING, 2 - 46" DIA ROTORS, 8 BLADES	28 HP G		$19,352	13.13	1.97	3.10	0.42	5.01	13

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			STOW MANUFACTURING, INC.										
	C25ST001	SCT36H80	CONCRETE FINISHER, WALK BEHIND, ROTO TROWEL, 36" DIA ROTOR, 4 BLADES	8 HP	G		$2,306	2.52	0.24	0.37	0.05	1.43	3
	C25ST002	SCT46H80	CONCRETE FINISHER, WALK BEHIND, ROTO TROWEL, 46" DIA ROTOR, 4 BLADES	9 HP	G		$2,389	2.76	0.24	0.38	0.05	1.61	3
			WACKER CORPORATION										
	C25WC002	CT48ADP	CONCRETE FINISHER, WALK BEHIND, POWER TROWEL, 48" DIA ROTOR, 4 BLADES	8 HP	G		$2,773	2.69	0.28	0.44	0.06	1.43	3
	SUBCATEGORY 0.20		**VIBRATORY SCREED**										
			ALLEN ENGINEERING CORP.										
	C25AJ003	12HED	CONCRETE, VIBRATORY SCREED, 12.5' WIDE	6 HP	G		$5,841	3.45	0.60	0.93	0.13	1.07	5
	C25AJ001	12 HD	CONCRETE, VIBRATORY SCREED, 20' WIDE	6 HP	G		$4,140	2.80	0.42	0.66	0.09	1.07	4
	C25AJ004	12HED	CONCRETE, VIBRATORY SCREED, 30' WIDE	8 HP	G		$8,363	4.83	0.85	1.34	0.18	1.43	8
	C25AJ005	12HED	CONCRETE, VIBRATORY SCREED, 40' WIDE	11 HP	G		$9,830	6.00	1.00	1.57	0.21	1.97	10
	C25AJ006	12HED	CONCRETE, VIBRATORY SCREED, 50' WIDE	11 HP	G		$11,677	6.71	1.19	1.87	0.25	1.97	12
	C25AJ007	12HED	CONCRETE, VIBRATORY SCREED, 55' WIDE	11 HP	G		$12,423	6.99	1.27	1.99	0.27	1.97	13
	SUBCATEGORY 0.25		**VIBRATORY LASER SCREED**										
			SOMERO ENTERPRISES, INC.										
	C25SV003	S-100	CONCRETE, VIBRATORY LASER SCREED, 8' WIDE X 12' BOOM	30 HP	D-off		$128,150	28.54	8.30	11.09	2.75	2.18	72
	C25SV002	SXP (VERSATILE)	CONCRETE, VIBRATORY LASER SCREED, 8' WIDE X 20' BOOM	65 HP	D-off		$282,201	62.71	18.34	24.56	6.06	4.72	126
	C25SV001	SXP (PRODUCTIVE)	CONCRETE, VIBRATORY LASER SCREED, 12' WIDE X 20' BOOM	65 HP	D-off		$689,820	145.21	44.91	60.18	14.82	4.72	151

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.30		**MATERIAL/TOPPING SPREADERS**									
			ALLEN ENGINEERING CORP.									
	C25AJ008	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 12.5' WIDE	6 HP G		$14,066	3.94	0.92	1.23	0.30	0.92	11
	C25AJ009	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 20' WIDE	6 HP G		$14,941	4.13	0.98	1.31	0.32	0.92	12
	C25AJ010	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 30' WIDE	6 HP G		$15,970	4.33	1.04	1.40	0.34	0.92	13
	C25AJ011	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 40' WIDE	6 HP G		$17,106	4.57	1.12	1.50	0.37	0.92	14
	C25AJ012	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 50' WIDE	6 HP G		$18,160	4.78	1.19	1.59	0.39	0.92	15
	C25AJ013	SP23H	CONCRETE, MATERIAL/TOPPING SPREADER, 60' WIDE	6 HP G		$19,243	4.99	1.25	1.68	0.41	0.92	17
C35	**CONCRETE GUNITERS / SHOTCRETERS**											
	SUBCATEGORY 0.00		**CONCRETE GUNITERS / SHOTCRETERS**									
			AIRPLACO EQUIPMENT CO., INC.									
	C35AF002	C-9A	CONCRETE GUNITER/SHOTCRETER, DRY/SEMI-WET, HOPPER/PUMP/SPRAY, 12 CY/HR, 2" HOSE & 1 GUN (ADD 600 CFM COMPRESSOR)	600 CFM A		$12,777	5.67	0.94	1.34	0.27	0.00	6
	C35AF001	1900 HD NUCRETOR	CONCRETE GUNITER/SHOTCRETER, DRY MIX, 2 - 15 CY/HR, W/2 PRESSURIZED TANKS/ 100' - 2" DIA HOSE (ADD 600 CFM COMPRESSOR)	600 CFM A		$23,783	7.15	1.76	2.52	0.50	0.00	11
	C35AF004	640 Mix Elevator	CONCRETE GUNITER/SHOTCRETER, DRY BATCH MIXER, 13 CY/HR, W/FEEDER, TRAILER MTD (ADD SHOTCRETE MACHINE)	30 HP G		$41,307	20.54	3.07	4.39	0.87	5.79	45
	C35AF005	734 Mix Elevator	CONCRETE GUNITER/SHOTCRETER, DRY BATCH MIXER, W/20 CY/HR ELEVATOR FEEDER/ 45 CF SAND HOPPER/ 4 CF CEMENT HOPPER/ & PREDAMPENING SPRAY BAR, TRAILER MTD (ADD SHOTCRETE MACHINE)	54 HP D-off		$59,891	24.36	4.43	6.33	1.26	4.55	81

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			ALLENTOWN EQUIPMENT									
	C35AL003	GRH-610 ROTARY GUN	CONCRETE GUNITER/SHOTCRETER, ROTARY PUMP, WET/DRY, 1 - 6 CY/HR, W/HOPPER/ 100' - 1.5" DIA HOSE/ & NOZZLE, CART MTD, (ADD 250 - 600 CFM COMPRESSOR)	5 HP E		$12,436	4.82	0.84	1.15	0.26	0.76	11
	C35AL013	AG-15 AUTOMATIC GUN	CONCRETE GUNITER/SHOTCRETER, ROTARY PUMP, WET/DRY, 3 - 15 CY/HR, W/HOPPER/ 100' - 1.5" DIA HOSE/ & NOZZLE (ADD 300 - 900 CFM COMPRESSOR)	900 CFM A		$11,541	3.66	0.81	1.14	0.24	0.00	15
	C35AL008	N-2 PNEUMATIC GUN	CONCRETE GUNITER/SHOTCRETER, DRY MIX, 2 - 8 CY/HR, W/2 PRESSURIZED TANKS/ 100' - 1.5" DIA HOSE/ & NOZZLE (ADD 200 - 900 CFM COMPRESSOR)	900 CFM A		$24,796	7.45	1.85	2.66	0.52	0.00	13
	C35AL002	R-900 BATCH MIX RIG	CONCRETE GUNITER/SHOTCRETER, DRY BATCH MIXER, 10 TON/HR, W/ELEVATOR FEEDER/ 20 CF CEMENT HOPPER/ 8 CF MIXER/ & PREDAMPENING SPRAY BAR, TRAILER MTD (ADD SHOTCRETE MACHINE OR ROTARY PUMP)	26 HP D-off		$34,911	13.43	2.52	3.55	0.74	2.19	47
	C35AL014	POWER CRETER 10	CONCRETE GUNITER/SHOTCRETER, GROUT/MUD JACK/ SHOTCRETE, 10 CY/HR, 400 PSI, W/30 GAL HOPPER/ 74 GAL MIXER, TRAILER MTD (ADD 3" HOSE LINE)	53 HP D-off		$56,489	21.80	4.20	6.01	1.19	4.46	30
			ALIVA LTD.									
	C35AV008	AL 246	CONCRETE GUNITER/SHOTCRETER, DRY/SEMI-WET, 1.4 - 2.3 CY/HR, W/1 GAL HOPPER/ ROTARY PUMP/ 100' - 1.5" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	7 HP E		$24,876	10.80	1.87	2.67	0.53	1.06	9
	C35AV009	AL 252	CONCRETE GUNITER/SHOTCRETER, DRY/SEMI-WET, 5 - 10 CY/HR, W/4.2 GAL HOPPER/ ROTARY PUMP/ 100' - 2.36" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	16 HP E		$30,387	14.46	2.27	3.26	0.64	2.42	18
	C35AV010	AL 262	CONCRETE GUNITER/SHOTCRETER, WET/DRY, 9 - 13 CY/HR, W/4.2 GAL HOPPER/ ROTARY PUMP/ 100' - 2.36" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	26 HP E		$54,724	23.79	4.09	5.86	1.16	3.94	27

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C35			*ALIVA LTD. (continued)*										
	C35AV006	AL 285	CONCRETE GUNITER/SHOTCRETER, WET/DRY, 11 - 27.5 CY/HR, W/6.6 GAL HOPPER/ ROTARY PUMP/ 100' - 2.55" DIA HOSE/ NOZZLE/ & AIR COMPRESSOR	20 HP	E		$83,526	30.67	6.20	8.87	1.76	3.03	33
	C35AV011	AL 302	CONCRETE GUNITER/SHOTCRETER, SHOTCRETE HYDRAULIC SPRAYER ARM, 25.6 ' HIGH (ADD TRUCK OR SMALL TRAILER & SHOTCRETE UNIT)	12 HP	E		$42,496	17.04	3.18	4.55	0.90	1.82	50
	C35AV012	AL 307	CONCRETE GUNITERS / SHOTCRETERS, SHOTCRETE HYDRAULIC SPRAYER ARM, 52.5' HIGH (ADD TRUCK OR SMALL TRAILER & SHOTCRETE UNIT)	20 HP	E		$125,523	43.32	9.38	13.45	2.65	3.03	68
C40	**CONCRETE MIXING UNITS**												
	SUBCATEGORY 0.00		**CONCRETE MIXING UNITS**										
			CEMEN TECH										
	C40CC001	SCD2-50H	CONCRETE MIXERS, STATIONARY CONCRETE DISPENSER, 15 CY/HR, 2 - 4.5 CY MATERIAL CAPACITY	10 HP	E		$23,375	11.13	2.37	3.74	0.50	1.41	23
			MULTIQUIP, INC.										
	C40MU001	WM 70SH8	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 7 CF, TRAILER MTD	8 HP	G		$3,075	2.80	0.30	0.46	0.07	1.43	8
	C40MU002	WM 120SHH	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 12 CF, TRAILER MTD	13 HP	G		$6,212	5.02	0.61	0.96	0.13	2.33	11
	C40MU003	MC 64SH8	CONCRETE MIXERS, MIXER, CONCRETE, 6 CF, TRAILER MTD	8 HP	G		$3,135	2.82	0.31	0.47	0.07	1.43	7
	C40MU004	MC 94SH8	CONCRETE MIXERS, MIXER, CONCRETE, 9 CF, TRAILER MTD	8 HP	G		$3,724	3.04	0.36	0.56	0.08	1.43	8
			ROSS COMPANY										
	C40RC005		CONCRETE MIXERS, STATIONARY MIXER, CONCRETE, 12 CY, TILT DRUM (ADD DRY BATCH PLANT)	120 HP	E		$205,433	109.06	20.85	32.87	4.41	16.97	90

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			STOW MANUFACTURING, INC.										
	C40ST001	CMS44E	CONCRETE MIXERS, MIXER, CONCRETE, 4 CF, TRAILER MTD	1 HP	E		$1,885	1.01	0.18	0.27	0.04	0.07	5
	C40ST002	CMS44H	CONCRETE MIXERS, MIXER, CONCRETE, 4 CF, TRAILER MTD	6 HP	G		$2,042	1.88	0.19	0.29	0.04	0.98	5
	C40ST003	CMS64E	CONCRETE MIXERS, MIXER, CONCRETE, 6 CF, TRAILER MTD	2 HP	E		$2,492	1.61	0.23	0.36	0.05	0.28	7
	C40ST005	CMS94E	CONCRETE MIXERS, MIXER, CONCRETE, 9 CF, TRAILER MTD	2 HP	E		$3,378	1.89	0.32	0.50	0.07	0.21	8
			NO SPECIFIC MANUFACTURER										
	C40XX001	8E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 8 CF, ELECTRIC, PORTABLE	2 HP	E		$3,157	1.85	0.33	0.51	0.07	0.28	7
	C40XX002	8G	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 8 CF, GAS, PORTABLE	7 HP	G		$3,370	2.72	0.34	0.54	0.07	1.25	7
	C40XX003	10E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 10 CF, ELECTRIC, PORTABLE	3 HP	E		$4,795	2.69	0.49	0.77	0.10	0.42	9
	C40XX004	10G	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 10 CF, GAS, PORTABLE	8 HP	G		$4,844	3.48	0.49	0.78	0.10	1.43	10
	C40XX005	12E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 12 CF, ELECTRIC, PORTABLE	5 HP	E		$6,300	3.77	0.65	1.01	0.14	0.71	11
	C40XX006	16E	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 16 CF, ELECTRIC, PORTABLE	5 HP	E		$8,710	4.69	0.89	1.39	0.19	0.71	12
	C40XX007	16G	CONCRETE MIXERS, MIXER, PLASTER/MORTAR, 16 CF, GAS, PORTABLE	9 HP	G		$8,145	4.94	0.82	1.30	0.17	1.61	13

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C45	**CONCRETE PAVING MACHINES**												
	SUBCATEGORY 0.00		**CONCRETE PAVING MACHINES**										
			GOMACO CORPORATION										
	C45GO026	C-450	CONCRETE PAVING MACHINES, CYLINDER FINISHER, SINGLE DRUM, FINISHING WIDTH 9'-137'	36 HP	G		$49,630	25.93	4.35	6.62	1.04	6.95	64
	C45GO027	C-650-F	CONCRETE PAVING MACHINES, CYLINDER FINISHER, DOUBLE DRUM, FINISHING WIDTH 19'-51'	50 HP	D-off		$63,210	27.61	5.54	8.43	1.32	4.21	91
	C45GO028	C-650-S	CONCRETE PAVING MACHINES, CYLINDER FINISHER, DOUBLE DRUM, FINISHING WIDTH 19'-51'	50 HP	D-off		$100,328	41.02	8.79	13.38	2.10	4.21	126
	C45GO029	C-750	CONCRETE PAVING MACHINES, CYLINDER FINISHER, DOUBLE DRUM, FINISHING WIDTH 8'-156'	36 HP	G		$66,792	32.14	5.86	8.91	1.40	6.95	91
	C45GO013	GT-3200	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 3-TRACK, 36" WIDE MOLD/FORM	92 HP	D-off		$114,729	50.23	10.05	15.30	2.40	7.75	130
	C45GO010	COMMANDER II /GT6200	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 2-TRACK, 36" WIDE MOLD/FORM	92 HP	D-off		$138,853	58.95	12.17	18.51	2.91	7.75	200
	C45GO014	GT-3600	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 3-TRACK, 24" WIDE MOLD/FORM	98 HP	D-off		$158,586	66.65	13.89	21.14	3.32	8.26	210
	C45GO011	COMMANDER III/GT6300	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER, 3-TRACK, 36" WIDE MOLD/FORM	185 HP	D-off		$214,065	94.99	18.75	28.54	4.48	15.58	300
	C45GO012	COMMANDER III	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, CRAWLER , 4-TRACK, 36" WIDE MOLD/FORM	169 HP	D-off		$285,335	119.22	24.99	38.04	5.97	14.24	369
	C45GO016	GP-2600	CONCRETE PAVING MACHINES, SLIPFORM PAVER, CRAWLER, 2-TRACK, 24'-32' PAVING WIDTH	230 HP	D-off		$311,076	134.34	27.25	41.48	6.51	19.38	750
	C45GO018	GHP-2800	CONCRETE PAVING MACHINES, SLIPFORM PAVER, CRAWLER, 2-TRACK, 24'-32' PAVING WIDTH	335 HP	D-off		$387,648	172.03	33.97	51.69	8.12	28.22	700

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C45			***GOMACO CORPORATION (continued)***										
	C45GO020	GP-4000	CONCRETE PAVING MACHINES, SLIPFORM PAVER, CRAWLER, 2-TRACK, 12'-50' PAVING WIDTH	450 HP	D-off		$457,923	208.38	40.12	61.06	9.59	37.91	880
	C45GO031	9500	CONCRETE PAVING MACHINES, TRIMMER/PLACER, W/16'-8" TRIMMER HEAD	385 HP	D-off		$375,775	172.49	32.92	50.10	7.87	32.43	729
			MILLER SPREADER CO.										
	C45MJ001	MC 650	CONCRETE PAVING MACHINES, CURB BUILDER, SLIPFORM PAVER, 6.1 CF HOPPER 6" AUGER	15 HP	G		$6,730	5.76	0.59	0.90	0.14	2.90	8
			M-B-W, INC.										
	C45MW002	C101	CONCRETE PAVING MACHINES, CURB ONLY SLIPFORM PAVER, RUBBER TIRED, 12"	26 HP	D-off		$40,265	17.01	3.51	5.33	0.84	2.19	27
	C45MW003	CG200	CONCRETE PAVING MACHINES, CURB/GUTTER SLIPFORM PAVER, RUBBER TIRED, 48"	26 HP	D-off		$51,215	20.95	4.46	6.77	1.07	2.19	34
C55	**CONCRETE PUMPS**												
	SUBCATEGORY 0.00		**CONCRETE PUMPS**										
			MAYCO PUMP - MULTIQUIP INC.										
	C55M3001	C-30HD	CONCRETE PUMP, 25 CY/HR, SINGLE, TRAILER MTD	46 HP	G		$21,114	15.51	1.58	2.35	0.40	8.23	27
	C55M3002	ST-45	CONCRETE PUMP, 45 CY/HR, SINGLE, TRAILER MTD	60 HP	D-off		$49,659	19.65	3.74	5.59	0.94	4.77	42
	C55M3003	ST-70	CONCRETE PUMP, 70 CY/HR, SINGLE, TRAILER MTD	106 HP	D-off		$62,678	27.52	4.72	7.05	1.19	8.43	47
			OLIN ENGINEERING, INC.										
	C55OE006	10 22	CONCRETE PUMP, 22 CY/HR,TRAILER MTD (OPEN LOOP HYDRAULIC SYSTEM)	74 HP	D-off		$44,327	19.35	3.31	4.93	0.84	5.89	44
	C55OE009	20 80	CONCRETE PUMP, 76 CY/HR, TRAILER MTD TANDEM (CLOSED LOOP HYDRAULIC SYSTEM)	127 HP	D-off		$83,569	35.35	6.24	9.30	1.59	10.10	72

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C55			***OLIN ENGINEERING, INC. (continued)***									
	C55OE011	15 95	CONCRETE PUMP, 100 CY/HR, TRAILER MTD TANDEM (OPEN LOOP HYDRAULIC SYSTEM)	181 HP D-off		$77,378	38.43	5.77	8.60	1.47	14.40	70
	C55OE012	20 100	CONCRETE PUMP, 100 CY/HR, TRAILER MTD TANDEM (CLOSED LOOP HYDRAULIC SYSTEM)	181 HP D-off		$98,137	44.39	7.33	10.94	1.86	14.40	81
	C55OE001	4Z 26X	CONCRETE PUMP, PUMP & BOOM, 130 CY/HR, REACH: 72' HORIZONTAL / 85' VERTICAL (ADD 50,000 GVW TRUCK)			$233,258	66.97	17.55	26.24	4.43	0.00	100
	C55OE002	4Z 36X	CONCRETE PUMP, PUMP & BOOM, 182 CY/HR, REACH: 104' HORIZONTAL / 118' VERTICAL (ADD 50,000 GVW TRUCK)			$299,107	85.88	22.51	33.65	5.68	0.00	100
	C55OE003	5RZ 47I	CONCRETE PUMP, PUMP & BOOM, 182 CY/HR, REACH: 134' HORIZONTAL / 152' VERTICAL (ADD 50,000 GVW TRUCK)			$454,751	130.56	34.21	51.16	8.63	0.00	100
			SCHWING AMERICA INC.									
	C55SC001	WP750 D-18X	CONCRETE PUMP, 70 CY/HR, 1,100 PSI, TRAILER MTD	80 HP D-off		$72,677	28.04	5.45	8.14	1.38	6.36	69
	C55SC002	BPA 2000HDD-20R	CONCRETE PUMP, 67 CY/HR, 1,565 PSI, TRAILER MTD	177 HP D-off		$155,251	60.41	11.60	17.30	2.95	14.08	115
	C55SC005	BPL 900/KVM 23	CONCRETE PUMP, 117 CY/HR, 75' BOOM, TRUCK MTD	210 HP D-on		$305,525	106.51	22.73	33.85	5.80	16.71	359
	C55SC006	BPL 900/KVM 28	CONCRETE PUMP, 117 CY/HR, 92' BOOM, TRUCK MTD	210 HP D-on		$384,847	129.28	28.69	42.78	7.30	16.71	470
C60	**CONCRETE SAWS (Add cost for sawblade wear)**											
	SUBCATEGORY 0.00		**CONCRETE SAWS (Add cost for sawblade wear)**									
			CUSHION CUT, INC.									
	C60CQ011	FS 6500/14	CONCRETE SAW, 4.625" DEPTH, SELF PROPELLED, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	65 HP G		$14,628	22.70	1.39	2.19	0.29	14.95	13
	C60CQ002	FS 9B	CONCRETE SAW, 5.625" DEPTH, MANUAL, 16" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	9 HP G		$2,562	3.34	0.24	0.38	0.05	2.07	2

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C60			***CUSHION CUT, INC. (continued)***										
	C60CQ003	FS 13BUC	CONCRETE SAW, 5.625" DEPTH, MANUAL, 16" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	13 HP	G		$2,756	4.47	0.26	0.41	0.05	2.99	2
	C60CQ001	FS 3500/18	CONCRETE SAW, 6.5" DEPTH, SELF-PROPELLED, 18" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	35 HP	G		$11,777	13.69	1.12	1.77	0.23	8.05	10
	C60CQ014	FS 3000/26E	CONCRETE SAW, 10.625" DEPTH, SELF PROPELLED, 26" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	30 HP	E		$14,685	13.85	1.39	2.20	0.29	5.45	13
	C60CQ012	FS 6500/26	CONCRETE SAW, 10.625" DEPTH, SELF PROPELLED, 26" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	65 HP	G		$14,914	22.80	1.41	2.24	0.29	14.95	13
	C60CQ010	FS 3500/30	CONCRETE SAW, 12.125" DEPTH, SELF PROPELLED, 30" BLADE,W/TRANSAXLE (ADD COST FOR SAWBLADE WEAR & WATER)	35 HP	D-off		$11,910	8.64	1.14	1.79	0.24	3.52	10
	C60CQ013	FS 6500/36	CONCRETE SAW, 14.875" DEPTH, SELF PROPELLED, 36" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	65 HP	G		$15,138	22.89	1.44	2.27	0.30	14.95	13
	C60CQ016	FS 8400/36	CONCRETE SAW, 14.875" DEPTH, SELF PROPELLED, 36" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	84 HP	D-off		$24,987	19.37	2.37	3.75	0.49	8.45	20
			FELKER										
	C60FE002	S80/14Z	CONCRETE SAW, 5.00" DEPTH, MANUAL, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	2 HP	G		$1,322	1.03	0.13	0.20	0.03	0.46	1
	C60FE006	ES 1409	CONCRETE SAW, 4.625" DEPTH, WALK BEHIND, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	9 HP	G		$2,759	3.41	0.26	0.41	0.05	2.07	2
	C60FE007	ES 1413	CONCRETE SAW, 4.625" DEPTH, WALK BEHIND, 14" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	13 HP	G		$2,887	4.53	0.28	0.43	0.06	2.99	2
	C60FE009	ECII20H	CONCRETE SAW, 7.50" DEPTH, SELF PROPELLED, 20" BLADE (ADD COST FOR SAWBLADE WEAR & WATER)	20 HP	G		$9,215	8.76	0.87	1.38	0.18	4.60	6

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			BOART LONGYEAR COMPANY									
	C60LY005	FS 13B	CONCRETE SAW, 7.00" DEPTH, WALK BEHIND(ADD COST FOR SAWBLADE WEAR & WATER)	13 HP G		$2,709	4.46	0.26	0.41	0.05	2.99	2
	C60LY001	360-10AP	CONCRETE SAW, RAIL SAW, 15.50" DEPTH, WALL (ADD COMPRESSOR & COST FOR SAWBLADE WEAR & WATER)	10 HP G		$23,397	11.46	2.22	3.51	0.46	2.30	2
	C60LY002	360-35HM	CONCRETE SAW, RAIL SAW, 24.50" DEPTH, WALL(ADD COST FOR SAWBLADE WEAR & WATER)	35 HP G		$34,588	22.30	3.28	5.19	0.68	8.05	2
	C60LY011	WR-400	CONCRETE SAW, WIRE SAW SYSTEM, HEAVY DUTY (ADD COST FOR SAW WIRE WEAR & WATER)	32 HP D-off		$67,000	29.06	6.35	10.05	1.32	3.22	15
C65	**CONCRETE VIBRATORS**											
	SUBCATEGORY 0.00		**CONCRETE VIBRATORS**									
			STOW MANUFACTURING, INC.									
	C65ST007	SV-1 115V	CONCRETE VIBRATOR, 1.375" HEAD, 21' SHAFT (ADD 2KV GENERATOR)	1 HP E		$930	1.13	0.13	0.21	0.02	0.13	1
	C65ST008	SV-2 115V	CONCRETE VIBRATOR, 2.175" HEAD, 21' SHAFT (ADD 2KV GENERATOR)	2 HP E		$971	1.38	0.13	0.22	0.02	0.26	1
	C65ST009	SV-3 115V	CONCRETE VIBRATOR, 2.625" HEAD, 21' SHAFT (ADD 2KV GENERATOR)	3 HP E		$1,149	1.74	0.15	0.26	0.02	0.39	1
	C65ST013	G550HC	CONCRETE VIBRATOR, 2.325" HEAD, 21' SHAFT, W/GAS MOTOR ON CART	6 HP G		$1,937	3.01	0.26	0.44	0.04	0.92	2
			WACKER CORPORATION									
	C65WC005	A 5000	CONCRETE VIBRATOR, 1.75" HEAD, 13' SHAFT, W/GAS MOTOR ON CART	5 HP G		$1,722	2.70	0.24	0.39	0.04	0.84	1
	C65WC004	M 3000	CONCRETE VIBRATOR, 1.75" HEAD, 13' SHAFT, HI-FREQ INTERNAL (ADD 2KV GENERATOR)	3 HP E		$1,200	1.94	0.17	0.27	0.03	0.39	1
	C65WC003	IREN 57	CONCRETE VIBRATOR, 2.50" HEAD, 16.5' SHAFT, HI-FREQ INTERNAL (ADD 2KV GENERATOR)	2 HP E		$1,413	1.96	0.19	0.32	0.03	0.26	1

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C75	**CRANES, HYDRAULIC, SELF-PROPELLED**												
	SUBCATEGORY 0.00		**CRANES, HYDRAULIC, SELF-PROPELLED**										
			BRODERSON MANUFACTURING CORPORATION										
	C75BD007	IC-20-1F	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 2.5 TON, 15' BOOM, 4X2	38 HP	G		$54,423	16.73	2.65	3.27	1.01	7.34	63
	C75BD008	IC-35-2C	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 4.0 TON, 19.2' BOOM, 4X2	42 HP	G		$72,283	20.32	3.53	4.36	1.35	8.11	78
	C75BD004	IC-35-2C	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 4.0 TON, 19' BOOM, 4X2, NON-ROTATING OPERATOR'S CAB	42 HP	G		$75,250	20.84	3.66	4.51	1.40	8.11	79
	C75BD009	IC-80-3G	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 8.5 TON, 30' BOOM, 4X2	69 HP	G		$98,566	30.55	4.77	5.86	1.84	13.33	172
	C75BD005	IC-80-1G	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 9.0 TON, 20' BOOM, 4X2, NON-ROTATING OPERATOR'S CAB	69 HP	G		$95,376	30.07	4.62	5.67	1.78	13.33	163
	C75BD006	IC-200-3F	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 15.0 TON, 50' BOOM, 4X2, NON-ROTATING OPERATOR'S CAB	110 HP	G		$139,684	46.13	6.74	8.27	2.60	21.24	308
	C75BD010	IC-250-3A	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 18.0 TON, 50' BOOM, 4X4	85 HP	D-off		$165,286	33.74	7.99	9.82	3.08	7.16	384
	C75BD011	RT-300-2B	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 15.0 TON, 60' BOOM, 4X4, 20'0" OFFSET	130 HP	D-off		$218,211	47.06	10.57	12.99	4.07	10.95	473
			GROVE CRANES										
	C75GV021	YB4410	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 10 TON, 30' BOOM, 4X4, NON-ROTATING OPERATOR'S CAB	62 HP	G		$109,805	30.71	5.32	6.54	2.05	11.97	173
	C75GV022	YB4415XT	CRANES, HYDRAULIC, SELF-PROPELLED, YARD, 15 TON, 52' BOOM, 4X4, NON-ROTATING OPERATOR'S CAB	110 HP	D-off		$136,867	31.91	6.60	8.09	2.55	9.27	313
	C75GV028	RT525E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 25 TON, 75' BOOM, 4X4X4	152 HP	D-off		$255,436	55.62	12.32	15.11	4.76	12.80	500
	C75GV023	RT530E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 30 TON, 95' BOOM, 4X4	152 HP	D-off		$267,417	62.75	12.60	15.21	4.99	12.80	580

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C75			*GROVE CRANES (continued)*									
	C75GV024	RT640E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 40 TON, 105' BOOM 4X4	173 HP D-off		$401,723	85.01	19.17	23.36	7.49	14.57	650
	C75GV019	RT750E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 50 TON, 110' BOOM, 4X4	240 HP D-off		$458,191	104.24	21.66	26.23	8.54	20.22	876
	C75GV014	RT760	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 60 TON, 110' BOOM, 4X4, W/HOOK BLOCK & BALL	240 HP D-off		$458,458	104.28	21.67	26.24	8.55	20.22	909
	C75GV025	RT875C	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 70 TON, 110' BOOM 4X4	250 HP D-off		$727,982	145.04	34.88	42.61	13.57	21.06	1,091
	C75GV020	RT875 BXL	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 90 TON, 138' BOOM, 4X4	250 HP D-off		$732,321	146.48	35.09	42.87	13.65	21.06	1,119
	C75GV016	RT9130E	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 100 TON, 160' BOOM, 4X4, W/HOOK BLOCK & BALL	300 HP D-off		$1,043,154	198.14	50.33	61.75	19.45	25.27	1,364
			PETTIBONE MICHIGAN LLC									
	C75PB001	36MK	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 18 TON, 64.1' BOOM, 4X4X4	127 HP D-off		$336,860	64.83	16.23	19.90	6.28	10.70	492
	C75PB002	40RS	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 20 TON, 64.1' BOOM, 4X4X4	185 HP D-off		$424,293	83.57	20.52	25.21	7.91	15.58	496
			TADANO AMERICA CORPORATION									
	C75TD003	TR-300XL-4	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 30 TON, 112' BOOM, 4X4	180 HP D-off		$341,021	72.26	16.48	20.23	6.36	15.16	537
	C75TD007	TR-500XL-4	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 50 TON, 175' BOOM, 4X4	247 HP D-off		$640,667	124.95	30.70	37.52	11.94	20.81	882
	C75TD008	TR-650XL-3	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 65 TON, 180' BOOM, 4X4	247 HP D-off		$594,225	123.79	28.43	34.70	11.08	20.81	945

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			TEREX CORPORATION									
	C75TE001	RT230	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 30 TON, 94' BOOM, 4X4	130 HP D-off		$321,242	62.95	15.58	19.18	5.99	10.95	563
	C75TE002	RT335/40	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 40 TON, 94' BOOM, 4X4	152 HP D-off		$440,856	84.08	21.37	26.29	8.22	12.80	634
	C75TE004	RT160	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 60 TON, 115' BOOM, 4X4	215 HP D-off		$510,324	100.01	24.11	29.19	9.51	18.11	905
	C75TE005	RT175	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 75 TON, 126' BOOM, 4X4	260 HP D-off		$691,823	131.69	33.01	40.21	12.90	21.90	982
	C75TE006	RT190	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 90 TON, 124' BOOM, 4X4	260 HP D-off		$748,241	140.19	35.77	43.63	13.95	21.90	1,106
	C75TE007	RT1100	CRANES, HYDRAULIC, SELF-PROPELLED, ROUGH TERRAIN, 100 TON, 149' BOOM, 4X4	260 HP D-off		$857,920	164.09	41.39	50.80	15.99	21.90	1,230
C80	**CRANES, HYDRAULIC, TRUCK MOUNTED**											
	SUBCATEGORY 0.01		**UNDER 26 TON**									
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C80LB005	ATC-822	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 22 TON, 70' BOOM, 4X4	190 HP D-off		$295,559	56.87	14.28	17.54	5.51	13.78	392
			TEREX CORPORATION									
	C80TE005	T 220	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 20 TON, 94' BOOM, 6X4X2	242 HP D-off		$271,888	58.19	13.10	16.06	5.07	17.55	472
	C80TE006	T 225	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 25 TON, 94' BOOM, 6X4X2	242 HP D-off		$271,888	58.19	13.10	16.06	5.07	17.55	472
	SUBCATEGORY 0.02		**26 TON THRU 65 TON**									
			GROVE CRANES									
	C80GV025	TMS-500E	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 95' BOOM, 6X4	300 HP D-off		$405,139	76.59	18.12	21.26	7.49	21.76	540

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
C80			*GROVE CRANES (continued)*										
	C80GV027	TMS640	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 105' BOOM, 8X4X4	250 HP	D-off		$508,588	86.47	22.67	26.54	9.40	18.14	743
	C80GV006	TMS-700E	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X4	400 HP	D-off		$619,225	111.99	27.74	32.58	11.45	29.02	771
	C80GV029	TMS750E	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X4X4	400 HP	D-off		$618,706	112.95	27.59	32.30	11.44	29.02	947
	C80GV028	AT700D	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X8X8	400 HP	D-off		$649,429	116.84	28.98	33.94	12.01	29.02	856
	C80GV026	GMK 3050	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 55 TON, 125' BOOM, 8X4	348 HP	D-off		$610,451	107.29	27.27	31.95	11.29	25.24	745
	C80GV030	TMS760E	CRANES, HYDRAULIC, TRUCK MTD, 60 TON, 110' BOOM, 8X4X4	400 HP	D-off		$619,763	113.09	27.64	32.36	11.46	29.02	949
			LINK-BELT CONSTRUCTION EQUIPMENT COMPANY										
	C80LI009	HTC-8640	CRANES, HYDRAULIC, TRUCK MTD, 40 TON, 105' BOOM, 6X4X2	350 HP	D-off		$388,698	79.15	17.32	20.26	7.19	25.39	575
	C80LI010	HTC-8650 II	CRANES, HYDRAULIC, TRUCK MTD, 50 TON, 110' BOOM, 8X4X4	315 HP	D-off		$444,782	83.77	19.79	23.13	8.22	22.85	780
	C80LI011	HTC-8660	CRANES, HYDRAULIC, TRUCK MTD, 60 TON, 110' BOOM, 8X4X4	365 HP	D-off		$498,967	95.03	22.20	25.94	9.23	26.48	831
			TEREX CORPORATION										
	C80TE001	T230	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 30 TON, 94' BOOM, 6X4	250 HP	D-off		$402,815	72.57	17.99	21.07	7.45	18.14	506
	C80TE002	T335/40	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 40 TON, 94' BOOM, 6X4	250 HP	D-off		$327,508	63.15	14.59	17.05	6.06	18.14	493
	C80TE003	T 500	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 50 TON, 110' BOOM, 8X4	370 HP	D-off		$428,929	86.46	19.06	22.25	7.93	26.84	806
	C80TE007	T 560	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 60 TON, 110' BOOM, 8X4X4, 32 FT	316 HP	D-off		$424,993	81.36	18.90	22.08	7.86	22.92	736
	SUBCATEGORY 0.03		**66 TON THRU 125 TON**										
			GROVE CRANES										
	C80GV020	TMS-870	CRANES, HYDRAULIC, TRUCK MTD, 70 TON, 110' BOOM, 8X4	400 HP	D-off		$778,298	128.63	32.48	36.35	14.30	29.02	9,161

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C80			*GROVE CRANES (continued)*									
	C80GV031	TMS875C	CRANES, HYDRAULIC, TRUCK MTD, 75 TON, 110' BOOM, 8X4X4	400 HP D-off		$701,160	119.81	29.19	32.61	12.88	29.02	817
	C80GV032	GMK4090	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 80 TON, 142' BOOM, 8X6X8	422 HP D-off		$934,518	154.66	38.87	43.40	17.17	30.61	1,184
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C80LB001	HTC-8670	CRANES, HYDRAULIC, TRUCK MTD, 70 TON, 115' BOOM, 8X4	365 HP D-off		$559,697	99.74	23.26	25.95	10.28	26.48	895
	C80LB002	HTC-11100	CRANES, HYDRAULIC, TRUCK MTD, 100 TON, 115' BOOM, 8X4	430 HP D-off		$743,860	125.46	31.19	35.04	13.67	31.19	1,139
			TADANO AMERICA CORPORATION									
	C80TD001	ATF-650XL	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 65 TON, 132' BOOM, 8X8	121 HP D-off	349 HP D-on	$651,998	96.92	27.01	30.06	11.98	12.86	1,090
	C80TD002	ATF-1000XL	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 100 TON, 138' BOOM, 8X8	158 HP D-off	375 HP D-on	$812,631	119.54	33.75	37.64	14.93	15.85	1,070
	SUBCATEGORY 0.04		**OVER 125 TON**									
			GROVE CRANES									
	C80GV013	GMK 5240	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 125 TON, 197' BOOM, 10X8	174 HP D-off	600 HP D-on	$1,829,948	245.54	71.93	76.95	33.45	19.64	1,180
	C80GV014	GMK 5240	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 165 TON, 197' BOOM, 10X8	174 HP D-off	600 HP D-on	$1,835,186	246.15	72.14	77.17	33.55	19.64	1,336
	C80GV015	GMK 5240	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 200 TON, 197' BOOM, 10X8	174 HP D-off	600 HP D-on	$1,845,535	247.37	72.55	77.61	33.74	19.64	2,348
	C80GV016	GMK 6350	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 200 TON, 197' BOOM, 12X8	165 HP D-off	525 HP D-on	$2,593,932	334.87	102.05	109.26	47.42	18.11	1,425
			TADANO AMERICA CORPORATION									
	C80TD005	ATF-1500XL	CRANES, HYDRAULIC, TRUCK MTD, ALL TERRAIN, 150 TON, 162' BOOM, 10X8	533 HP D-off	503 HP D-on	$975,530	168.45	38.15	40.64	17.83	44.55	1,330

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C85	**CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED**											
	SUBCATEGORY 0.12		**DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY**									
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C85LB019	LS-208H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 80 TON, 100' BOOM (ADD BUCKET)	263 HP D-off		$714,940	115.41	31.60	35.75	13.72	16.00	1,390
	C85LB020	LS-218H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 100 TON, 100' BOOM (ADD BUCKET)	263 HP D-off		$918,958	143.05	40.61	45.95	17.63	16.00	1,789
			TEREX CORPORATION									
	C85TE001	5220	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 50 TON, 100' BOOM (ADD BUCKET)	150 HP D-off		$579,642	89.12	25.61	28.98	11.12	9.13	831
	C85TE002	7225	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 85 TON, 100' BOOM (ADD BUCKET)	250 HP D-off		$806,608	126.92	35.65	40.33	15.48	15.21	1,259
	SUBCATEGORY 0.13		**DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY**									
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C85LB021	LS-238H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 150 TON, 100' BOOM (ADD BUCKET)	207 HP D-off		$1,002,356	143.58	41.39	44.55	19.11	12.59	3,357
	C85LB022	LS-248H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 200 TON, 120' BOOM (ADD BUCKET)	237 HP D-off		$1,342,452	189.61	55.43	59.66	25.60	14.42	3,242
			MANITOWOC ENGINEERING CO.									
	C85MA001	222HD	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 3.5 CY, 80' BOOM (ADD BUCKET)	350 HP D-off		$919,759	142.49	37.98	40.88	17.54	21.29	1,988
	C85MA002	777	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 5.0 CY, 130' BOOM (ADD BUCKET)	340 HP D-off		$1,130,100	169.05	46.67	50.23	21.55	20.69	3,815

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			TEREX CORPORATION									
	C85TE003	9225	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 150 TON, 100' BOOM (ADD BUCKET)	335 HP D-off		$1,018,348	154.25	42.05	45.26	19.42	20.38	2,482
	SUBCATEGORY 0.14		**DRAGLINE, CLAMSHELL, OVER 5.0 CY**									
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C85LB023	LS-278H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 250 TON, 120' BOOM (ADD BUCKET)	440 HP D-off		$1,582,209	226.78	61.67	63.29	30.02	26.77	4,064
			MANITOWOC ENGINEERING CO.									
	C85MA003	999	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 7.0 CY, 140' BOOM (ADD BUCKET)	375 HP D-off		$1,681,934	234.82	65.56	67.28	31.92	22.82	5,100
	C85MA009	888	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, DRAGLINE/CLAMSHELL, 10 CY, 70' BOOM (ADD BUCKET)	340 HP D-off		$1,475,633	206.76	57.52	59.03	28.00	20.69	3,397
	SUBCATEGORY 0.22		**LIFTING, 26 TON THRU 50 TON**									
			KOBELCO AMERICA INC.									
	C85KC007	CK550	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 50 TON, 30' BOOM, LIFTING	178 HP D-off		$533,075	70.22	22.01	23.69	10.16	7.91	1,001
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C85LB018	LS-108H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 50 TON, 70' BOOM, LIFTING	157 HP D-off		$477,206	62.75	19.71	21.21	9.10	6.98	1,027
	SUBCATEGORY 0.23		**LIFTING, 51 TON THRU 150 TON**									
			KOBELCO AMERICA INC.									
	C85KC004	CK550	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 55 TON, 160' BOOM, LIFTING	178 HP D-off		$576,067	74.29	22.77	24.48	10.53	7.91	1,071

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C85			*KOBELCO AMERICA INC. (continued)*									
	C85KC005	CK850	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 85 TON, 180' BOOM, LIFTING	213 HP D-off		$665,718	86.22	26.32	28.29	12.17	9.47	1,729
	C85KC003	CK1000	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 200' BOOM, LIFTING	265 HP D-off		$913,027	116.92	36.09	38.80	16.69	11.78	1,899
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C85LB013	LS-208H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 80 TON, 190' BOOM, LIFTING	263 HP D-off		$735,334	96.59	29.07	31.25	13.44	11.69	1,390
	C85LB014	LS-218H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 110 TON, 230' BOOM, LIFTING	263 HP D-off		$948,847	120.91	37.52	40.33	17.35	11.69	1,790
	C85LB015	LS-238H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 150 TON, 240' BOOM, LIFTING	207 HP D-off		$1,002,356	124.23	39.62	42.60	18.32	9.20	3,357
			LINK-BELT CONSTRUCTION EQUIPMENT COMPANY									
	C85LI001	LS-138H SERIES II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 80 TON, 40' TUBULAR BOOM, LIFTING	207 HP D-off		$602,306	78.70	23.81	25.60	11.01	9.20	1,464
			MANITOWOC ENGINEERING CO.									
	C85MA004	222HD	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 210' BOOM, LIFTING	350 HP D-off		$910,267	120.78	35.99	38.69	16.64	15.56	2,354
	C85MA008	555	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 260' BOOM, LIFTING	335 HP D-off		$904,737	119.41	35.77	38.45	16.54	14.89	3,121
	C85MA005	555	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 150 TON, 250' BOOM, LIFTING	335 HP D-off		$854,106	113.64	33.76	36.30	15.61	14.89	2,744
			TEREX CORPORATION									
	C85TE008	HC 80	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 80 TON, 200' BOOM, LIFTING	184 HP D-off		$610,132	78.47	24.12	25.93	11.15	8.18	1,430
	C85TE009	HC 110	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 100 TON, 230' BOOM, LIFTING	230 HP D-off		$752,396	96.92	29.74	31.98	13.75	10.23	1,911
	C85TE010	HC 125	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 125 TON, 240' BOOM, LIFTING	240 HP D-off		$997,613	125.32	39.44	42.40	18.24	10.67	2,128

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.24		**LIFTING, OVER 150 TON**									
			AMERICAN CRANE CORPORATION									
	C85AM017	HC 210	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 210 TON, 50' BOOM, LIFTING	315 HP D-off		$1,210,787	149.63	45.41	46.78	22.02	14.00	3,344
			KOBELCO AMERICA INC.									
	C85KC008	CK2000	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 200 TON, 50' BOOM, LIFTING	316 HP D-off		$1,213,782	150.03	45.53	46.90	22.08	14.05	3,622
	C85KC006	CK2500	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 250 TON, 280' BOOM, LIFTING	279 HP D-off		$1,709,874	203.13	64.13	66.06	31.10	12.40	4,985
			LINK-BELT CONSTRUCTION EQUIPMENT CO.									
	C85LB016	LS-248H II	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 200 TON, 280' BOOM, LIFTING	237 HP D-off		$1,342,452	160.38	50.36	51.87	24.42	10.54	3,242
	C85LB017	LS-278H	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 250 TON, 330' BOOM, LIFTING	440 HP D-off		$1,655,734	205.10	62.11	63.97	30.12	19.56	4,064
			MANITOWOC ENGINEERING CO.									
	C85MA006	777	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 200 TON, 260' BOOM, LIFTING	340 HP D-off		$1,187,399	148.30	44.54	45.88	21.60	15.12	3,929
	C85MA010	888	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 230 TON, 300' BOOM, LIFTING	340 HP D-off		$1,512,826	184.34	56.75	58.45	27.52	15.12	3,697
	C85MA007	999	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 250 TON, 260' BOOM, LIFTING	375 HP D-off		$1,673,854	203.89	62.79	64.67	30.45	16.67	4,942
			TEREX CORPORATION									
	C85TE011	HC 210	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER, 210 TON, 280' BOOM, LIFTING	315 HP D-off		$1,473,944	178.78	55.29	56.95	26.81	14.00	3,708

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER		VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C90	**CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED**													
	SUBCATEGORY 0.04		**OVER 125 TON**											
			LINK-BELT CONSTRUCTION EQUIPMENT CO.											
	C90LB001	HC-238H II	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 150 TON, 260' BOOM, 8X4	207 HP	D-off	430 HP	D-on	$1,297,827	176.94	50.25	51.23	24.63	16.66	1,913
	C90LB002	HC-248H	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 200 TON, 280' BOOM, 8X4	248 HP	D-off	430 HP	D-on	$1,497,007	202.47	58.01	59.20	28.41	18.96	2,476
	C90LB003	HC-278H	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MTD, 300 TON, 330' BOOM, 12X6	360 HP	D-off	430 HP	D-on	$2,374,124	314.93	92.02	93.94	45.05	25.25	3,385
C95	**CRANES, TOWER**													
	SUBCATEGORY 0.00		**CRANES, TOWER**											
			PECCO AND WOLFF TOWER CRANES											
	C95AP004	SK200	TOWER CRANE, 3.4 TON @ 181' RADIUS 42.6' HEIGHT (ADD 95KW GENERATOR & T-SECTION)	128 HP	E			$466,702	87.76	19.27	20.74	8.90	16.81	970
	C95AP005	S16-35 TOWER SECTION	TOWER CRANE OPTION, 1.1' T-TRANSITION S35 -S16 (ADD SK 140 - SK 225 TOWER CRANE)					$14,971	1.84	0.63	0.67	0.29	0.00	16
	C95AP006	S35 TOWER SECTION	TOWER CRANE OPTION, 19.33' TOWER SECTION (ADD TO SK 140 - SK 400 TOWER CRANE)					$29,129	3.57	1.21	1.29	0.56	0.00	89
	C95AP007	SK400	TOWER CRANE, 3.3 TON @ 245' RADIUS, 56.7' HEIGHT (ADD 160 KW GENERATOR & T-SECTION)	213 HP	E			$737,852	139.63	30.47	32.79	14.07	27.97	1,783
	C95AP008	S35 CLIMBING UNIT	TOWER CRANE OPTION, 29.2' CLIMBING UNIT (ADD TO SK 200 - SK 400 TOWER CRANE)					$116,649	14.78	4.81	5.18	2.22	0.00	248
	C95AP009	S35-60 TOWER SECTION	TOWER CRANE OPTION, 19.4' T-TRANSITION S60 S35 (ADD SK 225 - SK 560 TOWER CRANE)					$38,959	4.77	1.61	1.73	0.74	0.00	99
	C95AP010	SK560	TOWER CRANE, 2.8 TON @ 265' RADIUS, 76.5' HEIGHT (ADD 161 KW GENERATOR &T-SECTION)	217 HP	E			$983,401	170.53	40.61	43.71	18.75	28.49	1,557

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
C95			***PECCO AND WOLFF TOWER CRANES (continued)***										
	C95AP011	S60 TOWER SECTION	TOWER CRANE OPTION, 19.33' TOWER SECTION (ADD TO SK 225 - SK 560 TOWER CRANE)				$36,504	4.47	1.51	1.62	0.70	0.00	99
	C95AP012	S60 CLIMB UNIT	TOWER CRANE OPTION, 32.8' CLIMBING UNIT (ADD TO SK 225 - SK 560 TOWER CRANE)				$144,701	18.22	5.98	6.43	2.76	0.00	258
	C95AP013	SN355	TOWER CRANE, 3.8 TON @ 197' RADIUS, 110' TALL, LUFFING (ADD 300 KW GENERATOR & T-SECTION)	354 HP	E		$942,557	194.00	38.92	41.89	17.97	46.48	2,748
	C95AP014	SN35 TOWER SECTION	TOWER CRANE OPTION, 14.75' TOWER SECTION (ADD TO SN 141 - SN 355 TOWER CRANE)				$33,203	4.07	1.37	1.48	0.63	0.00	89
	C95AP015	SN35 CLIMBING UNIT	TOWER CRANE OPTION, 29.2' CLIMBING UNIT (ADD TO SN 141 - SN 355 TOWER CRANE)				$126,544	15.99	5.22	5.62	2.41	0.00	248
	C95AP016	S35N-60TOWER SECTION	TOWER CRANE OPTION, 19.4' T-TRANSITION S60 S35N (ADD SN 141 - SK 355 TOWER CRANE)				$44,319	5.42	1.83	1.97	0.84	0.00	99
	C95AP017	SK140	TOWER CRANE, 3.1 TON @ 151' RADIUS, 85.0' HEIGHT (ADD 95KW GENERATOR & T-SECTION)	125 HP	E		$398,942	77.84	16.48	17.73	7.61	16.41	1,309
	C95AP018	S16 TOWER SECTION	TOWER CRANE OPTION, 14.75' TOWER SECTION (ADD TO SK 140 - SK 200 TOWER CRANE)				$14,128	1.73	0.59	0.63	0.27	0.00	55
	C95AP019	S16 CLIMBING UNIT	TOWER CRANE OPTION, 29.2' CLIMBING UNIT (ADD TO SK140 - SK 200 TOWER CRANE)				$78,671	10.14	3.25	3.50	1.50	0.00	165
	C95AP020	SN141	TOWER CRANE, 1.6 TON @ 147' RADIUS, 89' TALL, LUFFING (ADD 200 KW GENERATOR & T-SECTION)	223 HP	E		$439,158	103.13	18.13	19.52	8.37	29.28	1,082
	C95AP021	SN160-16	TOWER CRANE, 2.8 TON @ 164' RADIUS, 88' TALL, LUFFING (ADD 250 KW GENERATOR & T-SECTION)	258 HP	E		$686,174	141.66	28.33	30.50	13.08	33.88	1,179
	C95AP022	PH5000-12	TOWER CRANE OPTION, 24 PERSON / 2.4 TON MATERIAL ELEVATOR/HOIST (ADD 4.9' MAST SECTION & 18 KW GENERATOR)	24 HP	E		$105,407	18.89	4.35	4.68	2.01	3.15	130
	C95AP023	MAST SECTION	TOWER CRANE OPTION, 4.9' MAST-> PERSON/MATERIAL ELEVATOR/HOIST (ADD WALL TIE & CABLE GUIDE @30')				$2,488	0.31	0.11	0.11	0.05	0.00	3

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			MORROW EQUIPMENT COMPANY, LLC										
	C95LH022	97K	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 13.2 TON MAX, 1.9 TON @ 148' RADIUS, 66' HEIGHT, SELF/ERECTING, W/FIVE - 7' 10" TOWER SECTIONS/ & ROAD TRANSPORT EQUIPMENT (ADD 40KW GENERATOR)	35 HP	E		$363,377	54.21	14.92	15.97	6.93	4.60	1,593
	C95LH023	140K	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 11.0 TON MAX, 1.7 TON @ 180' RAD 146' HEIGHT, SELF/ERECTING, W/EIGHT - 9' 10" TOWER SECTIONS/ & ROAD TRANSPORT EQUIPMENT (ADD 60KW GENERATOR)	65 HP	E		$506,521	79.07	20.80	22.28	9.66	8.53	1,836
	C95LH003	132 HC	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 8.8 TON MAX, 2.4 TON @ 168' RADIUS, 147.8' HEIGHT, W/FOURTEEN - 8' 2" TOWER SECTIONS (ADD 85 KW GENERATOR)	109 HP	E		$407,823	75.60	16.85	18.13	7.78	14.31	1,156
	C95LH005	200 HC	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 11.0 TON MAX, 2.5 TON @ 201' RADIUS, 162.7' HEIGHT, W/NINE - 13' 7" TOWER SECTIONS (ADD 110 KW GENERATOR)	148 HP	E		$530,312	99.70	21.90	23.57	10.11	19.43	1,374
	C95LH011	390 HC	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 17.6 TON MAX, 3.3 TON @ 246' RADIUS, 199.1' HEIGHT, W/NINE - 19' 0" TOWER SECTIONS (ADD 170 KW GENERATOR)	223 HP	E		$991,021	172.71	40.92	44.05	18.89	29.28	2,744
	C95LH013	550 HC20	TOWER CRANE, HORIZONTAL BOOM, JIB CRANE, 22.0 TON MAX, 3.8 TON @ 265' RADIUS, 237.5' HEIGHT, W/TWELVE - 19' 0" TOWER SECTIONS (ADD 170 KW GENERATOR)	223 HP	E		$1,266,158	206.39	52.28	56.27	24.14	29.28	3,765
	C95LH015	550 HC-L	TOWER CRANE, 26.4 TON MAX, 3/4 TON @ 197' RADIUS, 210' HEIGHT, LUFFING, W/SIX 19' 0" TOWER SECTIONS (ADD 480 KW GENERATOR)	317 HP	E		$1,687,608	279.54	69.68	75.00	32.18	41.62	5,075

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
D10	**DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)**											
	SUBCATEGORY 0.10		**DRILLS, AIR TRACK (Add cost for drill steel and bit wear)**									
			INGERSOLL RAND ROCK DRILL DIV									
	D10IR003	ECM350/VL140	DRILL, AIR TRACK, CRAWLER, 2.5-4.0" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 750 CFM COMPRESSOR)	750 CFM A		$199,313	34.34	9.33	10.68	3.99	0.00	129
			SULLIVAN INDUSTRIES, INC.									
	D10SU002	RAM EXT, VCR360	DRILL, AIR TRACK, CRAWLER, 2.5-4.0" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 750 CFM COMPRESSOR)	750 CFM A		$245,443	42.11	11.49	13.15	4.91	0.00	152
	D10SU003	RAM EXT, VCR361	DRILL, AIR TRACK, CRAWLER, 3.0-4.0" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 900 CFM COMPRESSOR)	900 CFM A		$251,850	43.18	11.79	13.49	5.04	0.00	205
	SUBCATEGORY 0.20		**DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)**									
			INGERSOLL RAND ROCK DRILL DIV									
	D10IR005	ECM590/YH80A	DRILL, HYDRAULIC TRACK, CRAWLER, 2.5-4.5" DIA, 14' DRIFTER TRAVEL, SELF-CONTAINED (ADD COST FOR DRILL STEEL AND BIT WEAR)	215 HP D-off		$535,737	143.80	31.05	40.18	10.96	19.12	245
			SULLIVAN INDUSTRIES, INC.									
	D10SU005	SCORPION VCR360	DRILL, HYDRAULIC TRACK, CRAWLER, 5.25" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR)	260 HP D-off		$274,344	88.71	15.90	20.58	5.61	23.12	265
	D10SU006	SCORPION VCR361	DRILL, HYDRAULIC TRACK, CRAWLER, 6.5" DIA, 12' FEED (ADD COST FOR DRILL STEEL AND BIT WEAR)	260 HP D-off		$277,631	89.45	16.09	20.82	5.68	23.12	265

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
D15	**DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)**											
	SUBCATEGORY 0.00		**DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)**									
		BOR-IT MANUFACTURING COMPANY INC.										
	D15BI001	12 MIGHT MAX	DRILL, HORIZONTAL BORING, 12" DIA, COMBINED HEAD 28,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	12 HP G		$19,321	6.97	1.13	1.45	0.40	2.45	18
	D15BI002	20 POWER HOUSE II	DRILL, HORIZONTAL BORING, 20" DIA, COMBINED HEAD 44,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	20 HP D-off		$34,442	9.40	1.99	2.58	0.70	1.78	15
	D15BI003	24 BRUTE	DRILL, HORIZONTAL BORING, 24" DIA, COMBINED HEAD 84,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	30 HP D-off		$52,013	14.19	3.01	3.90	1.06	2.67	38
	D15BI004	30 POWER PLUS	DRILL, HORIZONTAL BORING, 30" DIA, COMBINED HEAD 170,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	45 HP D-off		$81,333	21.98	4.71	6.10	1.66	4.00	70
	D15BI005	36 WORKHORSE	DRILL, HORIZONTAL BORING, 36" DIA, COMBINED HEAD 225,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	68 HP D-off		$112,761	31.06	6.54	8.46	2.31	6.05	90
	D15BI006	48 TERMINATOR	DRILL, HORIZONTAL BORING, 48" DIA, COMBINED HEAD 525,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	119 HP D-off		$178,968	50.39	10.37	13.42	3.66	10.58	170
	D15BI008	54 TERMINATOR II	DRILL, HORIZONTAL BORING, 54" DIA, COMBINED HEAD 32,700,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	171 HP D-off		$221,067	64.67	12.81	16.58	4.52	15.21	250
	D15BI007	60	DRILL, HORIZONTAL BORING, 60" DIA, COMBINED HEAD 1,100,000 LBS THRUST, W/100' AUGER TRACK (ADD COST FOR DRILL STEEL AND BIT WEAR)	171 HP D-off		$262,535	73.58	15.22	19.69	5.37	15.21	250

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			NO SPECIFIC MANUFACTURER										
	D15XX001	MC-500H	DRILL, HORIZONTAL BORING, 3" - 6" DIA, 15,000 LBS THRUST, HYDRAULIC MOTOR (ADD COST FOR DRILL STEEL AND BIT WEAR)				$10,199	2.19	0.59	0.76	0.21	0.00	10
	D15XX002	H-12/RM-12	DRILL, HORIZONTAL BORING, 4" - 12" DIA, 24,000 LBS THRUST, HYDRAULIC MOTOR (ADD COST FOR DRILL STEEL AND BIT WEAR)				$15,327	3.29	0.89	1.15	0.31	0.00	12
D20	**DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)**												
	SUBCATEGORY 0.00		**DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)**										
			ACKER DRILL COMPANY INC.										
	D20AD005	630-E	DRILL, CORE, COLUMN MOUNTED, 4" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	2 HP	E		$6,972	2.52	0.48	0.65	0.15	0.32	1
	D20AD002	930-E	DRILL, CORE, COLUMN MOUNTED, 10" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	2 HP	E		$7,096	2.56	0.49	0.67	0.15	0.32	2
	D20AD006	1040-E	DRILL, CORE, COLUMN MOUNTED, 10" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	4 HP	E		$11,535	4.33	0.78	1.08	0.24	0.65	1
	D20AD007	1200-G	DRILL, CORE, COLUMN MOUNTED, 12" DIA MAX CORE HOLE (ADD COST FOR DRILL STEEL AND BIT WEAR)	8 HP	E		$19,046	7.64	1.30	1.79	0.40	1.29	3
			CUSHION CUT, INC.										
	D20CQ001	HCD24/12	DRILL, CORE, COLUMN MOUNTED, 9"-36" BIT DIA (ADD COST FOR DRILL STEEL AND BIT WEAR)	42 HP	G		$27,635	17.79	1.88	2.59	0.58	8.59	11
			BOART LONGYEAR COMPANY										
	D20LY001	752	DRILL, CORE, COLUMN MOUNTED, 1.5"-6" BIT DIA, W/E4-230/110 MOTOR (110V) (ADD COST FOR DRILL STEEL AND BIT WEAR)	3 HP	E		$10,276	3.85	0.69	0.96	0.21	0.48	2

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
D20			***BOART LONGYEAR COMPANY (continued)***									
	D20LY002	42N	DRILL, CORE, COLUMN MOUNTED, 0.5"-36" BIT DIA, W/A4-350 MOTOR (ADD COST FOR DRILL STEEL AND BIT WEAR AND ADD 185 CFM AIR COMPRESSOR)	185 CFM A		$10,636	3.32	0.72	1.00	0.22	0.00	3
D25	**DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)**											
	SUBCATEGORY 0.00		**DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)**									
			ACKER DRILL COMPANY INC.									
	D25AD004	ACEW	DRILL, CORE, SKID MTD, 725' MAX DRILL DEPTH (ADD COST FOR DRILL STEEL AND BIT WEAR)	28 HP D-off		$99,433	25.44	5.76	7.46	2.03	2.49	35
	D25AD003	BUSH MASTER	DRILL, CORE, SKID MTD, 1500' MAX DRILL DEPTH (ADD COST FOR DRILL STEEL AND BIT WEAR)	69 HP D-off		$124,651	35.26	7.23	9.35	2.55	6.14	45
			E-Z DRILL, INC.									
	D25EZ002	210 B	DRILL, CORE, SKID MTD, 0.6"-2.5" DIA., 18" DEPTH, HORIZONTAL DOWELLING ASSEMBLY (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM A		$7,240	2.16	0.40	0.50	0.15	0.00	3
	D25EZ003	210 B SRA	DRILL, CORE, SKID MTD, 0.6"-2.5" DIA., 18" DEPTH, HORIZONTAL DOWELLING ASSEMBLY (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM A		$7,737	2.27	0.44	0.55	0.16	0.00	3
	D25EZ001	210 B SR HORIZONTAL	DRILL, CORE, SKID MTD, 0.6"-2.5" DIA., 18" DEPTH, HORIZONTAL DOWELLING ASSEMBLY (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM A		$8,433	2.42	0.49	0.63	0.17	0.00	3
	D25EZ005	210-3 SRA	DRILL, CORE, SELF PROPELLED, 0.6"-2.5" DIA., 18" DEPTH, DOWELLING MACHINE (ADD COST FOR DRILL STEEL AND BIT WEAR, ADD 100 CFM COMPRESSOR)	100 CFM A		$28,912	7.85	1.65	2.11	0.59	0.00	12

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER		VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
D30	**DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)**													
	SUBCATEGORY 0.00		**DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)**											
			HYDRAULIC POWER SYSTEMS, INC.											
	D30HD001	H-15	DRILL, AUGER, HYDRAULIC, W/60' 8" X 21" LEADS, 15,000 FT-LBS TORQUE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR AND CRANE)	210 HP	D-off			$95,301	44.85	5.53	7.15	1.95	18.67	146
	D30HD002	H-35VT	DRILL, AUGER, HYDRAULIC, W/60' 8" X 27" LEADS, 33,000 FT-LBS TORQUE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR AND CRANE)	270 HP	D-off			$142,738	62.71	8.28	10.71	2.92	24.01	200
	D30HD003	H-50VT	DRILL, AUGER, HYDRAULIC, W/60' 8" X 33" LEADS, 50,000 FT-LBS TORQUE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR AND CRANE)	335 HP	D-off			$186,227	80.15	10.80	13.97	3.81	29.79	269
			FOREMOST MOBILE DRILLING COMPANY, INC.											
	D30MR001	MINUTEMAN	DRILL, EARTH / AUGER, W/AUGER KIT, 3" DIA, 30' DEPTH, 350 FT-LBS TORQUE, PORTABLE (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	8 HP	G			$13,563	4.98	0.79	1.02	0.28	1.64	4
	D30MR003	B-31	DRILL, EARTH / AUGER, HYDRAULIC AUGER, 14" DIA, 30' DEPTH, 3,500 FT-LBS TORQUE, TRAILER MOUNTED (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	58 HP	D-off			$135,687	36.76	7.83	10.10	2.78	5.16	42
	D30MR005	B-53	DRILL, EARTH / AUGER, MULTI-PURPOSE, 6" DIA, 245' DEPTH, 5,955 FT-LBS TORQUE, W/21,000 GVW TRUCK (W/PTO DRIVE)(ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	100 HP	D-on	2,205 HP	D-on	$249,959	96.27	14.36	18.50	5.11	34.69	120
	D30MR006	B-58	DRILL, EARTH / AUGER, MULTI-PURPOSE, 8" DIA, 250' DEPTH, 7,000 FT-LBS TORQUE W/33,000 GVW TRUCK (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	115 HP	D-off	205 HP	D-on	$287,603	79.92	16.55	21.33	5.88	12.63	130

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
D30			***FOREMOST MOBILE DRILLING COMPANY, INC. (continued)***									
	D30MR007	B-61HDX	DRILL, EARTH / AUGER, MULTI-PURPOSE, 8" DIA, 375' DEPTH, 20,000 FT-LBS TORQUE W/33,000 GVW TRUCK (ADD COST FOR DRILL STEEL AND CUTTING EDGE WEAR)	115 HP D-off	205 HP D-on	$409,265	107.67	23.60	30.45	8.37	12.63	205
D35	**DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)**											
	SUBCATEGORY 0.11		**DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)**									
			DRILTECH, INC.									
	D35DT001	D25KS	DRILL, ROTARY BLASTHOLE, 5"-6.75" DIA., 27,000 LB PULLDOWN, CRAWLER, 88' DEEP(ADD COST FOR DRILL STEEL AND BIT WEAR)	450 HP D-off		$537,664	139.14	25.76	30.72	10.40	40.01	620
	D35DT002	D245S	DRILL, ROTARY BLASTHOLE, 5"-8" DIA., 40,000 LB PULLDOWN, CRAWLER, 148' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	450 HP D-off		$566,362	144.05	27.13	32.36	10.95	40.01	720
	D35DT003	D45KS	DRILL, ROTARY BLASTHOLE, 6"-9" DIA., 45,000 LB PULLDOWN, CRAWLER, 208' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	450 HP D-off		$621,971	153.58	29.80	35.54	12.03	40.01	1,050
	D35DT004	D50KS	DRILL, ROTARY BLASTHOLE, 6"-9.875" DIA., 50,000 LB PULLDOWN, CRAWLER, 148' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	525 HP D-off		$655,657	167.21	31.42	37.47	12.68	46.68	1,050
	D35DT005	D55SP	DRILL, ROTARY BLASTHOLE, 6.75"-10" DIA., 45,000 LB PULLDOWN, CRAWLER, 55' DEEP (SINGLE PASS) (ADD COST FOR DRILL STEEL AND BIT WEAR)	760 HP D-off		$986,013	248.36	47.24	56.34	19.07	67.58	1,320
			REEDRILL, INC.									
	D35RD001	SK5AD	DRILL, ROTARY BLASTHOLE, 4"-7" DIA, 12,000 LBS PULL BACK, TRUCK MTD, 148' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	400 HP D-off	350 HP D-on	$551,080	141.06	26.41	31.49	10.66	39.67	525

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.12		**DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)**									
			DRILTECH, INC.									
	D35DT006	D75KS	DRILL, ROTARY BLASTHOLE, 9"-11" DIA., 75,000 LB PULLDOWN, CRAWLER, 173' DEEP (ADD COST FOR DRILL STEEL AND BIT WEAR)	760 HP D-off		$851,425	194.45	35.15	37.84	16.23	67.58	1,400
			INGERSOLL RAND ROTARY DRILL DIV									
	D35IB004	T3W	DRILL, ROTARY BLASTHOLE, WATER WELL 6"-24" DIA, 30,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	465 HP D-off	380 HP D-on	$775,085	159.67	31.86	34.15	14.78	45.80	660
	D35IB003	TH-60	DRILL, ROTARY BLASTHOLE, WATER WELL, 12" DIA, 26,500 LBS PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	475 HP D-off	380 HP D-on	$812,702	165.67	33.45	35.89	15.50	46.69	600
	D35IB005	T3W DEEPHOLE	DRILL, ROTARY BLASTHOLE, WATER WELL 6"-18" DIA, 50,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	575 HP D-off	380 HP D-on	$898,150	187.79	36.93	39.62	17.12	55.58	688
	D35IB006	T4W	DRILL, ROTARY BLASTHOLE, WATER WELL 6"-20" DIA, 70,000 LB PULL BACK, TRUCK MTD (ADD COST FOR DRILL STEEL AND BIT WEAR)	600 HP D-off	305 HP D-on	$944,170	195.64	38.83	41.66	18.00	56.92	688
F10	**FORK LIFTS**											
	SUBCATEGORY 0.00		**FORK LIFTS**									
			JCB INC.									
	F10JC001	930-4	FORK LIFT, ROUGH TERRAIN, 6,000 LBS @ 28' HIGH STRAIGHT MAST, 4X4	75 HP D-off		$64,921	19.09	3.80	5.01	1.29	5.44	150
	F10JC002	940-4	FORK LIFT, ROUGH TERRAIN, 8,000 LBS @ 30' HIGH STRAIGHT MAST, 4X4	75 HP D-off		$70,646	20.20	4.14	5.47	1.40	5.44	165

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
G10	**GENERATOR SETS**												
	SUBCATEGORY 0.10		**PORTABLE**										
			WACKER CORPORATION										
	G10WC001	GP 3800A	GENERATOR SET, PORTABLE, 3.7 KW, 120/240V, 60 HZ	8 HP	G		$2,065	1.96	0.16	0.23	0.04	1.34	2
	G10WC002	GP 5600A	GENERATOR SET, PORTABLE, 5.6 KW, 120/240V, 60 HZ	11 HP	G		$2,622	2.64	0.20	0.29	0.05	1.84	2
	G10WC003	GS 8.5V	GENERATOR SET, PORTABLE, 8.5 KW, 120/240V, 60 HZ, WITH ELECTRIC START	16 HP	G		$4,213	3.93	0.32	0.47	0.08	2.68	2
	G10WC004	GS 9.7V	GENERATOR SET, PORTABLE, 9.7 KW, 120/240V, 60 HZ, WITH ELECTRIC START	18 HP	G		$4,736	4.43	0.36	0.53	0.09	3.02	2
			NO SPECIFIC MANUFACTURER										
	G10XX001	1000	GENERATOR SET, PORTABLE, 1 KW	1 HP	G		$900	0.40	0.07	0.10	0.02	0.17	1
	G10XX004	D4500	GENERATOR SET, PORTABLE, 5 KW	9 HP	D-off		$5,135	1.89	0.39	0.58	0.10	0.65	3
	G10XX002	10000	GENERATOR SET, PORTABLE, 10 KW	19 HP	G		$4,410	4.54	0.33	0.50	0.08	3.18	6
	G10XX003	10000D	GENERATOR SET, PORTABLE, 10 KW	23 HP	D-off		$9,976	4.12	0.75	1.12	0.19	1.67	9
	SUBCATEGORY 0.20		**SKID MOUNTED**										
			CATERPILLAR INC. (MACHINE DIVISION)										
	G10CA020	3304 PKG - P 304DE03	GENERATOR SET, SKID MTD, 113 EKW, 240/480V, 60 HZ PGS PRIME	174 HP	D-off		$24,788	18.91	1.58	2.23	0.46	12.62	37
	G10CA012	3306 PKG - 306DE39	GENERATOR SET, SKID MTD, 210 EKW, 240 VOLT, 60 HZ PGS PRIME	314 HP	D-off		$31,098	31.46	1.98	2.80	0.58	22.78	50
	G10CA013	3406 PKG - 306DE30	GENERATOR SET, SKID MTD, 275 EKW, 480 VOLT, 60 HZ PGS PRIME	405 HP	D-off		$40,135	40.56	2.55	3.61	0.74	29.38	68
	G10CA014	3406 PKG - 406DE30	GENERATOR SET, SKID MTD, 365 EKW, 240/480V, 60 HZ PGS PRIME	536 HP	D-off		$52,459	53.56	3.33	4.72	0.97	38.88	72
	G10CA015	3412 PKG - 412DE3H	GENERATOR SET, SKID MTD, 455 EKW, 240/480V, 60 HZ PGS PRIME	687 HP	D-off		$72,590	69.69	4.61	6.53	1.34	49.83	93
	G10CA016	3412 PKG - 412DE30	GENERATOR SET, SKID MTD, 545 EKW, 240/480V, 60 HZ PGS PRIME	817 HP	D-off		$88,557	83.33	5.63	7.97	1.64	59.27	100

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
G10			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***										
	G10CA017	3508 PKG - 508DE34	GENERATOR SET, SKID MTD, 725 EKW, 480 VOLT, 60 HZ PGS PRIME	1,089 HP	D-off		$139,421	115.28	8.86	12.55	2.58	79.00	181
	G10CA018	3512 PKG - 512DE1F	GENERATOR SET, SKID MTD, 1000 EKW, 480 VOLT, 60 HZ PGS PRIME	1,443 HP	D-off		$177,146	151.26	11.25	15.94	3.28	104.68	236
	G10CA019	3516 PKG - 516DE35	GENERATOR SET, SKID MTD, 1600 EKW, 480 VOLT, 60 HZ PGS PRIME	2,304 HP	D-off		$295,887	244.08	18.80	26.63	5.48	167.13	291
			NO SPECIFIC MANUFACTURER										
	G10XX005	25G	GENERATOR SET, SKID MTD, 25 KW	36 HP	G		$15,779	9.80	1.00	1.42	0.29	6.03	16
	G10XX006	35G	GENERATOR SET, SKID MTD, 35 KW	50 HP	G		$13,924	12.06	0.89	1.25	0.26	8.38	17
	G10XX007	50G	GENERATOR SET, SKID MTD, 50 KW	70 HP	G		$21,004	17.18	1.34	1.89	0.39	11.73	26
	G10XX008	75D	GENERATOR SET, SKID MTD, 75 KW	107 HP	D-off		$25,790	13.71	1.64	2.32	0.48	7.76	38
	G10XX009	100D	GENERATOR SET, SKID MTD, 100 KW	143 HP	D-off		$22,259	15.91	1.41	2.00	0.41	10.37	42
	G10XX010	125D	GENERATOR SET, SKID MTD, 125 KW	200 HP	D-off		$32,882	22.61	2.09	2.96	0.61	14.51	44
	G10XX011	200D	GENERATOR SET, SKID MTD, 200 KW	375 HP	D-off		$36,296	37.39	2.31	3.27	0.67	27.20	60
	G10XX012	300D	GENERATOR SET, SKID MTD, 300 KW	428 HP	D-off		$43,486	43.08	2.77	3.91	0.81	31.05	105
	G10XX013	400D	GENERATOR SET, SKID MTD, 400 KW	570 HP	D-off		$54,633	56.73	3.47	4.92	1.01	41.35	150
	G10XX014	500D	GENERATOR SET, SKID MTD, 500 KW	713 HP	D-off		$77,943	72.84	4.95	7.01	1.44	51.72	170
	G10XX015	750D	GENERATOR SET, SKID MTD, 750 KW	1,050 HP	D-off		$127,672	109.82	8.11	11.49	2.36	76.17	215
	G10XX016	1000D	GENERATOR SET, SKID MTD, 1,000 KW	1,425 HP	D-off		$180,047	150.37	11.43	16.20	3.33	103.37	250
G15	**GRADERS, MOTOR**												
	SUBCATEGORY 0.00		**GRADERS, MOTOR**										
			CATERPILLAR INC. (MACHINE DIVISION)										
	G15CA001	120-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/17 TEETH SCARIFIERS	125 HP	D-off		$207,917	38.70	9.46	10.61	4.15	8.48	299
	G15CA007	135-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/17 TEETH SCARIFIERS	135 HP	D-off		$219,618	41.07	10.00	11.22	4.39	9.16	309
	G15CA003	12-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/17 TEETH SCARIFIERS	140 HP	D-off		$243,064	44.60	11.07	12.43	4.85	9.50	336
	G15CA004	140-H	GRADER, MOTOR, ARTICULATED, 6X4, 12' BLADE W/5 RIPPER/SCARIFIERS	165 HP	D-off		$259,730	48.92	11.83	13.28	5.19	11.20	347

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
G15			*CATERPILLAR INC. (MACHINE DIVISION) (continued)*									
	G15CA008	143-H	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	185 HP D-off		$300,480	56.14	13.70	15.39	6.00	12.55	364
	G15CA009	160-H	GRADER, MOTOR, ARTICULATED, 6X4, 14' BLADE W/5 RIPPER/SCARIFIERS	185 HP D-off		$281,277	53.38	12.82	14.39	5.62	12.55	372
	G15CA010	163-H	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 14' BLADE W/5 RIPPER/SCARIFIERS	200 HP D-off		$324,961	60.60	14.82	16.65	6.49	13.57	388
	G15CA005	14-H	GRADER, MOTOR, ARTICULATED, 6X4, 14' BLADE W/7 SHANK RIPPER	215 HP D-off		$355,652	67.61	16.08	17.95	7.10	14.59	448
	G15CA006	16-H	GRADER, MOTOR, ARTICULATED, 6X4, 16' BLADE W/7 SHANK RIPPER	275 HP D-off		$510,025	94.95	23.08	25.77	10.19	18.66	594
			DEERE & COMPANY									
	G15JD008	670CH	GRADER, MOTOR, ARTICULATED, 6X4, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	151 HP D-off		$226,113	45.35	10.13	11.22	4.52	10.25	343
	G15JD009	672CH (HFWD)	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	156 HP D-off		$259,985	50.83	11.68	12.97	5.19	10.59	353
	G15JD010	770CH	GRADER, MOTOR, ARTICULATED, 6X4, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	185 HP D-off		$260,890	52.69	11.72	13.02	5.21	12.55	353
	G15JD011	772CH (HFWD)	GRADER, MOTOR, ARTICULATED, 6X6, AWD, 12' BLADE W/5 RIPPER/SCARIFIERS	205 HP D-off		$294,309	59.30	13.26	14.75	5.88	13.91	363
H10	**HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)**											
	SUBCATEGORY 0.00		**HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)**									
			NPK CONSTRUCTION EQUIPMENT									
	H10NP001	E-200	HAMMERS, HYDRAULIC, 150 FT-LBS, IMPACT FREQUENCY 700 BPM (ADD 150-250 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$6,531	2.87	0.58	0.87	0.14	0.00	2
	H10NP002	E-201	HAMMERS, HYDRAULIC, 200 FT-LBS, IMPACT FREQUENCY 750 BPM (ADD 60-75 HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			$7,250	3.12	0.64	0.97	0.15	0.00	2

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H10			***NPK CONSTRUCTION EQUIPMENT (continued)***									
	H10NP003	E-202	HAMMERS, HYDRAULIC, 350 FT-LBS, IMPACT FREQUENCY 800 BPM (ADD 60-75HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			$10,867	4.68	0.96	1.45	0.23	0.00	4
	H10NP004	E-203	HAMMERS, HYDRAULIC, 500 FT-LBS, IMPACT FREQUENCY 800 BPM (ADD 60-75 HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			$13,962	5.80	1.22	1.86	0.29	0.00	4
	H10NP005	E-204	HAMMERS, HYDRAULIC, 750 FT-LBS, IMPACT FREQUENCY 700 BPM (ADD 75-100 HP HYDRAULIC EXCAVATOR H25 OR L50)(ADD COST FOR POINT WEAR)			$18,522	7.70	1.63	2.47	0.39	0.00	7
	H10NP006	E-205	HAMMERS, HYDRAULIC, 1,300 FT-LBS, IMPACT FREQUENCY 750 BPM (ADD 95-125 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$24,929	10.01	2.18	3.32	0.52	0.00	11
	H10NP008	E-207	HAMMERS, HYDRAULIC, 2,000 FT-LBS, IMPACT FREQUENCY 550 BPM (ADD 95-125 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$37,859	14.95	3.32	5.05	0.79	0.00	19
	H10NP009	E-208	HAMMERS, HYDRAULIC, 2,500 FT-LBS, IMPACT FREQUENCY 550 BPM (ADD 95-125 HP HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$48,371	18.75	4.24	6.45	1.01	0.00	28
	H10NP015	E-210A	HAMMERS, HYDRAULIC, 3,000 FT-LBS, IMPACT FREQUENCY 670 BPM (ADD 20-28 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$58,920	22.57	5.16	7.86	1.23	0.00	34
	H10NP016	E-216	HAMMERS, HYDRAULIC, 5,500 FT-LBS, IMPACT FREQUENCY 500 BPM (ADD 28-43 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$81,325	30.66	7.12	10.84	1.70	0.00	56
	H10NP017	E-220	HAMMERS, HYDRAULIC, 8,000 FT-LBS, IMPACT FREQUENCY 430 BPM (ADD 33-50 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$106,123	39.64	9.30	14.15	2.22	0.00	68
	H10NP018	E-260A	HAMMERS, HYDRAULIC, 20,000 FT-LBS, IMPACT FREQUENCY 330 BPM (ADD 80-130 TON HYDRAULIC EXCAVATOR H25)(ADD COST FOR POINT WEAR)			$246,498	90.43	21.60	32.87	5.16	0.00	170

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H13	**HAZARDOUS/TOXIC WASTE EQUIPMENT**												
	SUBCATEGORY 0.11		**COMPACTORS (Compression force) 0 THRU 50 TONS**										
			CONSOLIDATED BALING MACHINE COMPANY, INC										
	H13CB001	DOS RAW WI	HAZARDOUS/TOXIC WASTE EQIPMENT, COMPACTOR, RADIOLOGICAL WASTE, 12.5 TON, LOW LEVEL	5 HP	E		$21,635	5.69	1.33	1.84	0.41	0.66	25
	H13CB002	DOS RAW W2	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, RADIOLOGICAL WASTE, 20 TON, LOW LEVEL	10 HP	E		$23,366	7.09	1.45	1.99	0.45	1.31	25
			BOMAG AMERICAS										
	H13CO002	8040	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 37 TON HAZARD WASTE IN-DRUM , EXPLOSION PROOF	5 HP	E		$12,027	3.74	0.74	1.02	0.23	0.66	167
			ENVIRO-PAK										
	H13EP001	4000HM	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 30 TON HAZARDOUS WASTE, HAZ-MAT STORAGE CONTAINER 40"X40"X40"	5 HP	E		$21,438	5.66	1.32	1.82	0.41	0.66	32
			TEEMARK CORPORATION										
	H13TH001	DPC60-E50	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 30 TON DRUM CRUSHER	5 HP	E		$11,403	3.37	0.71	0.97	0.22	0.66	19
	H13TH002	DPC60-D90	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 30 TON DRUM CRUSHER, TRAILER MOUNTED	9 HP	D-off		$21,073	5.01	1.28	1.75	0.40	0.65	19
	H13TH003	DPC85-D160	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 42.5 TON DRUM CRUSHER, TRAILER MOUNTED	16 HP	D-off		$26,590	6.71	1.62	2.22	0.51	1.16	36

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			ADVANCED ENVIRONMENTAL SOLUTIONS										
	H13YB001	CCYC	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 700 PSI OPERATING PRESSURE, FINAL COMPACTED SIZE 39.4" X 39.4" X 39.4"	50 HP	E		$330,588	77.76	20.38	28.10	6.33	6.57	320
	H13YB002	CCYC-HD-E	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 1,000 PSI OPERATING PRESSURE, FINAL COMPACTED SIZE 39.4" X 39.4" X 39.4"	50 HP	E		$330,588	77.76	20.38	28.10	6.33	6.57	320
	H13YB003	CMC-HD	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 1,200 PSI OPERATING PRESSURE, FINAL COMPACTED SIZE 39.4" X 39.4" X 39.4"	50 HP	E		$330,588	77.76	20.38	28.10	6.33	6.57	320
	SUBCATEGORY 0.12		**COMPACTORS (Compression force) OVER 50 TONS**										
			BOMAG AMERICAS										
	H13CO003	8550	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM	3 HP	E		$23,571	5.10	1.25	1.57	0.46	0.39	270
	H13CO004	8560-C	HAZARDOUS/TOXIC WASTE EQIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM, W/HEPA FILTER	3 HP	E		$41,023	8.48	2.17	2.73	0.80	0.39	290
	H13CO006	8560-R	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM, W/HEPA FILTER & SS PLATEN & CHAMBER	3 HP	E		$47,658	9.53	2.52	3.18	0.93	0.39	300
	H13CO005	8560-EXL	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 85 TON HAZARD WASTE IN-DRUM, EXPLOSION PROOF, W/LIQUID REMOVAL SYSTEM	3 HP	E		$61,970	12.25	3.28	4.13	1.21	0.39	310
			ENVIRO-PAK										
	H13EP002	9600HM	HAZARDOUS/TOXIC WASTE EQUIPMENT, COMPACTOR, 250 TON HAZARDOUS WASTE, B-25 METAL STORAGE CONTAINER 4'X4'X6'	8 HP	E		$35,761	8.27	1.89	2.38	0.70	0.98	100

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.21		**FILTER PRESSES, STATIONARY**									
			KOMLINE-SANDERSON ENGINEERING CO.									
	H13AY015	L/S 1200/25	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 25 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$57,323	12.16	3.44	4.59	1.14	0.00	112
	H13AY016	K/F 1200/25	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 25 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$37,606	7.98	2.26	3.01	0.75	0.00	108
	H13AY013	L/S 1200/50	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 50 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$97,080	20.57	5.81	7.77	1.92	0.00	173
	H13AY014	K/F 1200/50	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 50 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$53,117	11.25	3.18	4.25	1.05	0.00	168
	H13AY011	L/S 1200/75	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 75 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$120,730	25.58	7.22	9.66	2.39	0.00	194
	H13AY012	K/F 1200/75	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 75 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$62,901	13.33	3.77	5.03	1.25	0.00	188
	H13AY009	L/S 1200/100	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 100 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$143,934	30.50	8.61	11.51	2.85	0.00	199
	H13AY010	K/F 1200/100	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 100 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$74,517	15.79	4.46	5.96	1.48	0.00	191
	H13AY007	L/S 1200/125	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 125 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM A		$161,706	34.28	9.68	12.94	3.21	0.00	216

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
H13			***KOMLINE-SANDERSON ENGINEERING CO. (continued)***										
	H13AY008	K/F 1200/125	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 125 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A		$80,729	17.11	4.83	6.46	1.60	0.00	207
	H13AY017	L/S 1200/150	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 150 CF MEMBRANE, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A		$179,534	38.05	10.74	14.36	3.56	0.00	235
	H13AY018	K/F 1200/150	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 150 CF CONVENTIONAL, 1,200 MM SQ (ADD 100 CFM COMPRESSOR)	100 CFM	A		$92,735	19.66	5.55	7.42	1.84	0.00	224
	H13AY019		HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, FILTER PRESS PLATE SHIFTING UNIT, 1,200 MM SQ, MECHANIZED	1 HP	E		$11,614	2.92	0.70	0.93	0.23	0.13	5
	H13AY020	SLC-500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, PLC CONTROL PANEL - PLATE SHIFTING, COMPUTER AUTOMATED	1 HP	E		$14,990	3.64	0.90	1.20	0.30	0.13	2
			USFILTER PERRIN PRODUCTS										
	H13PR001	PLC 25-1000	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 25 CF STANDARD FILTER PRESS, 1,000 MM SQ	3 HP	E		$109,217	23.76	6.53	8.74	2.16	0.39	125
	H13PR003	PLC 115-1200	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 115 CF STANDARD FILTER PRESS, 1,200 MM SQ	5 HP	E		$194,627	42.29	11.65	15.57	3.86	0.66	460
	H13PR005	PLC 180-1500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 180 CF STANDARD FILTER PRESS, 1,500 MM SQ	5 HP	E		$255,872	55.26	15.31	20.47	5.07	0.66	680
	H13PR007	PLC 270-1500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 270 CF MAXI FILTER PRESS, 1,500 MM SQ	10 HP	E		$308,706	67.50	18.47	24.70	6.12	1.31	1,100
	H13PR022	BPR 1200-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 47" WIDE FILTER BELT PRESS, 2 HP	2 HP	E		$225,226	48.14	13.47	18.02	4.46	0.26	191

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H13			***USFILTER PERRIN PRODUCTS (continued)***										
	H13PR023	BPR 1600-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 63" WIDE FILTER BELT PRESS, 3 HP	3 HP	E		$258,325	55.37	15.46	20.67	5.12	0.39	258
	H13PR024	BPR 2000-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 78.75" WIDE FILTER BELT PRESS, 3 HP	3 HP	E		$286,059	61.24	17.11	22.88	5.67	0.39	319
	H13PR025	BPR 2500-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 98.5" WIDE FILTER BELT PRESS, 3 HP	3 HP	E		$344,460	73.62	20.61	27.56	6.83	0.39	515
	H13PR026	BPR 3000-15H	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, STATIONARY, 118" WIDE FILTER BELT PRESS, 4 HP	4 HP	E		$183,753	39.78	10.99	14.70	3.64	0.53	594
	SUBCATEGORY 0.22		**FILTER PRESSES, MOBILE**										
			KOMLINE-SANDERSON ENGINEERING CO.										
	H13AY031	L/S 1200/25M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 25 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A		$70,996	14.70	4.27	5.82	1.36	0.00	112
	H13AY032	K/F 1200/25M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 25 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A		$47,848	9.98	2.85	3.85	0.92	0.00	109
	H13AY029	L/S 1200/50M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 50 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A		$107,850	22.21	6.55	8.95	2.07	0.00	193
	H13AY030	K/F 1200/50M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 50 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A		$63,888	13.25	3.83	5.22	1.22	0.00	188
	H13AY027	L/S 1200/75M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 75 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A		$132,624	27.26	8.07	11.06	2.54	0.00	214
	H13AY028	K/F 1200/75M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 75 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM	A		$74,795	15.47	4.50	6.14	1.43	0.00	208

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
H13			***KOMLINE-SANDERSON ENGINEERING CO. (continued)***									
	H13AY025	L/S 1200/100M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 100 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM A		$156,950	32.22	9.58	13.13	3.01	0.00	219
	H13AY026	K/F 1200/100M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 100 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM A		$87,533	18.08	5.30	7.23	1.68	0.00	211
	H13AY023	L/S 1200/125M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 125 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM A		$175,845	36.06	10.74	14.73	3.37	0.00	236
	H13AY024	K/F 1200/125M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 125 CF CONVENTIONAL, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM A		$94,868	19.57	5.75	7.85	1.82	0.00	227
	H13AY021	L/S 1200/150M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 150 CF MEMBRANE, 1,200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM A		$193,630	39.69	11.84	16.25	3.71	0.00	255
	H13AY022	K/F 1200/150M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 150 CF CONVENTIONAL, 1200 MM SQ, TRAILER MOUNTED (ADD 100 CFM COMPRESSOR)	100 CFM A		$106,833	22.01	6.49	8.87	2.05	0.00	244
			KOCH-WATER									
	H13KP001	BFP-0500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 20" (0.5M) WIDE, 0.6 - 2.0 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	13 HP E		$73,542	17.64	4.51	6.20	1.41	1.64	40

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
			REGION 12										
H13			***KOCH-WATER (continued)***										
	H13KP002	BFP-1000	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 39" (1.0M) WIDE, 3.0 - 6.5 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	16 HP	E		$83,422	20.29	5.12	7.04	1.60	2.04	48
	H13KP003	BFP-1500	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 59" (1.5M) WIDE, 6.0 - 14.0 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	22 HP	E		$98,102	24.62	6.03	8.29	1.88	2.89	55
	H13KP004	BFP-2000	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, FILTER BELT PRESS, 79" (2.0M) WIDE, 14.0 - 20.0 TONS/HR, TRAILER MOUNTED (STAND ALONE UNIT, INCLUDES POLYMER FEED PUMP, BOOSTER PUMP, SLUDGE PUMP, AND DISCHARGE CONVEYOR)	28 HP	E		$112,867	28.88	6.93	9.54	2.16	3.68	65
			USFILTER PERRIN PRODUCTS										
	H13PR002	PLC 25-1000M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 25 CF STANDARD FILTER PRESS, 1,000 MM SQ, TRAILER MOUNTED (COMPLETE)	3 HP	E		$305,244	64.55	18.72	25.73	5.85	0.39	145
	H13PR006	180-1500M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 180 CF STANDARD FILTER PRESS,1,500 MM SQ, TRAILER MOUNTED	5 HP	E		$271,172	58.03	16.61	22.84	5.19	0.66	705
	H13PR011	BPR 1200-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 47" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	2 HP	E		$421,922	88.11	25.91	35.65	8.08	0.26	235

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H13			***USFILTER PERRIN PRODUCTS (continued)***										
	H13PR012	BPR 1600-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 63" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	3 HP	E		$453,763	94.81	27.87	38.36	8.69	0.39	302
	H13PR013	BPR 2000-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 78.75" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	5 HP	E		$481,529	100.89	29.58	40.72	9.22	0.66	319
	H13PR014	BPR 2500-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 98.5" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	8 HP	E		$539,930	113.40	33.18	45.68	10.34	1.05	515
	H13PR015	BPR 3000-15H-M	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, 118" FILTER BELT PRESS, TRAILER MOUNTED (STAND ALONE UNIT, ADD APPURTENANCES SUCH AS FEED PUMPS, POLYMER SYSTEM, WASH WATER BOOSTER PUMP, CONVEYOR ETC.)	8 HP	E		$615,175	128.74	37.82	52.08	11.78	1.05	594
			SOMAT WASTE REDUCTION TECHNOLOGY										
	H13S5001	1PB-6D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 6-15 GPM CAPACITY, TRAILER MOUNTED	3 HP	E		$61,326	13.11	3.78	5.21	1.17	0.39	14
	H13S5002	1PB-9D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 15-40 GPM CAPACITY, TRAILER MOUNTED	5 HP	E		$125,902	26.69	7.76	10.70	2.41	0.66	35
	H13S5003	2PB-9D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 30-80 GPM CAPACITY, TRAILER MOUNTED	5 HP	E		$150,256	31.66	9.27	12.77	2.88	0.66	40

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H13			***SOMAT WASTE REDUCTION TECHNOLOGY (continued)***										
	H13S5004	3PB-9D	HAZARDOUS/TOXIC WASTE EQUIPMENT, FILTER PRESS, MOBILE, PUSHER SCREW PRESS, 45-120 GPM CAPACITY, TRAILER MOUNTED	5 HP	E		$208,534	43.53	12.86	17.73	3.99	0.66	52
	SUBCATEGORY 0.30		**CENTRIFUGES**										
			BOCK ENGINEERED PRODUCTS, INC.										
	H13BC013	GP 35	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 35 LB DRY WT.	3 HP	E		$13,668	6.64	1.68	2.73	0.31	0.39	9
	H13BC010	305 TX	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 35 LB DRY WT.	3 HP	E		$14,447	6.98	1.77	2.89	0.32	0.39	6
	H13BC012	GP 60	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 60 LB DRY WT.	3 HP	E		$15,094	7.27	1.85	3.02	0.34	0.39	9
	H13BC006	605 TX	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 60 LB DRY WT.	3 HP	E		$18,891	8.94	2.31	3.78	0.42	0.39	9
	H13BC011	GP 100	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 100 LB DRY WT.	5 HP	E		$18,462	9.16	2.26	3.69	0.41	0.66	12
	H13BC003	GP 130	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, TIMER, 130 LB DRY WT.	5 HP	E		$20,268	9.96	2.48	4.05	0.45	0.66	12
	H13BC009	355	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, MANUAL CONTROL, EXPLOSION PROOF, 35 LB	3 HP	E		$24,493	11.41	3.00	4.90	0.55	0.39	6
	H13BC007	655	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, MANUAL CONTROL, EXPLOSION PROOF, 60 LB	3 HP	E		$29,226	13.49	3.58	5.85	0.65	0.39	9
	H13BC008	755	HAZARDOUS/TOXIC WASTE EQUIPMENT, CENTRIFUGE, FIXED SPEED, MANUAL CONTROL, EXPLOSION PROOF, 100 LB	5 HP	E		$35,770	16.79	4.38	7.15	0.80	0.66	12

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.40		**SHREDDERS**									
			MAC CORPORATION									
	H13MN001	52-32HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 32" X 52" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET/ BELT-TYPE INFEED & DISCHARGE CONVEYORS	150 HP E		$261,829	89.58	15.95	21.86	5.02	19.70	200
	H13MN002	62-40HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 38" X 62" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET, HOOK-TYPE INFEED FOR TIRES, & DISCHARGE CONVEYOR	200 HP E		$318,337	112.77	19.38	26.55	6.10	26.26	300
	H13MN003	62-40HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 38" X 62" OPENING, TRAILER MTD, W/DIESEL GENERATOR SET, CRANE GRAPPLE & DISCHARGE CONVEYOR SYSTEM	200 HP E		$373,685	125.74	22.79	31.25	7.16	26.26	300
	H13MN004	72-46HT	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 45" X 72" OPENING , TRAILER MTD, W/DIESEL GENERATOR SET, CRANE GRAPPLE & DISCHARGE CONVEYOR SYSTEM	300 HP E		$427,981	158.50	26.14	35.87	8.20	39.39	400
			SHRED-TECH LIMITED									
	H13SH001	ST-25E	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 29" X 42" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	20 HP E		$48,398	14.48	2.99	4.11	0.93	2.63	20
	H13SH002	ST-25EL	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 29" X 46" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	20 HP E		$45,452	13.84	2.80	3.86	0.87	2.63	23
	H13SH003	ST-50	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 40" X 55" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	40 HP E		$78,308	24.94	4.83	6.66	1.50	5.25	45
	H13SH004	ST-50L	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 40" X 65" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	40 HP E		$81,758	25.69	5.05	6.95	1.57	5.25	50

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
H13			***SHRED-TECH LIMITED (continued)***										
	H13SH005	ST-100	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 63" X 70" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	100 HP	E		$132,482	48.67	8.17	11.26	2.54	13.13	200
	H13SH006	ST-500	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 66" X 96" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	300 HP	E		$421,427	151.19	25.98	35.82	8.07	39.39	420
	H13SH007	ST-500L	HAZARDOUS/TOXIC WASTE EQUIPMENT, SHREDDER, 66" X 115" OPENING, TRAILER MTD. (ADD COST FOR CONVEYOR SYSTEM, POWER SUPPLY, AND TRAILER)	600 HP	E		$547,748	238.57	33.77	46.56	10.49	78.78	440
	SUBCATEGORY 0.71		**WASTE HANDLING EQUIPMENT, DRUM HANDLING**										
			BASCO										
	H13BB001	VELT 55/35	HAZARDOUS/TOXIC WASTE EQUIPMENT, WASTE HANDLING EQUIPMENT, DRUM HANDLING, DRUM FILLER, 55 GAL TOP FILL	10 HP	E		$18,502	12.84	2.37	3.93	0.40	1.31	11
	H13BB002	2B	HAZARDOUS/TOXIC WASTE EQUIPMENT, WASTE HANDLING EQUIPMENT, DRUM CLEANER, 12 DRUM/HR CAP INTERIOR	15 HP	E		$16,602	13.06	2.13	3.53	0.36	1.97	19
H20	**HOISTS & AIR WINCHES**												
	SUBCATEGORY 0.00		**HOISTS & AIR WINCHES**										
			INGERSOLL RAND MATERIAL HANDLING										
	H20BE002	FA2.5	AIR WINCH, MANUAL BRAKE, 24" DRUM, 5,000 LBS CAP, 145 FPM (ADD 700 CFM COMPRESSOR)	700 CFM	A		$21,721	4.96	1.40	1.93	0.43	0.00	10
	H20BE003	FA5	AIR WINCH, MANUAL BRAKE, 24" DRUM, 10,000 LBS CAP, 65 FPM (ADD 700 CFM COMPRESSOR)	700 CFM	A		$28,750	6.62	1.86	2.56	0.58	0.00	19
	H20BE004	FA10	AIR WINCH, AUTOMATIC BRAKE, 24" DRUM, 22,000 LBS CAP, 30 FPM (ADD 800 CFM COMPRESSOR)	800 CFM	A		$47,133	10.75	3.04	4.19	0.94	0.00	35

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25	**HYDRAULIC EXCAVATORS, CRAWLER MOUNTED**											
	SUBCATEGORY 0.10		**0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	H25CA034	301.8	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 3,800 LBS, 0.04 CY BUCKET, 7.50' MAX DIGGING DEPTH	17 HP D-off		$35,694	9.42	2.42	3.35	0.74	1.23	37
	H25CA035	303 CR	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 7,500 LBS, 0.11 CY BUCKET, 9.08' MAX DIGGING DEPTH	25 HP D-off		$43,269	11.80	2.93	4.06	0.90	1.81	73
	H25CA036	305 CR	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 10,800 LBS, 0.17 CY BUCKET, 11.08' MAX DIGGING DEPTH	42 HP D-off		$71,476	19.55	4.84	6.70	1.49	3.05	109
			Komatsu America International Company									
	H25KM018	PC20MR-2	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 4,800 LBS, 0.05 CY BUCKET, 8'11" MAX DIGGING DEPTH	20 HP D-off		$42,222	11.14	2.86	3.96	0.88	1.45	51
	H25KM021	PC40MR-2	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 10,000 LBS, 0.18 CY BUCKET, 12'9" MAX DIGGING DEPTH	39 HP D-off		$57,307	16.11	3.88	5.37	1.19	2.83	106
	H25KM022	PC58UU-3	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 11,400 LBS, 0.29 CY BUCKET, 13'1" MAX DIGGING DEPTH	40 HP D-off		$72,976	19.71	4.94	6.84	1.52	2.90	115
	H25KM023	PC78US-6	HYDRAULIC EXCAVATOR, CRAWLER, 6,200 LBS, 0.37 CY BUCKET, 12'4" MAX DIGGING DEPTH	54 HP D-off		$90,190	24.75	6.11	8.46	1.88	3.92	159
			MELROE COMPANY/BOBCAT									
	H25ME001	323	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 3,600 LBS, 0.04 CY BUCKET, 7'6" MAX DIGGING DEPTH	13 HP D-off		$28,457	7.49	1.93	2.67	0.59	0.96	37
	H25ME002	331	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 7,200 LBS, 0.10 CY BUCKET, 10'2" MAX DIGGING DEPTH	40 HP D-off		$41,699	12.72	2.83	3.91	0.87	2.90	72

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***MELROE COMPANY/BOBCAT (continued)***									
	H25ME003	337	HYDRAULIC EXCAVATOR, CRAWLER-RUBBER TRACK, 11,000 LBS, 0.18 CY BUCKET, 12' MAX DIGGING DEPTH	48 HP D-off		$59,486	17.37	4.03	5.58	1.24	3.48	110
	SUBCATEGORY 0.11		**OVER 12,500 LBS THRU 40,000 LBS**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	H25CA038	307C	HYDRAULIC EXCAVATOR, CRAWLER, 14,310 LBS, 0.48 CY BUCKET, 15.25' MAX DIGGING DEPTH	54 HP D-off		$99,697	25.68	6.47	8.80	2.07	3.92	159
	H25CA020	311-CU	HYDRAULIC EXCAVATOR, CRAWLER, 24,640 LBS, 0.60 CY BUCKET, 16.50' MAX DIGGING DEPTH	79 HP D-off		$132,592	34.75	8.60	11.70	2.75	5.73	258
	H25CA021	312-C L	HYDRAULIC EXCAVATOR, CRAWLER, 26,900 LBS, 0.68 CY BUCKET, 18.16' MAX DIGGING DEPTH	84 HP D-off		$145,397	37.88	9.43	12.83	3.01	6.09	288
			KOBELCO AMERICA INC.									
	H25KC017	70SR	HYDRAULIC EXCAVATOR, CRAWLER, 16,400 LBS, 0.33 CY BUCKET, 14.75' MAX DIGGING DEPTH	54 HP D-off		$98,869	25.50	6.41	8.72	2.05	3.92	168
	H25KC016	135SR LC	HYDRAULIC EXCAVATOR, CRAWLER, 30,870 LBS, 0.60 CY BUCKET, 19.58' MAX DIGGING DEPTH	94 HP D-off		$140,901	37.78	9.14	12.43	2.92	6.82	319
			Komatsu America International Company									
	H25KM027	PC128UU-2	HYDRAULIC EXCAVATOR, CRAWLER, 12,200 LBS, 0.58 CY BUCKET, 16' 0" MAX DIGGING DEPTH	86 HP D-off		$175,324	44.39	11.37	15.47	3.63	6.24	295
	H25KM001	PC 120-6	HYDRAULIC EXCAVATOR, CRAWLER, 26,950 LBS, 0.75 CY BUCKET, 18.08' MAX DIGGING DEPTH	89 HP D-off		$124,823	33.95	8.10	11.01	2.59	6.46	265
	H25KM003	PC 160LC-7	HYDRAULIC EXCAVATOR, CRAWLER, 39,400 LBS, 1.12 CY BUCKET, 19.58' MAX DIGGING DEPTH	110 HP D-off		$191,746	49.90	12.43	16.92	3.97	7.98	395

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	LINK-BELT CONSTRUCTION EQUIPMENT COMPANY											
	H25LI003	130 LX	HYDRAULIC EXCAVATOR, CRAWLER, 27,100 LBS, 0.50 CY BUCKET, 18' 2" MAX DIGGING DEPTH	89 HP D-off		$129,343	34.91	8.39	11.41	2.68	6.46	271
	H25LI005	160 LX	HYDRAULIC EXCAVATOR, CRAWLER, 35,275 LBS, 0.66 CY BUCKET, 20' 1" MAX DIGGING DEPTH	101 HP D-off		$151,012	40.51	9.79	13.32	3.13	7.33	362
	SUBCATEGORY 0.12		**OVER 40,000 LBS THRU 100,000 LBS**									
	CATERPILLAR INC. (MACHINE DIVISION)											
	H25CA040	318CL	HYDRAULIC EXCAVATOR, CRAWLER, 40,600 LBS, 1.00 CY BUCKET, 22.50' MAX DIGGING DEPTH	125 HP D-off		$151,755	35.73	7.80	9.48	3.06	9.07	405
	H25CA022	320C	HYDRAULIC EXCAVATOR, CRAWLER, 43,800 LBS, 1.50 CY BUCKET, 21.75' MAX DIGGING DEPTH	128 HP D-off		$218,493	47.07	11.24	13.66	4.41	9.29	444
	H25CA023	320CL	HYDRAULIC EXCAVATOR, CRAWLER, 49,000 LBS, 0.80 CY BUCKET, 39.0' MAX DIGGING DEPTH, LONG REACH BOOM	128 HP D-off		$273,483	56.19	14.07	17.09	5.52	9.29	536
	KOBELCO AMERICA INC.											
	H25KC019	SK210 LC	HYDRAULIC EXCAVATOR, CRAWLER, 48,000 LBS, 1.13 CY BUCKET, 22.00' MAX DIGGING DEPTH	143 HP D-off		$218,426	48.31	11.24	13.65	4.41	10.37	480
	H25KC020	SK210 LC	HYDRAULIC EXCAVATOR, CRAWLER, 53,400 LBS, 0.63 CY BUCKET, 39' MAX DIGGING DEPTH, LONG REACH BOOM	143 HP D-off		$238,151	51.59	12.25	14.88	4.81	10.37	534
	H25KC021	SK250 LC	HYDRAULIC EXCAVATOR, CRAWLER, 55,100 LBS, 1.875 CY BUCKET, 23.08' MAX DIGGING DEPTH	176 HP D-off		$251,827	56.64	12.95	15.74	5.08	12.77	551
	H25KC022	SK250 LC	HYDRAULIC EXCAVATOR, CRAWLER, 59,100 LBS, 0.50 CY BUCKET, 23' MAX DIGGING DEPTH, LONG REACH BOOM	176 HP D-off		$285,024	62.15	14.66	17.81	5.75	12.77	591
	H25KC023	SK330 LC	HYDRAULIC EXCAVATOR, CRAWLER, 77,800 LBS, 2.05 CY BUCKET, 24.58' MAX DIGGING DEPTH	238 HP D-off		$354,117	78.85	18.22	22.13	7.15	17.26	778

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			Komatsu America International Company									
	H25KM013	PC 400 LC-6	HYDRAULIC EXCAVATOR, CRAWLER, 99,517 LBS, 2.75 CY BUCKET, 25.50' MAX DIGGING DEPTH	306 HP D-off		$547,578	116.70	28.16	34.22	11.05	22.20	952
	SUBCATEGORY 0.13		**OVER 100,000 LBS THRU 160,000 LBS**									
			KOBELCO AMERICA INC.									
	H25KC024	SK400 LC	HYDRAULIC EXCAVATOR, CRAWLER, 101,900 LBS 3.06 CY BUCKET, 25.58' MAX DIGGING DEPTH	306 HP D-off		$445,855	87.91	19.31	20.90	8.86	22.20	1,019
	H25KC026	SK480LC	HYDRAULIC EXCAVATOR, CRAWLER, 108,000 LBS, 2.25 CY BUCKET, 25.58' MAX DIGGING DEPTH	315 HP D-off		$467,137	91.69	20.24	21.90	9.29	22.85	1,080
			Komatsu America International Company									
	H25KM015	PC 600 LC-7	HYDRAULIC EXCAVATOR, CRAWLER, 133,160 LBS, 4.25 CY BUCKET, 27.83' MAX DIGGING DEPTH	384 HP D-off		$800,465	145.22	34.67	37.52	15.91	27.86	1,332
	SUBCATEGORY 0.14		**OVER 160,000 LBS**									
			Komatsu America International Company									
	H25KM009	PC 750LC-7	HYDRAULIC EXCAVATOR, CRAWLER, 171,070 LBS, 4.05 CY BUCKET, 27.66' MAX DIGGING DEPTH	454 HP D-off		$959,350	160.88	37.84	37.87	18.90	32.93	1,750
	H25KM033	PC1800-6	HYDRAULIC EXCAVATOR, CRAWLER, 396,800 LBS, 15.70 CY BUCKET, 30'5" MAX DIGGING DEPTH	908 HP D-off		$1,922,187	322.22	75.81	75.88	37.87	65.87	3,968
	SUBCATEGORY 0.21		**ATTACHMENTS, MOBILE SHEARS**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	H25CA055	S305	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 9.4" JAW OPENING (ADD 10,000 LB HYDRAULIC EXCAVATOR)			$23,835	8.71	2.17	3.38	0.48	0.00	15

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	H25CA057	S320	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 15.4" JAW OPENING (ADD 20,000 LB HYDRAULIC EXCAVATOR)			$81,100	29.09	7.40	11.49	1.65	0.00	57
	H25CA052	S230	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 22.0" JAW OPENING (ADD 35,000 LB HYDARULIC EXCAVATOR)			$92,211	33.67	8.41	13.06	1.88	0.00	84
	H25CA053	S250	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 28.0" JAW OPENING (ADD 45,000 LB HYDRAULIC EXCAVATOR)			$125,720	45.46	11.47	17.81	2.56	0.00	158
	H25CA054	S280	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 32.0" JAW OPENING (ADD 100,000 LB HYDRAULIC EXCAVATOR)			$161,497	59.33	14.72	22.88	3.28	0.00	191
	H25CA056	S2130	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, SCRAP, 43.0" JAW OPENING (ADD 100,000 LB HYDRAULIC EXCAVATOR)			$262,809	94.67	23.96	37.23	5.34	0.00	307
			LABOUNTY MANUFACTURING,									
	H25LU001	MSD 7	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 10" JAW OPENING (ADD 10,000 LB HYDRAULIC EXCAVATOR)			$19,235	7.10	1.75	2.72	0.39	0.00	10
	H25LU002	MSD 7R	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 10" JAW OPENING (ADD 14,000 LB HYDRAULIC EXCAVATOR)			$21,158	7.88	1.93	3.00	0.43	0.00	11
	H25LU003	MSD 15	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 18" JAW OPENING (ADD 20,000 LB HYDRAULIC EXCAVATOR)			$40,744	15.01	3.72	5.77	0.83	0.00	30
	H25LU004	MSD 15R	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 18" JAW OPENING (ADD 25,000 LB HYDRAULIC EXCAVATOR)			$47,369	17.42	4.32	6.71	0.96	0.00	35
	H25LU005	MSD 30 - III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 22" JAW OPENING (ADD 25,000 LB HYDRAULIC EXCAVATOR)			$59,460	21.84	5.42	8.42	1.21	0.00	50
	H25LU006	MSD 30R - III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 22" JAW OPENING (ADD 35,000 LB HYDRAULIC EXCAVATOR)			$83,280	30.55	7.59	11.80	1.69	0.00	67

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			*LABOUNTY MANUFACTURING, (continued)*									
	H25LU007	MSD 40-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 27" JAW OPENING (ADD 40,000 LB HYDRAULIC EXCAVATOR)			$71,192	26.24	6.50	10.09	1.45	0.00	70
	H25LU008	MSD 40R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 27" JAW OPENING (ADD 45,000 LB HYDRAULIC EXCAVATOR)			$93,100	34.07	8.49	13.19	1.89	0.00	90
	H25LU009	MSD 50-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 32" JAW OPENING (ADD 45,000 LB HYDRAULIC EXCAVATOR)			$102,310	37.38	9.33	14.49	2.08	0.00	109
	H25LU010	MSD 50R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 32" JAW OPENING (ADD 60,000 LB HYDRAULIC EXCAVATOR)			$123,028	44.92	11.22	17.43	2.50	0.00	140
	H25LU011	MSD 70-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 35" JAW OPENING (ADD 60,000 LB HYDRAULIC EXCAVATOR)			$121,752	44.48	11.11	17.25	2.48	0.00	130
	H25LU012	MSD 70R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 35" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$149,139	54.52	13.60	21.13	3.03	0.00	164
	H25LU013	MSD 100-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 38" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$153,837	56.26	14.03	21.79	3.13	0.00	150
	H25LU014	MSD 100R-III SV	HYDRAULIC EXCAVATOR, ATTACHMENT, MOBILE SHEARS, 38" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$179,117	65.48	16.33	25.37	3.64	0.00	180
	SUBCATEGORY 0.22		**ATTACHMENTS, MATERIAL HANDLING**									
			BALDERSON, INC.									
	H25BS001		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 0.50 CY BUCKET, W/TIPS (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			$4,728	1.51	0.42	0.63	0.10	0.00	10
	H25BS002		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 0.75 CY BUCKET, W/TIPS (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			$5,515	1.78	0.49	0.74	0.12	0.00	16
	H25BS003		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 1.25 CY BUCKET, W/TIPS (ADD 25,000-60,000 LB HYDRAULIC EXCAVATOR)			$6,142	1.97	0.54	0.82	0.13	0.00	30

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
			REGION 12									
H25			***BALDERSON, INC. (continued)***									
	H25BS004		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 1.50 CY BUCKET, W/TIPS (ADD 50,000-60,000 LB HYDRAULIC EXCAVATOR)			$7,408	2.38	0.66	0.99	0.16	0.00	22
	H25BS005		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, 3.25 CY BUCKET, W/TIPS (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			$11,717	3.76	1.03	1.56	0.25	0.00	52
			LABOUNTY MANUFACTURING,									
	H25LU023	100 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 1.25CY, 3-TINE/ 4-TINE (ADD 25,000 LB HYDRAULIC EXCAVATOR)			$11,420	3.91	1.00	1.52	0.24	0.00	16
	H25LU024	110 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 3.50CY, 4-TINE/ 5-TINE (ADD 35,000 LB HYDRAULIC EXCAVATOR)			$16,294	5.51	1.43	2.17	0.34	0.00	28
	H25LU025	120 TR	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 3.50CY, 4-TINE/ 5-TINE (ADD 45,000 LB HYDRAULIC EXCAVATOR)			$19,981	6.80	1.75	2.66	0.42	0.00	35
	H25LU026	140 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 5.50CY, 4-TINE/ 5-TINE (ADD 60,000 LB HYDRAULIC EXCAVATOR)			$22,838	7.82	2.01	3.05	0.48	0.00	48
	H25LU027	160 TR	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 6.50CY, 4-TINE/ 5-TINE (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$25,611	8.80	2.25	3.41	0.54	0.00	58
	H25LU028	170 TW	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, GRAPPLE, 9.00CY, 4-TINE/ 5-TINE (ADD 100,000 LB HYDRAULIC EXCAVATOR)			$32,803	11.21	2.88	4.37	0.69	0.00	78
	H25LU034	RDG 60	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, ROTATING GRAPPLE, 1.75 CY (ADD 38,000-70,000 LB HYDRAULIC EXCAVATOR)			$46,371	15.65	4.06	6.18	0.97	0.00	35

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***LABOUNTY MANUFACTURING, (continued)***									
	H25LU035	RDG 90	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, ROTATING GRAPPLE, 1.25 CY (ADD 70,000-140,000 LB HYDRAULIC EXCAVATOR)			$49,813	16.85	4.36	6.64	1.04	0.00	69
	H25LU036	RDG 120	HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, ROTATING GRAPPLE, 2.00 CY (ADD 120,000-160,000 LB HYDRAULIC EXCAVATOR)			$53,171	18.03	4.66	7.09	1.11	0.00	100
			WAIN-ROY, INC.									
	H25WN001		HYDRAULIC EXCAVATOR, ATTACHMENT, MATERIAL HANDLING, BUCKET, 36" CONCRETE/PAVEMENT REMOVAL (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$6,746	2.16	0.59	0.90	0.14	0.00	16
	SUBCATEGORY 0.23		**ATTACHMENTS, CONCRETE PULVERIZERS**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	H25CA058	CR3	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 16.0" JAW OPENING (ADD 40,000 LB MIN HYDRAULIC EXCAVATOR)			$19,373	7.65	1.76	2.74	0.39	0.00	6
	H25CA059	P16	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 30.0" JAW OPENING (ADD 40,000 LB MIN HYDRAULIC EXCAVATOR)			$71,123	26.89	6.49	10.08	1.45	0.00	53
	H25CA060	P28	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 34.0" JAW OPENING (ADD 40,000 LB MIN HYDRAULIC EXCAVATOR)			$104,870	39.50	9.56	14.86	2.13	0.00	87
	H25CA061	CR28	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 36.0" JAW OPENING (ADD 45,000 LB MIN HYDRAULIC EXCAVATOR)			$91,598	34.60	8.35	12.98	1.86	0.00	81
	H25CA062	P60	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 45.0" JAW OPENING (ADD 45,000 LB MIN HYDRAULIC EXCAVATOR)			$168,440	63.14	15.36	23.86	3.43	0.00	194

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	H25CA063	CR35	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 47.0" JAW OPENING (ADD 50,000 LB MIN HYDRAULIC EXCAVATOR)			$119,992	45.24	10.94	17.00	2.44	0.00	111
	H25CA064	CR50	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRUSHER, 63.0" JAW OPENING (ADD 50,000 LB MIN HYDRAULIC EXCAVATOR)			$146,248	55.04	13.33	20.72	2.97	0.00	155
			KENT DEMOLITION TOOLS									
	H25KN001	KF12 TLB	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 2,000 FT-LB, W/4.25" DIA. POINT (ADD 16,000-24,000 LB HYDRAULIC EXCAVATOR)			$28,456	11.01	2.60	4.03	0.58	0.00	19
	H25KN002	KF19 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 3,000 FT-LB, W/4.75" DIA. POINT (ADD 26,000-36,000 LB HYDRAULIC EXCAVATOR)			$39,455	15.08	3.60	5.59	0.80	0.00	31
	H25KN003	KF22 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 4,000 FT-LB, W/5.25" DIA. POINT (ADD 36,000-50,000 LB HYDRAULIC EXCAVATOR)			$48,123	18.29	4.39	6.82	0.98	0.00	38
	H25KN004	KF27 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 5,000 FT-LB, W/5.51" DIA. POINT (ADD 50,000-64,000 LB HYDRAULIC EXCAVATOR)			$55,292	20.92	5.04	7.83	1.12	0.00	43
	H25KN005	KHB40G 11	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 7,000 FT-LB, W/6.25" DIA. POINT (ADD 64,000-88,000 LB HYDRAULIC EXCAVATOR)			$79,809	30.49	7.28	11.31	1.62	0.00	75
	H25KN006	KF70 QT	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE BREAKER, 10,000 FT-LB, W/7.09 " DIA. POINT (ADD 80,000 LB HYDRAULIC EXCAVATOR)			$111,803	42.31	10.19	15.84	2.27	0.00	103
			LABOUNTY MANUFACTURING,									
	H25LU046	CP 40	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 30" JAW OPENING (ADD 40,000 LB HYDRAULIC EXCAVATOR)			$23,755	9.28	2.17	3.37	0.48	0.00	29

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***LABOUNTY MANUFACTURING, (continued)***									
	H25LU047	CP 60	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 36" JAW OPENING (ADD 60,000 LB HYDRAULIC EXCAVATOR)			$27,275	10.67	2.48	3.86	0.55	0.00	30
	H25LU048	CP 80	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 42" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$31,085	12.18	2.83	4.40	0.63	0.00	45
	H25LU049	CP 100	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 48" JAW OPENING (ADD 100,000 LB HYDRAULIC EXCAVATOR)			$37,845	14.78	3.45	5.36	0.77	0.00	62
	H25LU050	CP 120	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 54" JAW OPENING (ADD 140,000 LB HYDRAULIC EXCAVATOR)			$46,658	18.14	4.26	6.61	0.95	0.00	99
	H25LU040	UP 45 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRACKING JAWS, 45" JAW OPENING (ADD 55,000 LB HYDRAULIC EXCAVATOR)			$100,702	37.97	9.19	14.27	2.05	0.00	105
	H25LU041	UP 75 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRACKING JAWS, 49" JAW OPENING (ADD 80,000 LB HYDRAULIC EXCAVATOR)			$123,265	46.30	11.24	17.46	2.51	0.00	127
	H25LU042	UP 90	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, CRACKING JAWS, 62" JAW OPENING (ADD 75,000 LB HYDRAULIC EXCAVATOR)			$146,441	55.62	13.36	20.75	2.98	0.00	171
	H25LU053	UP 45 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 36" JAW OPENING (ADD 55,000 LB HYDRAULIC EXCAVATOR)			$105,690	39.80	9.64	14.97	2.15	0.00	105
	H25LU054	UP 75 SV	HYDRAULIC EXCAVATOR, ATTACHMENT, CONCRETE PULVERIZER, 40" JAW OPENING (ADD 80,000 LB HYDRAULIC EXCAVATOR)			$130,221	48.87	11.88	18.45	2.65	0.00	126
	SUBCATEGORY 0.24		**ATTACHMENTS, COMPACTORS**									
			ALLIED CONSTRUCTION PRODUCTS									
	H25AU001	4700 W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 18" X 12" PLATE, 3,000 LBS FORCE (ADD 15,000-20,000 LB HYDRAULIC EXCAVATOR)			$6,664	2.46	0.61	0.94	0.14	0.00	4

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***ALLIED CONSTRUCTION PRODUCTS (continued)***									
	H25AU002	8700C W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 34" X 24" PLATE, 6,400 LBS FORCE (ADD 20,000-30,000 LB HYDRAULIC EXCAVATOR)			$7,728	2.85	0.71	1.09	0.16	0.00	9
	H25AU003	9700C W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 40" X 29" PLATE, 13,000 LBS FORCE (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			$10,819	3.99	0.99	1.53	0.22	0.00	16
	H25AU004	9800 W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 46" X 34" PLATE, 20,000 LBS FORCE (ADD 40,000-75,000 LB HYDRAULIC EXCAVATOR)			$16,843	6.22	1.54	2.39	0.34	0.00	23
	H25AU005	9801 W/SWIVEL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 46" X 34" PLATE, 22,000 LBS FORCE (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			$16,884	6.23	1.54	2.39	0.34	0.00	23
			AMERICAN COMPACTION EQUIPMENT, INC.									
	H25AX001	DC-24BL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 23" WIDE, SHEEPS FOOT, 3 RIMS - 38" DIA (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			$7,033	2.60	0.64	1.00	0.14	0.00	25
	H25AX003	DC-24EX	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 23" WIDE, SHEEPS FOOT, 3 RIMS - 42" DIA (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			$8,504	3.13	0.77	1.20	0.17	0.00	33
	H25AX005	DC-24EXL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 23" WIDE, SHEEPS FOOT, 3 RIMS - 48" DIA (ADD 75,000-110,000 LB HYDRAULIC EXCAVATOR)			$9,632	3.56	0.88	1.36	0.20	0.00	39
	H25AX002	DC-36BL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 35" WIDE, SHEEPS FOOT, 4 RIMS - 38" DIA (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			$8,312	3.07	0.76	1.18	0.17	0.00	33
	H25AX004	DC-36EX	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 35" WIDE, SHEEPS FOOT, 4 RIMS - 42" DIA (ADD 50,000-75,000 LB HYDRAULIC EXCAVATOR)			$10,320	3.81	0.94	1.46	0.21	0.00	43

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H25			***AMERICAN COMPACTION EQUIPMENT, INC. (continued)***									
	H25AX006	DC-36EXL	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 36" WIDE, SHEEPS FOOT, 4 RIMS - 48" DIA (ADD 75,000-110,000 LB HYDRAULIC EXCAVATOR)			$11,944	4.41	1.09	1.69	0.24	0.00	53
			KENT DEMOLITION TOOLS									
	H25KN007	KHP-35 FT	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 12" X 26" PLATE, 3000 LB FORCE (ADD 14,000-25,000 LB HYDRAULIC EXCAVATOR)			$5,674	2.25	0.52	0.80	0.12	0.00	4
	H25KN009	KHP-135FT - II	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 28" X 40" PLATE, 13500 LB FORCE (ADD 25,000-50,000 LB HYDRAULIC EXCAVATOR)			$11,818	4.51	1.08	1.67	0.24	0.00	14
	H25KN010	KHP-210FT - II	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 34" X 46" PLATE, 21000 LB FORCE (ADD 40,000-75,000 LB HYDRAULIC EXCAVATOR)			$16,375	6.20	1.49	2.32	0.33	0.00	23
			WAIN-ROY, INC.									
	H25WN002	24-3 (15-22.5 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 24" WIDE, SHEEPSFOOT, 3 RIMS - 33" DIA (ADD 15-22.5 TON HYDRAULIC EXCAVATOR)			$7,252	2.68	0.67	1.03	0.15	0.00	22
	H25WN003	36-4 (15-22.5 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 36" WIDE, SHEEPSFOOT, 4 RIMS - 33" DIA (ADD 15-22.5 TON HYDRAULIC EXCAVATOR)			$7,983	2.95	0.73	1.13	0.16	0.00	26
	H25WN004	24-3 (22.5-30 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 24" WIDE, SHEEPSFOOT, 3 RIMS - 39" DIA (ADD 22.5-30 TON HYDRAULIC EXCAVATOR)			$8,766	3.24	0.80	1.24	0.18	0.00	31
	H25WN005	36-4 (22.5-30 TON)	HYDRAULIC EXCAVATOR, ATTACHMENT, COMPACTOR, 36" WIDE, SHEEPSFOOT, 4 RIMS - 39" DIA (ADD 22.5-30 TON HYDRAULIC EXCAVATOR)			$9,995	3.69	0.91	1.42	0.20	0.00	38

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
H30	**HYDRAULIC EXCAVATORS, WHEEL MOUNTED**											
	SUBCATEGORY 0.01		**0 THRU 1.0 CY**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	H30CA005	M318 C	HYDRAULIC EXCAVATORS, WHEEL, 33,700 LBS, 1.00 CY BUCKET, 1-PIECE BOOM, 19' DIGGING DEPTH, 4X4	151 HP D-off		$203,499	52.10	13.47	18.46	4.24	10.25	393
	H30CA007	M315C	HYDRAULIC EXCAVATORS, WHEEL, 35,100 LBS, 0.70 CY BUCKET, 1-PIECE BOOM, 17' 7" DIGGING DEPTH, 4X4X2	121 HP D-off		$170,385	43.64	11.15	15.19	3.55	8.21	352
			GRADALL COMPANY									
	H30GA006	XL4100 II	HYDRAULIC EXCAVATORS, WHEEL, 44,851 LBS, 0.75 CY BUCKET, TELESCOPIC BOOM, 22' 6" DIGGING DEPTH, 6X4	233 HP D-off	D-on	$265,978	70.39	17.70	24.29	5.55	15.81	469
	H30GA007	XL 3300	HYDRAULIC EXCAVATORS, WHEEL, 15,270 LBS, 0.68 CY BUCKET, TELESCOPIC BOOM, 4X4X2	138 HP D-off		$202,653	50.39	13.53	18.60	4.23	9.36	370
	SUBCATEGORY 0.02		**OVER 1.0 CY**									
			GRADALL COMPANY									
	H30GA008	XL 5100	HYDRAULIC EXCAVATORS, WHEEL, 22,800 LBS, 1.25 CY BUCKET, TELESCOPIC BOOM, 25' 4" DIGGING DEPTH, 6X4	163 HP D-off	230 HP D-on	$309,461	73.14	17.48	22.29	6.33	13.75	553
			Komatsu America International Company									
	H30KM001	PW170ES-6	HYDRAULIC EXCAVATORS, WHEEL, 37,600 LBS, 1.12 CY BUCKET, 1-PIECE BOOM, 18' 8" DIGGING DEPTH, 4X4	123 HP D-off		$216,564	47.28	12.40	15.94	4.43	8.35	376

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
H35	**HYDRAULIC SHOVELS, CRAWLER MOUNTED**											
	SUBCATEGORY 0.12		**DIESEL, OVER 5.0 CY**									
			HITACHI CONSTRUCTION MACHINERY									
	H35HI006	EX1200-5	HYDRAULIC SHOVEL, CRAWLER, 8.5 CY BUCKET, FRONT SHOVEL, 17' 3" DIGGING DEPTH	641 HP D-off		$1,180,817	241.36	52.18	59.04	22.66	46.50	2,447
			O & K ORENSTEIN & KOPPEL INC.									
	H35OK001	RH 40 E	HYDRAULIC SHOVEL, CRAWLER, 9.20 CY BUCKET, BACKHOE, 28' 10" DIGGING DEPTH	607 HP D-off		$750,303	168.67	33.16	37.52	14.40	44.03	2,204
	H35OK003	RH 90 C	HYDRAULIC SHOVEL, CRAWLER, 13.10 CY BUCKET, BACKHOE, 31' 1" DIGGING DEPTH	1,018 HP D-off		$1,521,079	325.64	67.22	76.05	29.19	73.85	3,594
	H35OK004	RH 120 C	HYDRAULIC SHOVEL, CRAWLER, 17.00 CY BUCKET, FRONT SHOVEL, 7' 7" DIGGING DEPTH	1,280 HP D-off		$2,426,994	493.21	107.25	121.35	46.57	92.85	5,842
	H35OK005	RH 200	HYDRAULIC SHOVEL, CRAWLER, 34.00 CY BUCKET, BACKHOE, 30' 6" DIGGING DEPTH	2,250 HP D-off		$4,574,636	917.18	202.14	228.73	87.77	163.22	10,582
L10	**LAND CLEARING EQUIPMENT**											
	SUBCATEGORY 0.00		**LAND CLEARING EQUIPMENT**									
			BALDERSON, INC.									
	L10BS004	BBL7	LAND CLEARING EQUIPMENT, ROCK & ROOT RAKE, 12.0' WIDE, 9 TEETH (ADD 200 - 250 HP TRACTOR DOZER)			$9,380	2.22	0.57	0.75	0.19	0.00	24
	L10BS005	BRK8	LAND CLEARING EQUIPMENT, ROCK & ROOT RAKE 12.5' WIDE, 9 TEETH (ADD 275 - 325 HP TRACTOR DOZER)			$24,940	5.53	1.49	2.00	0.49	0.00	72
	L10BS002	BMA8	LAND CLEARING EQUIPMENT, MULTI-APPLICATION RAKE, 12.5' WIDE, 9 TEETH (ADD 275 - 325 HP TRACTOR DOZER)			$27,159	5.99	1.63	2.17	0.54	0.00	68

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
L10			***BALDERSON, INC. (continued)***										
	L10BS007	988 DTC	LAND CLEARING EQUIPMENT, LOGGING FORK, 92" TINES (ADD 400 - 450 HP FE LOADER)				$34,946	7.82	2.09	2.80	0.69	0.00	90
			BUSH HOG										
	L10BU009	FH174	LAND CLEARING EQUIPMENT, FLAIL MOWER, 62" WIDE, 0.5 - 5" HEIGHT (ADD FARM 30 - 60 HP TRACTOR)				$4,670	1.87	0.28	0.37	0.09	0.00	10
	L10BU005	SM-60	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 5' WIDE-SIDE MTD (ADD FARM 50 HP TRACTOR)				$8,792	2.93	0.52	0.70	0.17	0.00	17
	L10BU010	287	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 7' WIDE, 1.5 - 12" HEIGHT (ADD FARM 40 HP TRACTOR)				$4,495	1.74	0.27	0.36	0.09	0.00	11
	L10BU011	3210	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 10.5' WIDE, 2 - 14" HEIGHT (ADD FARM 70 HP TRACTOR)				$9,685	3.52	0.58	0.77	0.19	0.00	25
	L10BU012	3715	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 15' WIDE, 2 - 14" HEIGHT (ADD FARM 80 HP TRACTOR)				$19,847	6.16	1.19	1.59	0.39	0.00	50
	L10BU013	2720	LAND CLEARING EQUIPMENT, ROTARY CUTTER, 20' WIDE, 2 - 14" HEIGHT (ADD FARM 90 HP TRACTOR)				$20,629	6.82	1.24	1.65	0.41	0.00	56
			ROME PLOW CO.										
	L10RM001	RV8N	LAND CLEARING EQUIPMENT, V-TREE CUTTER (ADD 275 - 325 HP TRACTOR DOZER)				$47,208	10.30	2.83	3.78	0.94	0.00	134
	L10RM002	MA-152R-8S	LAND CLEARING EQUIPMENT, MULTI-APPLICATION RAKE, 12' 8" WIDE, 9 TEETH (ADD 275 - 325 HP TRACTOR DOZER)				$41,182	8.63	2.47	3.29	0.82	0.00	150
			VERMEER MANUFACTURING CO.										
	L10VE010	SC 252	LAND CLEARING EQUIPMENT, STUMPER, 16" DIA WHEEL, TRAILER MTD	25 HP	G		$12,605	7.01	0.75	0.99	0.25	3.83	11
	L10VE002	SC 630B	LAND CLEARING EQUIPMENT, STUMPER, 18" DIA WHEEL, TRAILER MTD	34 HP	G		$16,278	9.36	0.96	1.27	0.32	5.21	17
	L10VE009	SC 752	LAND CLEARING EQUIPMENT, STUMPER, 25" DIA WHEEL, TRAILER MTD	75 HP	G		$31,894	19.80	1.89	2.52	0.63	11.50	40

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER		VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
L10			***VERMEER MANUFACTURING CO. (continued)***											
	L10VE005	TS-30	LAND CLEARING EQUIPMENT, TREE SPADE, 30" DIA, 26" DEPTH, TRAILER MTD	13 HP	G			$12,109	4.82	0.71	0.94	0.24	1.99	38
	L10VE006	TS-44A	LAND CLEARING EQUIPMENT, TREE SPADE, 44" DIA, 40" DEPTH, TRAILER MTD	20 HP	G			$26,143	8.99	1.55	2.06	0.52	3.07	66
	L10VE007	TS-50M	LAND CLEARING EQUIPMENT, TREE SPADE, 50" DIA, 48" DEPTH (ADD 13,800 GVW TRUCK)					$23,858	6.50	1.43	1.91	0.47	0.00	81
L15	**LANDSCAPING EQUIPMENT**													
	SUBCATEGORY 0.00		**LANDSCAPING EQUIPMENT**											
			BOWIE INDUSTRIES, INC.											
	L15BW001	LANCER 500	LANDSCAPING EQUIPMENT, 500 GAL, HYDROMULCHER, TRAILER MTD	25 HP	G			$14,976	12.42	1.89	3.11	0.33	5.11	25
	L15BW002	VICTOR 800	LANDSCAPING EQUIPMENT, 800 GAL, HYDROMULCHER, TRAILER MTD	35 HP	G			$27,042	20.13	3.40	5.61	0.59	7.16	48
	L15BW003	VICTOR 1100	LANDSCAPING EQUIPMENT, 1,100 GAL, HYDROMULCHER, GOOSENECK TRAILER MTD	50 HP	G			$31,118	25.38	3.92	6.48	0.68	10.22	60
	L15BW004	IMPERIAL 3000	LANDSCAPING EQUIPMENT, 3,000 GAL, HYDROMULCHER, TRUCK MTD (ADD 55,000 GVW TRUCK)	90 HP	D-off			$44,308	28.94	5.68	9.42	0.97	8.00	88
			FINN CORPORATION											
	L15FG001	T330	LANDSCAPING EQUIPMENT, 3,000 GAL, HYDROSEEDER, TRUCK MTD (INCLUDES 56,000 GVW TRUCK)	115 HP	D-off	310 HP	D-off	$166,464	91.51	21.33	35.37	3.64	14.58	96
	L15FG002	B260T	LANDSCAPING EQUIPMENT, MULCHER, STRAW BLOWER, 20 TONS PER HOUR, TRAILER MOUNTED	115 HP	D-off			$38,522	28.72	4.87	8.06	0.84	10.23	48
			HOFFCO-COMET											
	L15HZ001	PH980E	POST HOLE DRILL, UP TO 8" DIA, 30" DEEP, ONE MAN OPERATION	3 HP	G			$1,051	1.15	0.13	0.22	0.02	0.61	1

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			DEERE & COMPANY									
	L15JD001	F725	LANDSCAPING EQUIPMENT, LAWNMOWER, 54" DECK, SIDE DISCHARGE RIDING, 4X2	20 HP G		$9,928	9.53	0.86	1.27	0.22	4.09	12
	L15JD005	MX5	LANDSCAPING EQUIPMENT, ROTARY MOWER, 60" WIDE, MEDIUM DUTY, PTO DRIVE (ADD 45 - 100 HP AGRICULTURAL TRACTOR)			$1,983	0.89	0.25	0.42	0.04	0.00	8
	L15JD006	609	LANDSCAPING EQUIPMENT, ROTARY MOWER, 60" WIDE, HEAVY DUTY, PTO DRIVE (ADD 45 - 100 HP AGRICULTURAL TRACTOR)			$3,676	1.66	0.47	0.78	0.08	0.00	12
			TORO									
	L15TO001	22172 - PRO-LINE 21"	LANDSCAPING EQUIPMENT, LAWNMOWER, 21" DECK, REAR BAGGER, PUSH MOWER	6 HP G		$1,260	1.94	0.17	0.27	0.03	1.23	1
	L15TO002	30316 MID-SIZE	LANDSCAPING EQUIPMENT, LAWNMOWER, 32" DECK, SIDE DISCHARGE, RIDING MOWER	13 HP G		$3,259	4.46	0.39	0.64	0.07	2.66	4
	L15TO003	Z147	LANDSCAPING EQUIPMENT, LAWNMOWER, 48" DECK W/Z100 TRACTOR, SIDE DISCHARGE, RIDING MOWER	17 HP G		$7,889	7.46	0.98	1.62	0.17	3.48	11
	L15TO004	Z149	LANDSCAPING EQUIPMENT, LAWNMOWER, 52" DECK W/Z100 TRACTOR, SIDE DISCHARGE, RIDING MOWER	19 HP G		$8,695	8.27	1.09	1.79	0.19	3.89	11
	L15TO006	Z587L	LANDSCAPING EQUIPMENT, LAWNMOWER, 60" DECK W/Z500 TRACTOR, SIDE DISCHARGE, RIDING MOWER	27 HP G		$14,883	12.97	1.86	3.05	0.33	5.52	18
	L15TO007	Z587L	LANDSCAPING EQUIPMENT, LAWNMOWER, 72" DECK, W/Z500 TRACTOR, SIDE DISCHARGE, RIDING MOWER	27 HP G		$16,683	13.77	2.08	3.43	0.36	5.52	20
			WILLMAR EQUIPMENT COMPANY									
	L15WI001	S-200	LANDSCAPING EQUIPMENT, SPREADER, 85 CF DRY CHEMICAL (ADD 55 HP FARM TRACTOR)			$6,658	3.03	0.83	1.35	0.15	0.00	15

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
L20	**LIGHTING SETS, TRAILER MOUNTED**											
	SUBCATEGORY 0.10		**METALLIC VAPOR**									
			ALLMAND BROTHERS INC.									
	L20AB017	MAXI-LITE 695	LITE SET, TRAILER MTD., 4/1250W, W/6 KW GEN, ELECTRIC MAST WINCH	11 HP D-off		$12,884	5.73	0.89	1.26	0.26	1.06	20
	L20AB018	MAXI-LITE 895	LITE SET, TRAILER MTD., 4/1,250W, W/8 KW GEN, ELECTRIC MAST WINCH	14 HP D-off		$13,458	6.24	0.93	1.32	0.27	1.34	20
	L20AB019	MAXI-LITE 883XL	LITE SET, TRAILER MTD., 6/1,000W, W/8 KW GEN, ELECTRIC MAST WINCH	14 HP D-off		$14,338	6.56	1.00	1.41	0.29	1.34	21
	L20AB020	NIGHT-LITE 6330	LITE SET, TRAILER MTD., 4/1,000W, W/6 KW GEN, MANUAL MAST WINCH	11 HP D-off		$11,552	5.26	0.80	1.13	0.23	1.06	20
	L20AB021	NIGHT-LITE 8330	LITE SET, TRAILER MTD., 4/1,000W, W/8 KW GEN, MANUAL MAST WINCH	14 HP D-off		$12,126	5.77	0.84	1.18	0.25	1.34	20
	L20AB022	NIGHT-LITE 8500XL	LITE SET, TRAILER MTD., 6/1,000W, W/8 KW GEN, ELECTRIC MAST WINCH	14 HP D-off		$13,971	6.42	0.97	1.37	0.28	1.34	21
	L20AB023	ECLIPSE 2220/SE ALT	LITE SET, TRAILER MTD., 15 LED LAMP, FLASHING ARROW, W/TWO 8D BATTERIES AND 50W SOLAR ARRAY			$5,559	1.96	0.38	0.54	0.11	0.00	12
	L20AB024	ECLIPSE 2220/SE APF	LITE SET, TRAILER MTD., 25 LED LAMP, FLASHING ARROW, W/TWO 8D BATTERIES AND 50W SOLAR ARRAY			$6,147	2.16	0.42	0.59	0.12	0.00	12
L25	**LINE STRIPING EQUIPMENT**											
	SUBCATEGORY 0.00		**LINE STRIPING EQUIPMENT**									
			JCL EQUIPMENT CO.									
	L25JE001	4-B	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 2 GUNS, SELF PROPELLED, SINGLE COLOR	13 HP G		$10,484	6.38	0.74	1.05	0.21	2.84	15
	L25JE002	ROAD RUNNER	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3 GUNS, TRUCK MOUNTED (11,000 LB GVW), TWO COLORS	230 HP D-off		$89,166	51.98	6.21	8.79	1.81	22.07	116

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			M-B COMPANIES, INC.										
	L25MB002	5-10	LINE STRIPING EQUIPMENT, STRIPER, 1 GUN, WALK-BEHIND, SINGLE COLOR	5 HP	G		$5,535	3.96	0.34	0.45	0.11	1.09	6
	L25MB005	5-12A	LINE STRIPING EQUIPMENT, STRIPER, 2 GUNS, WALK BEHIND, SINGLE COLOR	10 HP	G		$10,025	6.56	0.65	0.90	0.20	2.19	6
	L25MB007	220	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3-4 GUNS, SELF PROPELLED, THREE COLORS	23 HP	G		$46,723	20.94	3.29	4.67	0.95	5.03	30
	L25MB006	245	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3 GUNS, SELF PROPELLED, TWO COLORS	60 HP	G		$83,169	41.37	5.84	8.32	1.68	13.12	48
	L25MB004	VANMARK 360	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3-4 GUNS, W/11,000 LBS GVW TRUCK, TWO COLORS	190 HP	G		$137,591	90.00	9.61	13.64	2.79	41.55	133
	L25MB008	360	LINE STRIPING EQUIPMENT, STRIPER, INTERMEDIATE, 3-4 GUNS, THERMAL 120 GAL, TRUCK MTD, TWO COLORS	190 HP	D-off		$149,534	67.90	10.28	14.49	3.03	18.23	80
L30	**LOADERS, BELT (Conveyor belts) & ACCESSORIES**												
	SUBCATEGORY 0.00		**LOADERS, BELT (Conveyor belts) & ACCESSORIES**										
			HEWITT-ROBINS										
	L30HW015	V-11 6X16FT, TD	LOADER, CONVEYOR BELT & ACCESSORIES, SCREENING PLANT, W/6' X 16' VIBRATORY SLOPE TRIPLE DECK SCREENS/36"X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER	25 HP	E		$127,771	33.94	7.49	9.92	2.53	3.28	138
			KOLBERG - PIONEER, INC										
	L30KB001	11-2450	LOADER, CONVEYOR BELT & ACCESSORIES, COVEYOR 50', MOBILE, CONCRETE & AGGREGATE, 24" WIDE	15 HP	E		$31,577	10.18	1.84	2.41	0.63	1.97	57
	L30KB002	11-2460	LOADER, CONVEYOR BELT & ACCESSORIES, CONVEYOR, 60', MOBILE, CONCRETE & AGGREGATE, 24" WIDE	15 HP	E		$33,660	10.65	1.96	2.58	0.67	1.97	62

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			METSO MINERALS									
	L30RA001	CV50D	LOADER, CONVEYOR BELT & ACCESSORIES, GRIZZLY SINGLE SCREEN, 40 CY/HR TRAILER MTD	25 HP D-off		$56,998	14.94	3.35	4.44	1.13	1.81	130
			SUPERIOR INDUSTRIES, AN ASTEC COMPANY									
	L30S4001	36"X35' FEED CONVEY	LOADER, CONVEYOR BELT & ACCESSORIES, BELT FEEDER	15 HP E		$16,860	6.78	1.01	1.35	0.33	1.97	33
	L30S4002	RUN-ON HYDRAULIC LEG	LOADER, CONVEYOR BELT & ACCESSORIES, 4 HYDRAULIC JACK LEGS			$19,132	4.29	1.15	1.53	0.38	0.00	28
	L30S4003	SIDE SKIRTING UPPER	LOADER, CONVEYOR BELT & ACCESSORIES, SIDE GUARD, ONE SIDE, UPPER			$1,498	0.34	0.09	0.12	0.03	0.00	9
	L30S4004	SIDE SKIRTING LOWER	LOADER, CONVEYOR BELT & ACCESSORIES, SIDE GUARD, ONE SIDE, LOWER			$2,452	0.56	0.15	0.20	0.05	0.00	9
			TELSMITH INC.									
	L30TS001	PTC 24IN X 50FT	LOADER, CONVEYOR BELT & ACCESSORIES, CONVEYOR, TRUSS FRAME, 24"W X 50'L, WHEEL MTD, 300 TPH	12 HP E		$28,590	9.03	1.62	2.09	0.57	1.58	10
L35	**LOADERS, FRONT END, CRAWLER TYPE**											
	SUBCATEGORY 0.00		**LOADERS, FRONT END, CRAWLER TYPE**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L35CA013	939-C	LOADER, FRONT END, CRAWLER, 1.50 CY BUCKET	90 HP D-off		$115,199	34.91	6.89	9.22	2.28	7.16	209
	L35CA005	953-C	LOADER, FRONT END, CRAWLER, 2.25 CY BUCKET	121 HP D-off		$186,261	54.27	11.14	14.90	3.69	9.63	334
	L35CA014	963-C	LOADER, FRONT END, CRAWLER, 3.20 CY BUCKET	160 HP D-off		$241,991	70.75	14.48	19.36	4.80	12.73	433
	L35CA007	973-C	LOADER, FRONT END, CRAWLER, 3.70 CY BUCKET	242 HP D-off		$366,246	107.06	21.91	29.30	7.26	19.25	581

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			Komatsu America International Company									
	L35KM006	D75S-5	LOADER, FRONT END, CRAWLER, 3.30 CY BUCKET	200 HP D-off		$414,729	114.70	24.81	33.18	8.22	15.91	485
L40	**LOADERS, FRONT END, WHEEL TYPE**											
	SUBCATEGORY 0.11		**ARTICULATED, 0 THRU 225 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L40CA032	904B	LOADER, FRONT END, WHEEL, 0.80 CY BUCKET, ARTICULATED, 4X4	45 HP D-off		$68,228	17.31	4.06	5.32	1.40	3.26	96
	L40CA033	906	LOADER, FRONT END, WHEEL, 1.00 CY BUCKET, ARTICULATED, 4X4	60 HP D-off		$70,960	19.07	4.23	5.54	1.46	4.35	111
	L40CA034	908	LOADER, FRONT END, WHEEL, 1.30 CY BUCKET, ARTICULATED, 4X4	82 HP D-off		$78,436	24.79	4.55	5.87	1.61	5.95	133
	L40CA019	914G	LOADER, FRONT END, WHEEL, 1.70 CY BUCKET, ARTICULATED, 4X4	89 HP D-off		$96,367	26.90	5.78	7.59	1.98	6.46	157
	L40CA022	924GZ	LOADER, FRONT END, WHEEL, 2.20 CY BUCKET, ARTICULATED, 4X4	112 HP D-off		$125,888	34.52	7.58	9.97	2.59	8.12	212
	L40CA015	928G	LOADER, FRONT END, WHEEL, 2.60 CY BUCKET, ARTICULATED, 4X4	135 HP D-off		$139,267	38.99	8.40	11.05	2.87	9.79	258
	L40CA023	938G II	LOADER, FRONT END, WHEEL, 3.65 CY BUCKET, ARTICULATED, 4X4	160 HP D-off		$167,707	47.93	9.97	13.03	3.45	11.61	297
	L40CA024	950G	LOADER, FRONT END, WHEEL, 3.50 CY BUCKET, ARTICULATED, 4X4	180 HP D-off		$221,639	61.07	13.14	17.15	4.56	13.06	392
	L40CA025	962G II	LOADER, FRONT END, WHEEL, 4.00 CY BUCKET, ARTICULATED, 4X4	200 HP D-off		$231,090	64.54	13.72	17.92	4.76	14.51	405
			CASE CORPORATION									
	L40CS009	621D	LOADER, FRONT END, WHEEL, 2.5 CY BUCKET, ARTICULATED, 4X4	136 HP D-off		$145,128	41.12	8.65	11.32	2.99	9.87	261
	L40CS010	721D	LOADER, FRONT END, WHEEL, 3.0 CY BUCKET, ARTICULATED, 4X4	181 HP D-off		$172,195	50.01	10.30	13.51	3.54	13.13	306
	L40CS011	821C	LOADER, FRONT END, WHEEL, 3.5 CY BUCKET, ARTICULATED, 4X4	187 HP D-off		$217,374	60.82	12.88	16.81	4.47	13.56	379

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			Komatsu America International Company									
	L40KM014	WA65-3	LOADER, FRONT END, WHEEL, 0.92 CY BUCKET, ARTICULATED, 4X4	50 HP D-off		$84,917	21.14	5.05	6.59	1.75	3.63	93
	L40KM015	WA95-3	LOADER, FRONT END, WHEEL, 1.40 CY BUCKET, ARTICULATED, 4X4	75 HP D-off		$81,119	22.57	4.78	6.21	1.67	5.44	128
	L40KM001	WA120-3	LOADER, FRONT END, WHEEL, 1.85 CY BUCKET, ARTICULATED, 4X4	105 HP D-off		$104,147	29.92	6.23	8.17	2.14	7.62	181
	L40KM002	WA180-3	LOADER, FRONT END, WHEEL, 2.25 CY BUCKET, ARTICULATED, 4X4	128 HP D-off		$124,936	35.81	7.50	9.85	2.57	9.29	208
	L40KM003	WA250-5	LOADER, FRONT END, WHEEL, 3.00 CY BUCKET, ARTICULATED, 4X4	139 HP D-off		$138,563	39.35	8.33	10.96	2.85	10.08	241
	L40KM004	WA320-3	LOADER, FRONT END, WHEEL, 3.50 CY BUCKET, ARTICULATED, 4X4	173 HP D-off		$162,542	47.98	9.65	12.61	3.34	12.55	312
	SUBCATEGORY 0.12		**ARTICULATED, OVER 225 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L40CA026	966G II	LOADER, FRONT END, WHEEL, 4.75 CY BUCKET, ARTICULATED, 4X4	246 HP D-off		$311,675	69.31	14.87	17.66	6.04	17.84	502
	L40CA027	972G II	LOADER, FRONT END, WHEEL, 5.25 CY BUCKET, ARTICULATED, 4X4	265 HP D-off		$340,700	74.93	16.29	19.38	6.60	19.22	555
	L40CA007	980G II	LOADER, FRONT END, WHEEL, 6.00 CY BUCKET, ARTICULATED, 4X4	300 HP D-off		$430,782	94.08	20.44	24.20	8.34	21.76	660
	L40CA008	988G	LOADER, FRONT END, WHEEL, 9.00 CY BUCKET, ARTICULATED, 4X4	430 HP D-off		$645,822	133.87	30.55	36.08	12.51	31.19	1,077
	L40CA018	990 SERIES II	LOADER, FRONT END, WHEEL, 11.00 CY BUCKET, ARTICULATED, 4X4	618 HP D-off		$1,069,613	206.64	50.60	59.75	20.72	44.83	1,628
	L40CA009	992-G	LOADER, FRONT END, WHEEL, 16.00 CY BUCKET, ARTICULATED, 4X4	800 HP D-off		$1,478,849	281.79	69.82	82.36	28.64	58.03	2,023
			Komatsu America International Company									
	L40KM008	WA500-3	LOADER, FRONT END, WHEEL, 6.50 CY BUCKET, ARTICULATED, 4X4	335 HP D-off		$430,591	92.58	20.44	24.19	8.34	24.30	671
	L40KM009	WA600-3	LOADER, FRONT END, WHEEL, 8.00 CY BUCKET, ARTICULATED, 4X4	490 HP D-off		$614,407	129.65	28.97	34.14	11.90	35.54	1,019
	L40KM010	WA700-3	LOADER, FRONT END, WHEEL, 11.10 CY BUCKET, ARTICULATED, 4X4	684 HP D-off		$998,931	201.83	47.13	55.56	19.35	49.62	1,574

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
L40			***Komatsu America International Company (continued)***									
	L40KM011	WA800-3	LOADER, FRONT END, WHEEL, 13.10 CY BUCKET, ARTICULATED, 4X4	853 HP D-off		$1,283,053	258.21	60.23	70.76	24.85	61.88	2,230
	SUBCATEGORY 0.20		**SKID STEER**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L40CA028	216B	LOADER, FRONT END, WHEEL, SKID-STEER, 13.0 CF, 60" BUCKET, 4X4	49 HP D-off		$26,365	11.31	1.79	2.51	0.53	3.90	54
	L40CA029	226B	LOADER, FRONT END, WHEEL, SKID-STEER, 13.0 CF, 60" BUCKET, 4X4	54 HP D-off		$30,174	12.68	2.06	2.89	0.61	4.30	58
	L40CA030	236B	LOADER, FRONT END, WHEEL, SKID-STEER, 14.0 CF, 66" BUCKET, 4X4	59 HP D-off		$33,065	14.04	2.24	3.13	0.67	4.69	71
	L40CA031	246B	LOADER, FRONT END, WHEEL, SKID-STEER, 15.4 CF, 72" BUCKET, 4X4	74 HP D-off		$35,841	16.06	2.44	3.41	0.73	5.89	74
			MELROE COMPANY/BOBCAT									
	L40ME016	463	LOADER, FRONT END, WHEEL, SKID-STEER, 6.5 CF, 44" BUCKET, 4X4	23 HP D-off		$15,219	5.90	1.05	1.48	0.31	1.79	27
	L40ME017	553	LOADER, FRONT END, WHEEL, SKID-STEER, 6.7 CF, 48" BUCKET, 4X4	25 HP D-off		$17,447	6.85	1.18	1.65	0.35	1.99	37
	L40ME012	S175	LOADER, FRONT END, WHEEL, SKID-STEER, 14.3 CF, 60" BUCKET	46 HP D-off		$24,356	10.30	1.68	2.37	0.49	3.66	62
	SUBCATEGORY 0.31		**TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L40CA013	IT14G	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 1.75 CY LOADER; 6,303 LB @ 12.17' HIGH, FORK LIFT, OR 1,841 LB @ 22.42' HIGH, MATERIAL HANDLING ARM	90 HP D-off		$115,149	31.22	6.58	8.43	2.36	6.53	180
	L40CA012	IT28G	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 2.50 CY LOADER; 10,640 LB @ 12.58' HIGH FORK LIFT, OR 3,195 LB @ 23.25' HIGH, MATERIAL HANDLING ARM	145 HP D-off		$158,066	44.26	9.05	11.64	3.23	10.52	279

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
L40			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	L40CA014	IT62G II	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 4.25 CY LOADER; 13,670 LB @ 12.42' HIGH, FORK LIFT, OR 5,040 LB @ 22.67' HIGH, MATERIAL HANDLING ARM	200 HP D-off		$252,234	67.79	14.48	18.63	5.16	14.51	454
			Komatsu America International Company									
	L40KM012	WA180-3 PT	LOADER, WHEEL, INTEGRATED TOOL CARRIER, 2.25 CY LOADER; 4,966 LB @ 12.00' HIGH, FORK LIFT; OR 2,306 LB @ 18.50' HIGH, MATERIAL HANDLING ARM	128 HP D-off		$133,189	38.09	7.59	9.73	2.72	9.29	230
L50	**LOADERS / BACKHOE, WHEEL TYPE**											
	SUBCATEGORY 0.00		**LOADERS / BACKHOE, WHEEL TYPE**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L50CA001	416D	LOADER / BACKHOE, WHEEL, 1.00 CY FRONT END BUCKET, 18" DIP, 4.5 CF, 14.5' DIGGING DEPTH, 4X2	78 HP D-off		$68,530	20.10	3.87	4.94	1.40	4.38	162
	L50CA004	446D	LOADER / BACKHOE, WHEEL, 1.50 CY FRONT END BUCKET, 36" DIP, 19 CF, 17.1' DIGGING DEPTH, 4X2	110 HP D-off		$136,894	36.24	7.75	9.89	2.80	6.18	193
			CASE CORPORATION									
	L50CS005	580 SUPER M SERIES 2	LOADER / BACKHOE, WHEEL, 1.00 CY FRONT END BUCKET, 24" DIP, 6.2 CF, 14.25' DIGGING DEPTH, 4X4	90 HP D-off		$86,830	24.72	4.92	6.28	1.78	5.05	143
	L50CS006	590 SUPER M SERIES 2	LOADER / BACKHOE, WHEEL, 1.30 CY FRONT END BUCKET, 24" DIP, 6.4 CF, 18' DIGGING DEPTH, 4X4, EXTENDAHOE	98 HP D-off		$104,122	28.89	5.87	7.48	2.13	5.50	153
			JCB INC.									
	L50JC001	212S (4WS)	LOADER / BACKHOE, WHEEL, 0.80 CY FRONT END BUCKET, 24" DIP, 4.3 CF, 12' DIGGING DEPTH, 4X4	67 HP D-off		$65,767	18.62	3.74	4.77	1.35	3.76	120

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
L50			*JCB INC. (continued)*									
	L50JC002	214S (2WD)	LOADER / BACKHOE, WHEEL, 1.25 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 14.6' DIGGING DEPTH, 4X2	92 HP D-off		$75,336	22.69	4.24	5.39	1.54	5.17	158
	L50JC003	214S (4WS)	LOADER / BACKHOE, WHEEL, 1.40 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 14.6' DIGGING DEPTH, 4X4	100 HP D-off		$91,055	26.62	5.12	6.52	1.86	5.62	164
	L50JC005	215S (4WS)	LOADER / BACKHOE, WHEEL, 1.40 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 20.1' DIGGING DEPTH, 4X4	100 HP D-off		$105,315	29.37	5.95	7.59	2.15	5.62	176
	L50JC007	217S (4WS)	LOADER / BACKHOE, WHEEL, 1.60 CY FRONT END BUCKET, 24" DIP, 7.1 CF, 21.5' DIGGING DEPTH, 4X4	100 HP D-off		$134,080	34.90	7.62	9.75	2.74	5.62	178
L55	**LOADER / BACKHOE, ATTACHMENTS**											
	SUBCATEGORY 0.00		**LOADER / BACKHOE, ATTACHMENTS**									
			KENT DEMOLITION TOOLS									
	L55KN001	KB-555	LOADER / BACKHOE, ATTACHMENT, AIR RAM, 500 FT-LB, W/2.5" DIA. POINT (ADD 175 CFM COMPRESSOR & LDR/BH)	175 CFM A		$6,759	2.96	0.59	0.90	0.14	0.00	6
	L55KN002	KB-999	LOADER / BACKHOE, ATTACHMENT, AIR RAM, 1000 FT-LB, W/ 3.5" DIA. POINT (ADD 250 CFM COMPRESSOR & LDR/BH)	250 CFM A		$13,871	6.08	1.22	1.85	0.29	0.00	10
	L55KN004	KF6TLB	LOADER / BACKHOE, ATTACHMENT, HYDRA RAM, 1000 FT-LB, W/3" DIA. POINT (ADD 12,000-14,000 LB LDR/BH)			$12,311	4.45	1.08	1.64	0.26	0.00	7
	L55KN005	KF9TLB	LOADER / BACKHOE, ATTACHMENT, HYDRA RAM, 1500 FT-LB, W/3.5" DIA. POINT (ADD 14,000-20,000 LB LDR/BH)			$18,230	6.59	1.60	2.43	0.38	0.00	11
	L55KN006	KF12TLB	LOADER / BACKHOE, ATTACHMENT, HYDRA RAM, 2000 FT-LB, W/4.25" DIA. POINT (ADD 20,000-30,000 LB LDR/BH)			$27,138	9.82	2.38	3.62	0.57	0.00	19

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
L60	**LOG SKIDDERS**											
	SUBCATEGORY 0.00		**LOG SKIDDERS**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	L60CA014	517 GRAPPLE	LOG SKIDDER, 8 SF GRAPPLE, CABLE 41,050 LBS LINE-PULL AND WINCH, CRAWLER	120 HP D-off		$262,822	59.81	16.20	22.34	5.03	8.70	405
	L60CA013	525 B	LOG SKIDDER, 11 SF GRAPPLE, CABLE 43,000 LBS LINE-PULL AND WINCH, WHEEL, 4X2	160 HP D-off		$211,213	54.36	12.70	17.30	4.05	11.61	358
	L60CA010	527 CABLE	LOG SKIDDER, CABLE, 69,200 LBS LINE-PULL AND WINCH, BLADE, CRAWLER	150 HP D-off		$301,077	69.55	18.57	25.59	5.77	10.88	407
	L60CA011	527 GRAPPLE	LOG SKIDDER, 10 SF GRAPPLE, CABLE 69,200 LBS LINE-PULL AND WINCH, CRAWLER	150 HP D-off		$359,992	80.76	22.20	30.60	6.90	10.88	473
			DEERE & COMPANY									
	L60JD001	540G II - SKIDDER	LOG SKIDDER, CABLE, 40,525 LBS LINE-PULL WINCH AND BLADE, WHEEL, 4X4	119 HP D-off		$142,334	38.56	8.42	11.37	2.73	8.63	219
	L60JD003	548G III - GRAPPLE	LOG SKIDDER, 8.0 SF GRAPPLE WITH BLADE, WHEEL, 4X4	119 HP D-off		$138,956	37.91	8.20	11.08	2.66	8.63	217
	L60JD004	648G III - GRAPPLE	LOG SKIDDER, 10.4 SF GRAPPLE WITH BLADE, WHEEL, 4X4	160 HP D-off		$184,185	51.04	10.75	14.43	3.53	11.61	266
	L60JD002	640G III - SKIDDER	LOG SKIDDER, CABLE, 48,867 LBS LINE-PULL WINCH AND BLADE, WHEEL, 4X4	151 HP D-off		$168,466	46.15	10.03	13.59	3.23	10.95	239
	L60JD006	643H	LOG SKIDDER, LOG FELLER/BUNCHER, 18" DIA TREE SAW CUTTER, WHEEL, 4X4	170 HP D-off		$221,728	58.40	13.19	17.87	4.25	12.33	320
	L60JD008	653G	LOG SKIDDER, LOG FELLER/BUNCHER, 28" DIA TREE SAW CUTTER, CRAWLER	170 HP D-off		$317,404	74.30	19.57	26.98	6.08	12.33	410
	L60JD007	843G	LOG SKIDDER, LOG FELLER/BUNCHER, 20" DIA TREE SAW CUTTER, WHEEL, 4X4	200 HP D-off		$242,225	64.76	14.45	19.61	4.64	14.51	323

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
M10	**MARINE EQUIPMENT (NON DREDGING)**											
	SUBCATEGORY 0.41		**WORK FLOATS (NON-DREDGING)**									
			MARINE INLAND FABRICATORS									
	M10MZ001		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, 40' X 8' X 4', 23 TON			$18,618	5.07	1.77	2.79	0.37	0.00	143
	M10MZ003		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, 40' X 10' X 4', 30 TON			$22,862	6.23	2.17	3.43	0.45	0.00	173
	SUBCATEGORY 0.42		**WORK BARGES (SECTIONAL, NON-DREDGING)**									
			MARINE INLAND FABRICATORS									
	M10MZ005	RAKE	MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY', W/ONE BUCKHEAD AND SPUDS, 40' X 12' X 4', 36 TON			$26,222	1.89	0.85	0.79	0.45	0.00	193
	M10MZ007		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MEDIUM DUTY, 40' X 12' X 5', 51 TON			$27,496	1.97	0.88	0.82	0.47	0.00	217
			NO SPECIFIC MANUFACTURER									
	M10XX001		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, BOW AND STERN SECTIONS			$5,651	0.41	0.19	0.17	0.10	0.00	1
	M10XX002		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, LOADING RAMPS			$17,538	1.26	0.57	0.53	0.30	0.00	1
	M10XX003		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MID-SECTION, 20' X 10' X 5'			$21,177	1.53	0.69	0.64	0.37	0.00	1
	M10XX004		MARINE EQUIPMENT, WORK BARGE, SECTIONAL, MID-SECTION, 40' X 10' X 5'			$34,307	2.47	1.11	1.03	0.59	0.00	1
	SUBCATEGORY 0.45		**FLAT-DECK OR CARGO BARGE (NON-DREDGING)**									
			NO SPECIFIC MANUFACTURER									
	M10XX005		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 120' X 30' X 7.25', 400 TON			$147,938	5.16	3.16	1.56	2.38	0.00	1

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
M10			***NO SPECIFIC MANUFACTURER (continued)***									
	M10XX006		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 120' X 45' X 7', 800 TON			$208,229	7.26	4.45	2.20	3.35	0.00	1
	M10XX007		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 140' X 45' X 7', 900 TON			$264,865	9.24	5.66	2.80	4.26	0.00	1
	M10XX008		MARINE EQUIPMENT, FLAT-DECK CARGO BARGE, 150' X 45' X 9', 1,100 TON			$367,582	12.82	7.85	3.88	5.91	0.00	1
	SUBCATEGORY 0.48		**ALL OTHER BARGES (NON-DREDGING)**									
			NO SPECIFIC MANUFACTURER									
	M10XX016	OPEN 195	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 195' X 35' X 12', 1,400 TON			$221,047	17.02	7.15	7.00	3.65	0.00	1
	M10XX017	OPEN 200	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 200' X 35' X 12', 1,600 TON			$233,711	17.99	7.56	7.40	3.86	0.00	1
	M10XX018	CLOSED 195	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 195' X 35' X 12', 1,400 TON			$291,087	22.41	9.42	9.22	4.81	0.00	1
	M10XX019	CLOSED 200	MARINE EQUIPMENT, ALL OTHER BARGES, HOPPER, 200' X 35' X 12', 1,600 TON			$297,436	22.91	9.63	9.42	4.92	0.00	1
	SUBCATEGORY 0.51		**BOATS & LAUNCHES, 0 THRU 250 HP**									
			MARINE INLAND FABRICATORS									
	M10MZ010	COLT	MARINE EQUIPMENT, BOATS & LAUNCHES, TRUCKABLE WORKBOAT W/PILOT HOUSE & PUSH KNEES, INBOARD, 20.25' X 8' X 3'	140 HP D-off		$45,461	17.67	2.05	2.42	0.84	10.16	95
	M10MZ011	MUSTANG	MARINE EQUIPMENT, BOATS & LAUNCHES, TRUCKABLE WORKBOAT W/PILOT HOUSE & PUSH KNEES, INBOARD, 25.25' X 10' X 3.5'	210 HP D-off		$65,618	26.17	2.96	3.49	1.21	15.23	190
			SEAARK MARINE									
	M10SM005	18' - 72 SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 18' RIVER RUNNER, VEE HULL, NO CABIN, CAP 1,350 LBS, OUTBOARD, 18' X 7.9' X 0.5'	115 HP G		$24,421	25.21	1.10	1.30	0.45	19.27	15
	M10SM008	19' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 19' ROUSTABOUT, TRI HULL, NO CABIN, CAP 2,600 LBS, OUTBOARD, 19.4' X 8.5' X 0.8'	200 HP G		$44,221	44.07	2.00	2.35	0.82	33.51	17

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
M10			***SEAARK MARINE (continued)***										
	M10SM001	17' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 17' LITTLE GIANT, W/CABIN TRI-HULL, CAP 2,000 LBS, OUTBOARD, 17.5' X 7.25' X 0.7'	150 HP	G		$52,738	35.51	2.38	2.80	0.98	25.13	18
	M10SM003	21' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 21' LITTLE GIANT, W/CABIN TRI-HULL, CAP 2,800 LBS, OUTBOARD, 21.4' X 8.5' X 1'	200 HP	G		$65,464	46.74	2.95	3.48	1.21	33.51	24
	M10SM004	23' - UTILITY SERIES	MARINE EQUIPMENT, BOATS & LAUNCHES, 23' LITTLE GIANT, W/CABIN TRI-HULL, CAP 3,400 LBS, OUTBOARD, 23.4' X 8.5' X 1.2'	250 HP	G		$70,360	56.98	3.17	3.74	1.30	41.89	28
			NO SPECIFIC MANUFACTURER										
	M10XX010	12	MARINE EQUIPMENT, BOATS & LAUNCHES, 12' TENDER, 7' BEAM, INBOARD ENGINE	75 HP	D-off		$44,279	11.96	2.00	2.35	0.82	5.44	1
	M10XX009	13	MARINE EQUIPMENT, BOATS & LAUNCHES, 13' RUNABOUT, 5' BEAM, OUTBOARD ENGINE	50 HP	G		$13,428	11.32	0.61	0.71	0.25	8.38	13
	M10XX011	14	MARINE EQUIPMENT, BOATS & LAUNCHES, 14' TENDER, 7' BEAM, INBOARD ENGINE	100 HP	D-off		$51,041	14.95	2.30	2.71	0.94	7.25	13
	M10XX012	100	MARINE EQUIPMENT, BOATS & LAUNCHES, 16', SHALLOW DRAFT, INLAND TUG	100 HP	D-off		$51,993	15.07	2.34	2.76	0.96	7.25	13
	M10XX013	115	MARINE EQUIPMENT, BOATS & LAUNCHES, 22', SHALLOW DRAFT, INLAND TUG	115 HP	D-off		$67,444	18.29	3.04	3.58	1.25	8.34	23
	M10XX014	175	MARINE EQUIPMENT, BOATS & LAUNCHES, 18', W/STEERING NOZZLE, INLAND TUG	175 HP	D-off		$93,137	26.64	4.20	4.95	1.72	12.69	60
	M10XX015	250	MARINE EQUIPMENT, BOATS & LAUNCHES, 26', W/STEERING NOZZLE, INLAND TUG	250 HP	D-off		$116,938	36.04	5.27	6.21	2.16	18.14	83
	SUBCATEGORY 0.53		**BOATS & LAUNCHES, 251 THRU 500 HP**										
			NO SPECIFIC MANUFACTURER										
	M10XX021	380	MARINE EQUIPMENT, BOATS & LAUNCHES, 40', STANDARD RUDDER, INLAND TUG	380 HP	D-off		$308,553	70.26	13.17	15.43	5.45	27.57	100
	M10XX022	435	MARINE EQUIPMENT, BOATS & LAUNCHES, 45' LENGTH, 16' BEAM, 5' 0" DRAFT, PUSH BOAT	435 HP	D-off		$350,927	80.13	14.98	17.55	6.20	31.55	100
	M10XX023	400	MARINE EQUIPMENT, BOATS & LAUNCHES, 48' LENGTH, 20' BEAM, 6' 6" DRAFT PUSH BOAT	400 HP	D-off		$469,583	91.70	20.04	23.48	8.30	29.02	100

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
M10			***NO SPECIFIC MANUFACTURER (continued)***									
	M10XX024	435	MARINE EQUIPMENT, BOATS & LAUNCHES, 58' LENGTH, 21' BEAM, 6' 0" DRAFT, PUSH BOAT	435 HP D-off		$669,432	119.15	28.57	33.47	11.83	31.55	130
P10	**PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS**											
	SUBCATEGORY 0.00		**PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS**									
			INTERNATIONAL CONSTRUCTION EQUIPMENT,INC									
	P10IC001	216	PILE HAMMER ACCESSORIES, PILE EXTRACTOR, 30 TON LINE PULL (ADD LEADS & CRANE)	175 HP D-off		$98,684	43.89	7.59	10.69	2.24	12.69	130
	P10IC002	416L	PILE HAMMER ACCESSORIES, PILE EXTRACTOR, 40 TON LINE PULL (ADD LEADS & CRANE)	300 HP D-off		$155,377	71.15	11.94	16.83	3.52	21.76	207
	P10IC005	1412B	PILE HAMMER ACCESSORIES, PILE EXTRACTOR, 150 TON LINE PULL (ADD LEADS & CRANE)	800 HP D-off		$411,456	188.88	31.61	44.57	9.32	58.03	593
	P10IC010		PILE HAMMER ACCESSORIES, PILE LEADS, SWING, 26" X 86'			$15,635	4.64	1.20	1.69	0.35	0.00	101
	P10IC012		PILE HAMMER ACCESSORIES, PILE LEADS, SWING, 32" X 88'			$22,219	6.60	1.71	2.41	0.50	0.00	155
	P10IC011		PILE HAMMER ACCESSORIES, PILE LEADS, FIXED, 26" X 86', W/SPOTTER	13 HP D-off		$29,968	9.98	2.31	3.25	0.68	0.94	134
	P10IC013		PILE HAMMER ACCESSORIES, PILE LEADS, FIXED, 32" X 88', W/SPOTTER	13 HP G		$37,525	13.66	2.89	4.07	0.85	2.18	193
P20	**PILE HAMMERS, DOUBLE ACTING**											
	SUBCATEGORY 0.10		**DIESEL**									
			INTERNATIONAL CONSTRUCTION EQUIPMENT,INC									
	P20IC002	422	PILE HAMMER, DOUBLE ACTING, DIESEL, 22,500 FT-LBS, MAX STROKE 5' 8" (ADD LEADS & CRANE)			$89,638	35.50	7.53	11.20	1.93	0.00	122
	P20IC003	520	PILE HAMMER, DOUBLE ACTING, DIESEL, 30,000 FT-LBS, MAX STROKE 5' 11" (ADD LEADS & CRANE)			$91,526	36.81	7.69	11.44	1.97	0.00	156

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P20			***INTERNATIONAL CONSTRUCTION EQUIPMENT,INC (continued)***									
	P20IC004	640	PILE HAMMER, DOUBLE ACTING, DIESEL, 40,000 FT-LBS, MAX STROKE 6' 8" (ADD LEADS & CRANE)			$97,955	39.87	8.23	12.24	2.11	0.00	187
			MKT MANUFACTURING, INC.									
	P20MK001	DA-15C	PILE HAMMER, DOUBLE ACTING, DIESEL, 8,200 FT-LBS, MAX STROKE 10' 6" (ADD LEADS & CRANE)			$54,390	21.64	4.57	6.80	1.17	0.00	60
	SUBCATEGORY 0.20		**PNUEMATIC (STEAM/AIR)**									
			MKT MANUFACTURING, INC.									
	P20MK002	5	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 1,000 FT-LBS, MAX STROKE 7" (ADD 250 CFM COMPRESSOR, LEADS & CRANE)	250 CFM A		$16,207	6.70	1.42	2.16	0.34	0.00	16
	P20MK003	6	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 2,500 FT-LBS, MAX STROKE 8.75" (ADD 400 CFM COMPRESSOR, LEADS & CRANE)	400 CFM A		$20,550	8.86	1.80	2.74	0.43	0.00	30
	P20MK004	7	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 4,150 FT-LBS, MAX STROKE 9.5" (ADD 450 CFM COMPRESSOR, LEADS & CRANE)	450 CFM A		$25,631	11.06	2.25	3.42	0.54	0.00	51
	P20MK005	9B3	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 8,750 FT-LBS, MAX STROKE 17" (ADD 600 CFM COMPRESSOR, LEADS & CRANE)	600 CFM A		$42,987	17.70	3.77	5.73	0.90	0.00	71
	P20MK006	10B3	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 13,100 FT-LBS, MAX STROKE 19" (ADD 750 CFM COMPRESSOR, LEADS & CRANE)	750 CFM A		$48,027	20.88	4.21	6.40	1.01	0.00	110
	P20MK007	11B3	PILE HAMMER, DOUBLE ACTING, PNUEMATIC (STEAM/AIR), 19,150 FT-LBS, MAX STROKE 19" (ADD 900 CFM COMPRESSOR, LEADS & CRANE)	900 CFM A		$52,871	22.73	4.64	7.05	1.11	0.00	142

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P25	**PILE HAMMERS, SINGLE ACTING**											
	SUBCATEGORY 0.10		**DIESEL**									
			PILECO, INC.									
	P25DL001	D6-32	PILE HAMMER, SINGLE ACTING, DIESEL, 10,500 FT-LBS (ADD LEADS & CRANE)			$48,860	18.62	4.28	6.51	1.02	0.00	40
	P25DL003	D12-42	PILE HAMMER, SINGLE ACTING, DIESEL, 31,320 FT-LBS (ADD LEADS & CRANE)			$58,763	22.46	5.15	7.84	1.23	0.00	63
	P25DL004	D19-42	PILE HAMMER, SINGLE ACTING, DIESEL, 42,800 FT-LBS (ADD LEADS & CRANE)			$67,391	26.18	5.91	8.99	1.41	0.00	88
	P25DL005	D25-32	PILE HAMMER, SINGLE ACTING, DIESEL, 58,248 FT-LBS (ADD LEADS & CRANE)			$92,868	36.24	8.13	12.38	1.94	0.00	130
	P25DL006	D30-32	PILE HAMMER, SINGLE ACTING, DIESEL, 69,898 FT-LBS (ADD LEADS & CRANE)			$96,282	38.14	8.44	12.84	2.02	0.00	141
	P25DL008	D46-32	PILE HAMMER, SINGLE ACTING, DIESEL, 107,177 FT-LBS (ADD LEADS & CRANE)			$118,927	48.33	10.42	15.86	2.49	0.00	207
	P25DL009	D62-22	PILE HAMMER, SINGLE ACTING, DIESEL, 165,000 FT-LBS (ADD LEADS & CRANE)			$179,064	71.39	15.69	23.88	3.75	0.00	283
	P25DL010	D80-23	PILE HAMMER, SINGLE ACTING, DIESEL, 225,000 FT-LBS (ADD LEADS & CRANE)			$259,733	102.21	22.76	34.63	5.44	0.00	382
	P25DL011	D100-13	PILE HAMMER, SINGLE ACTING, DIESEL, 300,000 FT-LBS (ADD LEADS & CRANE)			$277,264	110.21	24.30	36.97	5.81	0.00	459
			INTERNATIONAL CONSTRUCTION EQUIPMENT,INC									
	P25IC001	30S	PILE HAMMER, SINGLE ACTING, DIESEL, 22,500 FT-LBS (ADD LEADS & CRANE)			$61,200	24.34	5.36	8.16	1.28	0.00	73
	P25IC002	42S	PILE HAMMER, SINGLE ACTING, DIESEL, 42,000 FT-LBS (ADD LEADS & CRANE)			$68,254	28.14	5.98	9.10	1.43	0.00	91
	P25IC003	60S	PILE HAMMER, SINGLE ACTING, DIESEL, 60,000 FT-LBS (ADD LEADS & CRANE)			$98,623	40.08	8.65	13.15	2.07	0.00	159
	P25IC004	80S	PILE HAMMER, SINGLE ACTING, DIESEL, 80,000 FT-LBS (ADD LEADS & CRANE)			$110,130	45.14	9.65	14.68	2.31	0.00	220
	P25IC005	100S	PILE HAMMER, SINGLE ACTING, DIESEL, 100,000 FT-LBS (ADD LEADS & CRANE)			$136,312	55.55	11.94	18.17	2.85	0.00	220
	P25IC006	120S	PILE HAMMER, SINGLE ACTING, DIESEL, 120,000 FT-LBS (ADD LEADS & CRANE)			$168,695	68.22	14.78	22.49	3.53	0.00	274

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			MKT MANUFACTURING, INC.									
	P25MK001	DE-33/30/20C	PILE HAMMER, SINGLE ACTING, DIESEL, 33,000 FT-LBS (ADD LEADS & CRANE)			$60,218	24.29	5.28	8.03	1.26	0.00	81
	P25MK003	DE-70/50C	PILE HAMMER, SINGLE ACTING, DIESEL, 70,000 FT-LBS (ADD LEADS & CRANE)			$100,116	40.37	8.78	13.35	2.10	0.00	153
	SUBCATEGORY 0.20		**PNUEMATIC (STEAM/AIR)**									
			VULCAN FOUNDATION EQUIPMENT, INC									
	P25VU002	306	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 18,000 FT-LBS (ADD 750 CFM COMPRESSOR, LEADS & CRANE)	750 CFM A		$64,432	26.31	5.88	9.13	1.31	0.00	121
	P25VU003	505	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 25,000 FT-LBS (ADD 600 CFM COMPRESSOR, LEADS & CRANE)	600 CFM A		$78,899	31.65	7.19	11.18	1.60	0.00	127
	P25VU004	506	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 32,500 FT-LBS (ADD 900 CFM COMPRESSOR, LEADS & CRANE)	900 CFM A		$80,793	32.35	7.37	11.45	1.64	0.00	140
	P25VU005	508	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 40,000 FT-LBS (ADD 900 CFM COMPRESSOR, LEADS & CRANE)	900 CFM A		$108,816	42.71	9.92	15.42	2.21	0.00	202
	P25VU010	510	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 50,000 FT-LBS (ADD 1,050 CFM COMPRESSOR, LEADS & CRANE)	1,050 CFM A		$112,057	42.35	10.22	15.87	2.28	0.00	222
	P25VU011	512	PILE HAMMER, SINGLE ACTING, PNUEMATIC (STEAM/AIR), 60,000 FT-LBS (ADD 1,200 CFM COMPRESSOR, LEADS & CRANE)	1,200 CFM A		$113,952	43.28	10.39	16.14	2.32	0.00	242
P30	**PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY**											
	SUBCATEGORY 0.00		**PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY**									
			MKT MANUFACTURING, INC.									
	P30MK001	V-5C	PILE HAMMER, DRIVER/EXTRACTOR, VIBRATORY, 53 TON FORCE DRIVE (ADD LEADS & CRANE)	185 HP D-off		$91,562	48.55	8.03	12.21	1.92	13.42	112

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P30			***MKT MANUFACTURING, INC. (continued)***									
	P30MK003	V-20B	PILE HAMMER, DRIVER/EXTRACTOR, VIBRATORY, 98.5 TON FORCE DRIVE (ADD LEADS & CRANE)	325 HP D-off		$157,070	83.92	13.76	20.94	3.29	23.58	211
	P30MK004	V-35	PILE HAMMER, DRIVER/EXTRACTOR, VIBRATORY, 200 TON FORCE DRIVE (ADD LEADS & CRANE)	600 HP D-off		$278,931	150.92	24.44	37.19	5.84	43.52	305
P35	**PIPELAYERS**											
	SUBCATEGORY 0.00		**PIPELAYERS**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	P35CA001	561M	PIPELAYER, 18' BOOM, 40,000 LBS CAPACITY	110 HP D-off		$204,771	37.80	9.81	11.70	3.96	4.38	358
	P35CA008	572-R	PIPELAYER, 20' BOOM, 90,000 LBS CAPACITY	230 HP D-off		$376,017	70.72	18.02	21.49	7.27	9.15	669
	P35CA009	583-R	PIPELAYER, 20' BOOM, 140,000 LBS CAPACITY	305 HP D-off		$482,915	91.28	23.14	27.60	9.34	12.13	984
	P35CA006	589	PIPELAYER, 28' BOOM, 230,000 LBS CAPACITY	420 HP D-off		$627,185	119.68	30.05	35.84	12.13	16.71	1,450
P40	**PLATFORMS & MAN-LIFTS**											
	SUBCATEGORY 0.00		**PLATFORMS & MAN-LIFTS**									
			BIL-JAX, INC.									
	P40BX001	SKYRIDER 15	MAN-LIFT, TELESCOPIC MAST, 14.8' HEIGHT, 500 LBS, 24 VOLT DC, RECHARGABLE BATTERIES, SELF PROPELLED, 2.2' X 4' PLATFORM			$11,894	3.11	0.90	1.34	0.23	0.00	18
			GROVE MANLIFT									
	P40GW016	A60J 2	MAN-LIFT, ARTICULATED BOOM, 68' HEIGHT, 500 LBS, 64' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	60 HP D-off		$121,885	35.52	9.10	13.58	2.31	3.37	268

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P40			***GROVE MANLIFT (continued)***									
	P40GW017	A80J	MAN-LIFT, ARTICULATED BOOM, 86' HEIGHT, 500 LBS, 64' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	100 HP D-off		$196,248	57.97	14.57	21.70	3.72	5.62	428
	P40GW019	A125J	MAN-LIFT, ARTICULATED BOOM, 131' HEIGHT, 600 LBS, 69' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	100 HP D-off		$289,587	85.14	21.50	32.00	5.50	5.62	479
	P40GW023	T65J	MAN-LIFT, STRAIGHT BOOM, 65' HEIGHT, 500 LBS, 62' REACH, 4X4, SELF PROPELLED, 3' X 8' PLATFORM	60 HP D-off		$132,228	38.40	9.85	14.68	2.51	3.37	267
	P40GW024	T80	MAN-LIFT, STRAIGHT BOOM, 86' HEIGHT, 600 LBS, 70' REACH, 4X4, SELF PROPELLED, 3' X8' PLATFORM	85 HP D-off		$167,740	48.75	12.57	18.77	3.18	4.77	340
	P40GW025	T86J	MAN-LIFT, STRAIGHT BOOM, 92' HEIGHT, 500 LBS, 76' REACH, 4X4, SELF PROPELLED, 3' X8' PLATFORM	85 HP D-off		$176,112	50.89	13.20	19.71	3.34	4.77	371
			TEREX CORPORATION									
	P40TE001	TS25RT	MAN-LIFT, SCISSOR, 25' HEIGHT, 1,500 LBS, 4X4, SELF PROPELLED, 5.3' X 10.3' PLATFORM	24 HP G		$35,468	12.89	2.63	3.91	0.67	3.07	58
	P40TE002	TS30RT	MAN-LIFT, SCISSOR, 30' HEIGHT, 2,000 LBS, 4X4, SELF PROPELLED, 6.3' X 13.3' PLATFORM	39 HP G		$45,013	17.53	3.35	4.99	0.85	4.98	89
	P40TE003	TA50RT	MAN-LIFT, ARTICULATED BOOM, 55' HEIGHT, 500 LBS, 29' REACH, 4X4, SELF PROPELLED, 2.2' X 5' PLATFORM	32 HP D-off		$80,997	23.51	6.00	8.91	1.54	1.80	154
	P40TE004	TA60RT	MAN-LIFT, ARTICULATED BOOM, 66' HEIGHT, 500 LBS, 33' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFROM	44 HP D-off		$94,239	27.95	6.95	10.32	1.79	2.47	241
	P40TE005	TB42	MAN-LIFT, STRAIGHT BOOM, 43' HEIGHT, 650 LBS, 37' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	66 HP D-off		$71,248	23.16	5.26	7.81	1.35	3.71	131
	P40TE006	TB66	MAN-LIFT, STRAIGHT BOOM, 66' HEIGHT, 650 LBS, 51' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	66 HP D-off		$96,648	29.85	7.14	10.62	1.83	3.71	250
	P40TE007	TB85	MAN-LIFT, STRAIGHT BOOM, 86' HEIGHT, 600 LBS, 70' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	66 HP D-off		$159,936	46.07	11.90	17.74	3.03	3.71	373

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P40			***TEREX CORPORATION (continued)***									
	P40TE008	TB100	MAN-LIFT, STRAIGHT BOOM, 92' HEIGHT, 500 LBS, 67' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	76 HP D-off		$177,660	51.26	13.24	19.74	3.37	4.27	393
	P40TE009	TB110	MAN-LIFT, STRAIGHT BOOM, 110' HEIGHT, 500 LBS, 74' REACH, 4X4, SELF PROPELLED, 3' X 6' PLATFORM	76 HP D-off		$197,180	56.26	14.71	21.93	3.74	4.27	420
	P40TE010	T-292	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 2.5' PLATFORM, 300 LBS, 34' HEIGHT, 23' RAD	210 HP D-off		$67,657	31.14	5.00	7.43	1.28	11.79	115
	P40TE011	T-38P	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 2.5' PLATFORM, 300 LBS, 43' HEIGHT, 26' RAD	210 HP D-off		$74,559	33.10	5.48	8.13	1.41	11.79	128
	P40TE012	Digger DerrickC-4045	MAN-LIFT, LINE-TRUCK, W/13.7 TON, 45' HIGH-BOOM TILT POLE CLAWS, & 1.5' DIA AUGER	210 HP D-off		$112,957	42.95	8.37	12.45	2.14	11.79	268
	P40TE013	5FC-52	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 4' PLATFORM, 700 LBS, 57' HEIGHT, 35' RAD	210 HP D-off		$102,748	40.33	7.60	11.30	1.95	11.79	215
	P40TE014	5FC-55	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 2.5' PLATFORM, 500 LBS, 60' HEIGHT, 38' RAD	210 HP D-off		$105,361	41.01	7.80	11.60	2.00	11.79	248
	P40TE015	6H-65	MAN-LIFT, LINE-TRUCK, W/AERIAL 2' X 4' PLATFORM, 750 LBS, 70' HEIGHT, 39' RAD	210 HP D-off		$119,169	44.54	8.84	13.15	2.26	11.79	255
P45	**PUMPS, GROUT**											
	SUBCATEGORY 0.00		**PUMPS, GROUT**									
			AIRPLACO EQUIPMENT CO., INC.									
	P45AF002	HG-5	PUMP, GROUT, HAND PUMP, 12 CF/HR, 0-100 PSI, W/O HOPPER (ADD HOSES)			$819	0.24	0.07	0.09	0.02	0.00	1
	P45AF003	HG-8	PUMP, GROUT, HAND PUMP, 15 CF/HR, 0-100 PSI, W/5 GAL HOPPER (ADD HOSES)			$1,310	0.37	0.10	0.14	0.03	0.00	1
	P45AF008	HGA-530	PUMP, GROUT, 50 CF/HR, 0-250 PSI, SKID MTD, W/5 GAL HOPPER AND 30 GAL MIXER (ADD 50 CFM COMPRESSOR & HOSE)	5 CFM A		$7,464	2.20	0.55	0.79	0.15	0.00	4
	P45AF005	HJ-15 SG	PUMP, GROUT, HIGH PRESSURE SINGLE CYLINDER GROUT PUMP, 110 CF/HR, 400 PSI,GROUT-MUD JACKING-SHOTCRETE, TRAILER MTD, W/30 GAL HOPPER AND 30 GAL MIXER (ADD 200 CFM COMPRESSOR & 2" HOSE)	11 HP G		$10,557	6.07	0.76	1.09	0.21	2.69	5

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P45			***AIRPLACO EQUIPMENT CO., INC. (continued)***									
	P45AF009	MP-2J6/GM-70DA	PUMP, GROUT, 160 CF/HR, 1 - 225 PSI, SKID MTD, W/15 GAL HOPPER/ & TWO 70 GAL MIXERS (ADD 350 CFM COMPRESSOR & HOSE)	350 CFM A		$22,852	6.54	1.67	2.43	0.45	0.00	5
	P45AF006	HJ-15 DG	PUMP, GROUT, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 180 CF/HR, 0-300 PSI, GROUT-MUD JACKING-SHOTCRETE, TRAILER MTD, W/30 GAL HOPPER AND 30 GAL MIXER (ADD 200 CFM COMPRESSOR & 2" HOSE)	11 HP G		$13,680	6.95	0.98	1.42	0.27	2.69	7
	P45AF010	HJ-25	PUMP, GROUT, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 180 CF/HR, 0 - 400 PSI, GROUT-MUD JACK-PLASTER, TRAILER MTD, W/100 GAL HOPPER AND 45 GAL MIXER/ 2" HOSE	18 HP G		$27,122	12.70	1.96	2.85	0.53	4.40	23
	P45AF011	HJ-36 CRG	PUMP, GROUT, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 250 CF/HR, 0 - 250 PSI, GROUT-MUD JACK-SHOTCRETE, TRAILER MTD, W/120 GAL HOPPER/ 90 GAL MIXER/ 2" HOSE	35 HP G		$48,399	23.46	3.51	5.11	0.95	8.55	49
	P45AF007	P-280 HD	PUMP, GROUT, HIGH VOLUME DUAL CYLINDER GROUT PUMP, 756 CF/HR CONCRETE, 486 CF/HR SHOTCRETE, TRAILER MTD, W/1200 GAL HOPPER (ADD HOSE 2" - 3" DIA)	30 HP D-off		$29,902	12.00	2.17	3.15	0.59	3.16	25
			ALLENTOWN EQUIPMENT									
	P45AL015	POWER CRETER MAGNUM	PUMP, GROUT, GROUT-MUD JACK-SHOTCRE, HIGH PRESSURE DUAL CYLINDER GROUT PUMP, 135 CF/HR, 0 - 1,330 PSI, TRAILER MTD, W/75 GAL HOPPER/ 82 GAL MIXER/ 3" HOSE	41 HP D-off		$43,728	17.19	3.17	4.61	0.86	4.32	35
			CHEMGROUT, INC.									
	P45CG001	CG-050	PUMP, GROUT, MINI, AIR, 40 CF/HR, 225 PSI, PORTABLE, SKID MTD (ADD 15 CFM - 100 PSI COMPRESSOR)	15 CFM A		$3,296	0.97	0.24	0.35	0.06	0.00	1
	P45CG002	CG-550P	PUMP, GROUT, MIXER, AIR, 40 CF/HR, 225 PSI, SKID MTD (ADD 85 CFM - 100 PSI COMPRESSOR)	85 CFM A		$5,485	1.64	0.40	0.58	0.11	0.00	3

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
P45			***CHEMGROUT, INC. (continued)***										
	P45CG003	CG-500/2TJ6	PUMP, GROUT, MIXER, AIR, 160 CF/HR, 160 PSI, SKID MTD, 15 GAL HOPPER & 2 - 70 GAL MIXING TANKS (ADD 250 CFM - 100 PSI COMPRESSOR)	230 CFM	A		$13,398	3.92	0.97	1.42	0.26	0.00	12
	P45CG007	CG-570 / 3C6 / H	PUMP, GROUT, THICK MIX/SPRAY, 64 CF/HR, 261 PSI, SKID MTD, 15 GAL HOPPER & 45 GAL MIXING TANK, W/AIR COMPRESSOR, POWER UNIT	16 HP	G		$19,178	9.89	1.40	2.04	0.38	3.91	13
	P45CG006	CG-570 / 3C6	PUMP, GROUT, THICK MIX/SPRAY, 64 CF/HR, 261 PSI, TRAILER MTD, 15 GAL HOPPER & 45 GAL MIXING TANK, W/AIR COMPRESSOR, POWER UNIT	16 HP	G		$23,563	11.12	1.70	2.47	0.46	3.91	15
			OLIN ENGINEERING, INC.										
	P45OE001	5 25	PUMP, GROUT PUMP, 810 CF/HR, 750 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	42 HP	D-off		$25,032	12.06	1.80	2.61	0.49	4.42	39
	P45OE002	5 40	PUMP, GROUT PUMP, 1,134 CF/HR, 750 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	55 HP	D-off		$31,301	15.37	2.25	3.27	0.61	5.79	42
	P45OE003	5 65	PUMP, GROUT PUMP, 1,836 CF/HR, 1100 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	84 HP	D-off		$40,547	21.44	2.93	4.26	0.80	8.85	48
	P45OE004	5 85	PUMP, GROUT PUMP, 2,295 CF/HR, 1100 PSI, 37 GAL HOPPER, TRAILER MTD, W/POWER UNIT	120 HP	D-off		$48,453	27.95	3.50	5.10	0.95	12.64	56
	P45OE005	5 140CA	PUMP, GROUT PUMP, 3,780 CF/HR, 900 PSI, 37 GAL HOPPER, TRAILER MTD TANDEM, W/POWER UNIT	181 HP	D-off		$65,642	40.05	4.73	6.87	1.29	19.06	100
P50	**PUMPS, WATER, CENTRIFUGAL, TRASH**												
	SUBCATEGORY 0.11		**ENGINE DRIVE**										
			WACKER CORPORATION										
	P50WC001	PT 2A	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 2" DIA, 205 GPM @ 100' HEAD (ADD HOSES)	10 HP	G		$1,442	3.01	0.10	0.14	0.03	2.30	1

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P50			***WACKER CORPORATION (continued)***									
	P50WC002	PT 3A	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 3" DIA, 425 GPM @ 95' HEAD (ADD HOSES)	15 HP D-off		$1,726	2.22	0.12	0.17	0.03	1.51	2
	P50WC003	PTS 4V	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 4" DIA, 705 GPM @ 106' HEAD (ADD HOSES)	16 HP D-off		$3,706	2.87	0.27	0.37	0.08	1.61	3
	P50WC004	PT 6LT	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 6" DIA, 1,300 GPM @ 100' HEAD ,TRAILER MTD (ADD HOSES)	33 HP D-off		$16,801	8.29	1.17	1.66	0.34	3.32	25
			NO SPECIFIC MANUFACTURER									
	P50XX001	6" DIESEL	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 6" DIA, 1,165 GPM, AIR COOLED (ADD HOSES)	60 HP D-off		$21,703	12.76	1.53	2.17	0.44	6.04	22
	P50XX002	8" DIESEL	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 8" DIA, 2,085 GPM, WATER COOLED (ADD HOSES)	70 HP D-off		$40,010	18.71	2.81	4.00	0.81	7.04	35
	P50XX003	10" DIESEL	PUMP, WATER, CENTRIFUGAL, TRASH, ENGINE DRIVE, 10" DIA, 2,665 GPM, WATER COOLED (ADD HOSES)	85 HP D-off		$42,984	21.26	3.02	4.30	0.87	8.55	43
	SUBCATEGORY 0.31		**HOSES, PUMP, SUCTION & DISCHARGE**									
			GORMAN-RUPP COMPANY									
	P50GR001		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 2" DIA X 20' WITH COUPLING (PER SECTION)			$384	0.28	0.06	0.09	0.01	0.00	1
	P50GR002		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 3" DIA X 20' WITH COUPLING (PER SECTION)			$566	0.40	0.08	0.13	0.01	0.00	1
	P50GR003		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 4" DIA X 20' WITH COUPLING (PER SECTION)			$782	0.57	0.11	0.18	0.02	0.00	1
	P50GR004		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 6" DIA X 20' WITH COUPLING (PER SECTION)			$1,578	1.13	0.21	0.36	0.03	0.00	1
	P50GR005		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 2" DIA X 50' WITH COUPLING (PER SECTION)			$524	0.37	0.07	0.12	0.01	0.00	1

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
P50			*GORMAN-RUPP COMPANY (continued)*									
	P50GR006		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 3" DIA X 50' WITH COUPLING (PER SECTION)			$759	0.54	0.11	0.17	0.02	0.00	1
	P50GR007		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 4" DIA X 50' WITH COUPLING (PER SECTION)			$1,032	0.73	0.14	0.23	0.02	0.00	1
	P50GR008		PUMP, WATER, CENTRIFUGAL, TRASH, HOSE, SUCTION/DISCH, 6" DIA X 50' WITH COUPLING (PER SECTION)			$2,207	1.58	0.30	0.50	0.05	0.00	1
P55	**PUMPS, WATER, SUBMERSIBLE**											
	SUBCATEGORY 0.01		**ENGINE DRIVE**									
			GRIFFIN DEWATERING CORP.									
	P55GF001	4MH	PUMP, WATER, SUBMERSIBLE, ENGINE DRIVE, 4" DIA, 400 GPM @ 20' HEAD, SKID MTD (INCLUDES POWER UNIT MODEL 250)(ADD HOSES)	21 HP D-off		$18,857	7.68	1.33	1.89	0.38	2.11	19
	P55GF002	6T	PUMP, WATER, SUBMERSIBLE, ENGINE DRIVE, 6" DIA, 2,000 GPM @ 20' HEAD, SKID MTD (INCLUDES POWER UNIT MODEL 400)(ADD HOSES)	72 HP D-off		$21,082	14.34	1.49	2.11	0.43	7.24	31
	SUBCATEGORY 0.02		**ELECTRIC DRIVE**									
			GORMAN-RUPP COMPANY									
	P55GR001	S2A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 2" DIA, 138 GPM @ 20' HEAD (ADD HOSES)	2 HP E		$2,972	1.21	0.22	0.32	0.06	0.36	2
	P55GR002	S3A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 3" DIA, 278 GPM @ 20' HEAD (ADD HOSES)	5 HP E		$3,999	2.26	0.29	0.42	0.08	0.91	3
	P55GR003	S4A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 4" DIA, 860 GPM @ 40' HEAD (ADD HOSES)	25 HP E		$13,861	9.97	1.01	1.47	0.27	4.55	12
	P55GR004	S6A1	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 6" DIA, 1,950 GPM @ 40' HEAD (ADD HOSES)	60 HP E		$18,773	20.74	1.37	1.99	0.37	10.91	14

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			WACKER CORPORATION									
	P55WC001	PS2 500	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 2" DIA, 66 GPM @ 39' HEAD (ADD HOSES)	1 HP E		$451	0.37	0.04	0.05	0.01	0.18	1
	P55WC002	PS2 750	PUMP, WATER, SUBMERSIBLE, ELECTRIC, 2" DIA, 100 GPM @ 52' HEAD (ADD HOSES)	1 HP E		$706	0.43	0.05	0.08	0.01	0.18	1
P60	**PUMPS, WATER, CENTRIFUGAL, DEWATERING**											
	SUBCATEGORY 0.11		**SKID MOUNTED, ENGINE DRIVE**									
			HOMELITE, INC. (DEERE & COMPANY)									
	P60HO002	S2B	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 2" DIA, 150 GPM @ 22' HEAD (ADD HOSES)	4 HP G		$814	1.14	0.06	0.08	0.02	0.81	1
	P60HO003	TP3B	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 3" DIA, 293 GPM @ 20' HEAD (ADD HOSES)	8 HP G		$1,471	2.50	0.11	0.15	0.03	1.84	1
			WACKER CORPORATION									
	P60WC001	PG 2A	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 2" DIA, 159 GPM @ 98' HEAD (ADD HOSES)	4 HP G		$604	1.21	0.04	0.06	0.01	0.92	1
	P60WC002	PG 3A	PUMP, WATER, CENTRIFUGAL, DEWATERING, SKID MOUNTED, ENGINE DRIVE, 3" DIA, 264 GPM @ 98' HEAD (ADD HOSES)	6 HP G		$726	1.77	0.05	0.07	0.01	1.38	1
	SUBCATEGORY 0.21		**WHEEL MOUNTED, ENGINE DRIVE**									
			GRIFFIN DEWATERING CORP.									
	P60GF003	250/4"MH	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 4" DIA, 400 GPM @ 60' HEAD (ADD HOSES)	21 HP D-off		$21,296	8.04	1.48	2.10	0.43	2.11	19
	P60GF008	400/6"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 6" DIA, 1,040 GPM @ 60' HEAD (ADD HOSES)	72 HP D-off		$23,520	14.66	1.64	2.32	0.48	7.24	31

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
P60			***GRIFFIN DEWATERING CORP. (continued)***										
	P60GF004	400/6"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 6" DIA, 2,000 GPM @ 60' HEAD (ADD HOSES)	72 HP	D-off		$23,520	14.66	1.64	2.32	0.48	7.24	31
	P60GF005	600/8"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 8" DIA, 3,410 GPM @ 60' HEAD (ADD HOSES)	113 HP	D-off		$27,133	20.46	1.89	2.68	0.55	11.37	39
	P60GF006	825/12"T	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 12" DIA, 4,410 GPM @ 60' HEAD (ADD HOSES)	140 HP	D-off		$41,889	27.51	2.93	4.15	0.85	14.09	39
			GORMAN-RUPP COMPANY										
	P60GR001	14C2-F3L	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 4" DIA, 600 GPM @ 80' HEAD (ADD HOSES)	47 HP	D-off		$21,573	11.20	1.50	2.12	0.44	4.73	20
	P60GR002	86A2-F4L	PUMP, WATER, CENTRIFUGAL, DEWATERING, WHEEL, 6" DIA, 1,825 GPM @ 40' HEAD (ADD HOSES)	101 HP	G		$23,649	32.87	1.65	2.33	0.48	23.23	20
P65	**PUMPS, WATER, DIAPHRAGM**												
	SUBCATEGORY 0.11		**SKID MOUNTED, ENGINE DRIVE**										
			HOMELITE, INC. (DEERE & COMPANY)										
	P65HO001	DP2B	PUMP, WATER, DIAPHRAGM, SKID MTD, 2" DIA, 33 GPM @ 25' HEAD (ADD HOSES)	4 HP	G		$1,521	1.32	0.11	0.15	0.03	0.81	1
	P65HO002	DP3B	PUMP, WATER, DIAPHRAGM, SKID MTD, 3" DIA, 80 GPM @ 25' HEAD (ADD HOSES)	4 HP	G		$1,630	1.35	0.11	0.16	0.03	0.81	2
	SUBCATEGORY 0.21		**WHEEL MOUNTED, ENGINE DRIVE**										
			GORMAN-RUPP COMPANY										
	P65GR001	3D-13	PUMP, WATER, DIAPHRAGM, WHEEL, 2" DIA SUCTION X 3" DIA DISCHARGE, 56 GPMH @ 25' HEAD (ADD HOSES)	5 HP	G		$2,521	1.96	0.15	0.19	0.05	1.15	2
	P65GR002	3D-B	PUMP, WATER, DIAPHRAGM, WHEEL, 3" DIA, 560 GPM @ 25' HEAD (ADD HOSES)	2 HP	G		$3,191	1.21	0.19	0.26	0.06	0.35	2

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
P65			***GORMAN-RUPP COMPANY (continued)***										
	P65GR003	4D-B	PUMP, WATER, DIAPHRAGM, WHEEL, 4" DIA, 74 GPM @ 25' HEAD (ADD HOSES)	3 HP	G		$8,117	2.82	0.53	0.74	0.16	0.69	3
			WACKER CORPORATION										
	P65WC001	PDT 2A	PUMP, WATER, DIAPHRAGM, WHEEL, 2" DIA, 50 GPM @ 25' HEAD (ADD HOSES)	4 HP	G		$1,793	1.50	0.13	0.18	0.04	0.92	1
	P65WC002	PDT 3A	PUMP, WATER, DIAPHRAGM, WHEEL, 3" DIA, 88 GPM @ 25' HEAD (ADD HOSES)	4 HP	G		$1,899	1.53	0.14	0.19	0.04	0.92	2
P70	**PUMPS, WATER (For core drills)**												
	SUBCATEGORY 0.01		**ENGINE DRIVE**										
			NO SPECIFIC MANUFACTURER										
	P70XX001	75-7.6	PUMP, WATER, FOR CORE DRILLS, 7.6 GPM, 75 PSI, MANUAL, SKID (ADD HOSES)	2 HP	G		$3,015	1.25	0.20	0.28	0.06	0.46	1
	P70XX002	225-17.5	PUMP, WATER, FOR CORE DRILLS, 17.5 GPM, 225 PSI, MANUAL, SKID (ADD HOSES)	6 HP	G		$7,843	3.47	0.53	0.74	0.16	1.38	1
R10	**RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)**												
	SUBCATEGORY 0.00		**RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)**										
			CATERPILLAR INC. (MACHINE DIVISION)										
	R10CA006	D-5C111	RIPPER, SHANK, EACH (ADD D-5 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)				$263	0.08	0.03	0.03	0.01	0.00	1
	R10CA022	D6RII-174-9198	RIPPER SHANK, EACH (ADD D6RII TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)				$1,032	0.26	0.07	0.10	0.02	0.00	2
	R10CA023	D6R II - 9J-8926	RIPPER, SHANK, EACH (ADD D-6 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)				$1,041	0.26	0.07	0.10	0.02	0.00	2
	R10CA010	D-7R	RIPPER, SHANK, EACH (ADD D-7 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)				$1,673	0.43	0.12	0.17	0.03	0.00	2

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R10			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	R10CA013	D-8R	RIPPER, SHANK, EACH (ADD D-8 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			$3,745	0.96	0.27	0.37	0.08	0.00	7
	R10CA016	D-9R	RIPPER, SHANK, EACH (ADD D-9 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			$3,773	0.98	0.27	0.38	0.08	0.00	8
	R10CA019	D-10R	RIPPER, SHANK, EACH (ADD D-10 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			$6,132	1.81	0.43	0.61	0.12	0.00	12
	R10CA001	D-3	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-3 TRACTOR DOZER & COST FOR POINT WEAR)			$9,802	2.60	0.69	0.98	0.20	0.00	13
	R10CA003	D-4C SERIES III	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-4 TRACTOR DOZER & COST FOR POINT WEAR)			$9,802	2.60	0.69	0.98	0.20	0.00	13
	R10CA005	D-5C SERIES III	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-5 TRACTOR DOZER & COST FOR POINT WEAR)			$9,802	2.60	0.69	0.98	0.20	0.00	13
	R10CA007	D-6R II	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-6 TRACTOR DOZER & COST FOR POINT WEAR)			$22,465	5.86	1.58	2.25	0.45	0.00	40
	R10CA009	D-7R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-7 TRACTOR DOZER & COST FOR POINT WEAR)			$41,863	10.86	2.95	4.19	0.85	0.00	77
	R10CA011	D-8R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-8 TRACTOR DOZER & RIPPER & COST FOR POINT WEAR)			$45,587	11.83	3.20	4.56	0.92	0.00	91
	R10CA012	D-8R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-8 TRACTOR DOZER & COST FOR POINT WEAR)			$53,735	13.93	3.78	5.37	1.09	0.00	102
	R10CA014	D-9R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-9 TRACTOR DOZER & COST FOR POINT WEAR)			$58,452	15.21	4.11	5.85	1.18	0.00	102
	R10CA015	D-9R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-9 TRACTOR DOZER & COST FOR POINT WEAR)			$66,257	17.22	4.66	6.63	1.34	0.00	91
	R10CA017	D-10R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-10 TRACTOR DOZER & COST FOR POINT WEAR)			$89,108	23.14	6.26	8.91	1.80	0.00	161

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R10			*CATERPILLAR INC. (MACHINE DIVISION) (continued)*									
	R10CA018	D-10R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-10 TRACTOR DOZER & COST FOR POINT WEAR)			$106,173	27.55	7.46	10.62	2.15	0.00	179
	R10CA020	D-11R	RIPPER, 1-SHANK & BEAM, HYDRAULIC (ADD D-11 TRACTOR DOZER & COST FOR POINT WEAR)			$106,244	27.57	7.46	10.62	2.15	0.00	72
	R10CA021	D-11R	RIPPER, 3-SHANKS & BEAM, HYDRAULIC (ADD D-11 TRACTOR DOZER & COST FOR POINT WEAR)			$110,030	28.57	7.73	11.00	2.23	0.00	103
R15	**ROLLERS, STATIC, TOWED, PNEUMATIC**											
	SUBCATEGORY 0.00		**ROLLERS, STATIC, TOWED, PNEUMATIC**									
			SOUTHWEST CONSTRUCTION EQUIPMENT CO.									
	R15SO001	C-50	ROLLER, STATIC, TOWED, PNEUMATIC, 60 TON, 9.8' WIDE, 4 TIRE (ADD TOWING UNIT)			$124,784	23.26	6.94	8.94	2.47	0.00	309
	R15SO002	C-75	ROLLER, STATIC, TOWED, PNEUMATIC, 75 TON, 10.5' WIDE, 4 TIRE (ADD TOWING UNIT)			$137,684	25.36	7.18	8.90	2.73	0.00	347
	R15SO003	C-100XL	ROLLER, STATIC, TOWED, PNEUMATIC, 100 TON, 10.5' WIDE, 4 TIRE (ADD TOWING UNIT)			$189,921	35.29	10.30	13.08	3.76	0.00	551
R20	**ROLLERS, STATIC, TOWED, STEEL DRUM**											
	SUBCATEGORY 0.00		**ROLLERS, STATIC, TOWED, STEEL DRUM**									
			REYNOLDS INTERNATIONAL, L.P.									
	R20RI002	DD-48X60	ROLLER, STATIC, TOWED, 2 STEEL DRUMS, 10-15 TON, 48" WIDE X 60" DIA, PADFOOT (ADD TOWING UNIT)			$32,659	6.72	1.96	2.61	0.65	0.00	177
			SOUTHWEST CONSTRUCTION EQUIPMENT CO.									
	R20SO001	2DH-RR	ROLLER, STATIC, TOWED, 2 STEEL DRUMS, 10-20 TON, 60" WIDE X 60" DIA, SHEEPSFOOT (ADD TOWING UNIT)			$69,813	14.08	4.18	5.59	1.38	0.00	200

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R30	**ROLLERS, STATIC, SELF-PROPELLED**											
	SUBCATEGORY 0.01		**PNEUMATIC**									
			COMPACTION AMERICA									
	R30BO004	BW11RH	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 13.50 TON, 68" WIDE, 9 TIRE, ASPHALT COMPACTOR	85 HP D-off		$79,956	27.28	5.70	8.26	1.57	7.56	100
	R30BO003	BW24R	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 30.00 TON, 78" WIDE, 8 TIRE, ASPHALT COMPACTOR	110 HP D-off		$133,462	42.74	9.32	13.40	2.62	9.78	290
			CATERPILLAR INC. (MACHINE DIVISION)									
	R30CA010	PS-150B	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 14.25 TON, 68" WIDE, 9 TIRE, ASPHALT COMPACTOR	70 HP D-off		$75,789	24.88	5.43	7.88	1.49	6.22	85
	R30CA011	PS-200B	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 20.00 TON, 68" WIDE, 9 TIRE, ASPHALT COMPACTOR	105 HP D-off		$87,080	31.12	6.20	8.98	1.71	9.34	87
	R30CA014	PS-360B	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 27.55 TON, 90" WIDE, 7 TIRE, ASPHALT COMPACTOR	105 HP D-off		$148,046	45.09	10.71	15.62	2.90	9.34	352
			ROSCO, A LeeBoy COMPANY									
	R30RS003	TRU-PAC 915	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 6-15 TON, 68" WIDE, 9 TIRES, ASPHALT/SOIL COMPACTOR	80 HP D-off		$60,119	22.11	4.27	6.17	1.18	7.11	115
			SAKAI AMERICA, INC.									
	R30SI002	TS200	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 16 TON, 81" WIDE, 9 TIRE, ASPHALT COMPACTOR	91 HP D-off		$100,325	33.07	6.96	9.97	1.97	8.09	187
	R30SI003	TS600C	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 16 TON, 81" WIDE, 9 TIRE, ASPHALT COMPACTOR	95 HP D-off		$123,900	38.98	8.67	12.48	2.43	8.45	187

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R30			*SAKAI AMERICA, INC. (continued)*									
	R30SI004	TS650C	ROLLER, STATIC, SELF-PROPELLED, PNEUMATIC, 27 TON, 82" WIDE, 7 TIRE, ASPHALT COMPACTOR	108 HP D-off		$164,977	49.75	11.72	16.96	3.24	9.60	281
	SUBCATEGORY 0.02		**SMOOTH DRUM**									
			COMPACTION AMERICA									
	R30BO005	BW5AS	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 6 TON, 40" WIDE ASPHALT COMPACTOR	47 HP D-off		$71,868	19.20	4.44	6.11	1.38	4.18	130
	R30BO006	BW9AS	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 10 TON, 50" WIDE ASPHALT COMPACTOR	83 HP D-off		$85,425	25.50	5.27	7.26	1.64	7.38	162
	R30BO007	BW11AS	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 14 TON, 54" WIDE ASPHALT COMPACTOR	78 HP D-off		$101,063	28.18	6.24	8.59	1.94	6.94	215
			ROSCO, A LeeBoy COMPANY									
	R30RS001	300 B	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 1.5 TON, 34" WIDE, ASPHALT COMPACTOR	16 HP G		$13,542	6.38	0.84	1.15	0.26	3.27	26
	R30RS002	400	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, DOUBLE DRUM, 2 TON, 40" WIDE, ASPHALT COMPACTOR	40 HP D-off		$26,857	9.39	1.65	2.28	0.51	3.56	37
			SAKAI AMERICA, INC.									
	R30SI005	R2H	ROLLER, STATIC, SELF-PROPELLED, SMOOTH DRUM, 3 DRUMS, 14 TON, 64" WIDE, ASPHALT COMPACTOR	75 HP D-off		$118,497	31.41	7.31	10.07	2.27	6.67	207
	SUBCATEGORY 0.03		**TAMPING FOOT, LANDFILL & SOIL COMPACTORS**									
			COMPACTION AMERICA									
	R30BO009	BC672RB	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 35 TON, 63" DIA, 19.58' WIDTH PER 2-PASS, W/BLADE	442 HP D-off		$541,884	134.79	28.65	36.13	10.58	39.30	710

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R30			***COMPACTION AMERICA (continued)***									
	R30BO008	BC772RB	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 40 TON, 63" DIA, 19.58' WIDTH PER 2-PASS, W/BLADE	442 HP D-off		$572,465	139.91	30.25	38.16	11.17	39.30	812
			CATERPILLAR INC. (MACHINE DIVISION)									
	R30CA003	815-F	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 23 TON, 56" DIA, 14.25' WIDTH PER 2-PASS, W/BLADE	240 HP D-off		$332,731	79.66	17.58	22.18	6.49	21.34	449
	R30CA012	816-F	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, TAMPING FOOT, CHOPPER, 4X4, 25.0 TON, 14.75' WIDTH PER 2-PASS, W/BLADE	220 HP D-off		$337,960	78.56	17.87	22.53	6.60	19.56	509
	R30CA006	825-G II	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, SHEEPSFOOT, 4X4, 35 TON, 51" DIA, 16.00' WIDTH PER 2-PASS, W/BLADE	315 HP D-off		$501,399	115.43	26.51	33.43	9.79	28.01	734
	R30CA013	826-G II	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, TAMPING FOOT, CHOPPER, 4X4, 36.5 TON, 15.66' WIDTH PER 2-PASS, W/BLADE	315 HP D-off		$521,836	118.87	27.59	34.79	10.19	28.01	771
	R30CA009	836 G	ROLLER, STATIC, SELF-PROPELLED, LANDFILL/SOIL COMPACTOR, TAMPING FOOT, CHOPPER, 4X4, 50.0 TON, 18.58' WIDTH PER 2-PASS, W/BLADE	473 HP D-off		$689,109	162.60	36.42	45.94	13.45	42.06	1,166
R40	**ROLLERS, VIBRATORY, TOWED**											
	SUBCATEGORY 0.00		**ROLLERS, VIBRATORY, TOWED**									
			COMPACTION AMERICA									
	R40BO001	BW6	ROLLER, VIBRATORY, TOWED, SINGLE DRUM, SMOOTH, 13,000 LB OPER. WT., 26,550 LB (13.3 TONS) CENTRIFUGAL FORCE, 67" WIDE (ADD 180 HP TOWING UNIT)	50 HP D-off		$74,339	23.84	5.22	7.43	1.50	5.03	128

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R40			***COMPACTION AMERICA (continued)***									
	R40BO002	BW6S	ROLLER, VIBRATORY, TOWED, SINGLE DRUM, SHEEPSFOOT, 15,000 LB OPER. WT., 26,550 LB (13.3 TONS) CENTRIFUGAL FORCE, 67" WIDE (ADD 180 HP TOWING UNIT)	50 HP D-off		$83,167	26.00	5.84	8.32	1.68	5.03	148
R45			**ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM**									
	SUBCATEGORY 0.00		**ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM**									
			COMPACTION AMERICA									
	R45BO004	BW120AD-4	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.9 TON, 47.2" WIDE, 2X1, ASPHALT COMPACTOR	33 HP D-off		$49,649	18.18	3.49	4.96	1.01	3.32	57
	R45BO005	BW138AD	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 4.6 TON, 54.3" WIDE, 2X1, ASPHALT COMPACTOR	46 HP D-off		$61,016	22.97	4.29	6.10	1.24	4.63	92
	R45BO006	BW151AD-4	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 7.8 TON, 66.1" WIDE, 2X1, ASPHALT COMPACTOR	108 HP D-off		$126,182	48.98	8.86	12.62	2.55	10.87	158
	R45BO007	BW161AD-4 HF	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 10.4 TON, 66.1" WIDE, 2X1, ASPHALT COMPACTOR	131 HP D-off		$146,157	57.43	10.27	14.62	2.96	13.18	209
	R45BO008	BW190AD-4 HF	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 12.6 TON, 79.0" WIDE, 2X1, ASPHALT COMPACTOR	205 HP D-off		$153,156	68.01	10.76	15.32	3.10	20.63	252
			CATERPILLAR INC. (MACHINE DIVISION)									
	R45CA001	CB-214D	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.5 TON, 39.4" WIDE, 2X1, ASPHALT COMPACTOR	32 HP D-off		$43,311	16.23	3.05	4.33	0.88	3.22	81
	R45CA002	CB-224D	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.7 TON, 47.2" WIDE, 2X1, ASPHALT COMPACTOR	32 HP D-off		$49,128	17.90	3.45	4.91	0.99	3.22	58
	R45CA005	CB-434C	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 6.6 TON, 56" WIDE, 2X1, ASPHALT COMPACTOR	70 HP D-off		$118,808	42.46	8.35	11.88	2.41	7.04	137

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R45			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	R45CA007	CB-534C	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 10.0 TON, 67" WIDE, 2X1, ASPHALT COMPACTOR	105 HP D-off		$145,834	54.33	10.24	14.58	2.95	10.57	233
	R45CA010	CB-634D	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 13.2 TON, 84" WIDE, 2X1, ASPHALT COMPACTOR	145 HP D-off		$181,547	69.28	12.76	18.15	3.68	14.59	283
			ROSCO, A LeeBoy COMPANY									
	R45RS001	300B	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 2.0 TON, 36" WIDE, ASPHALT COMPACTOR	20 HP D-off		$17,272	7.31	1.22	1.73	0.35	2.01	26
			SAKAI AMERICA, INC.									
	R45SI008	SW320	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 3.0 TON, 47" WIDE, 2X1, ASPHALT COMPACTOR	34 HP D-off		$41,992	16.08	2.95	4.20	0.85	3.42	28
	R45SI009	SW650	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 7.8 TON, 58" WIDE, 2X1, ASPHALT COMPACTOR	37 HP D-off		$97,952	32.60	6.88	9.80	1.98	3.72	157
	R45SI010	SW850	ROLLER, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM, SMOOTH, 14.0 TON, 79" WIDE, 2X1, ASPHALT COMPACTOR	121 HP D-off		$135,012	53.05	9.48	13.50	2.73	12.18	124
R50	**ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM**											
	SUBCATEGORY 0.00		**ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM**									
			COMPACTION AMERICA									
	R50BO005	BW124DH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 2.9 TON, 47.2" WIDE, 3X2, SOIL COMPACTOR	50 HP D-off		$61,066	21.02	3.92	5.30	1.27	3.63	60
	R50BO010	BW124PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 2.9 TON, 47.2" WIDE, 3X2, SOIL COMPACTOR	50 HP D-off		$62,914	21.16	4.21	5.79	1.31	3.63	60
	R50BO006	BW145D-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 5.5 TON, 56.1" WIDE, 3X2, SOIL COMPACTOR	75 HP D-off		$83,025	28.57	5.60	7.74	1.73	5.44	110

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R50			***COMPACTION AMERICA (continued)***									
	R50BO011	BW145PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 5.8 TON, 56.1" WIDE, 3X2, SOIL COMPACTOR	75 HP D-off		$89,291	30.25	6.03	8.33	1.86	5.44	118
	R50BO007	BW177D-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 7.9 TON, 66.4" WIDE, 3X2, SOIL COMPACTOR	75 HP D-off		$114,613	37.16	7.69	10.59	2.39	5.44	159
	R50BO012	BW177PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 8.3 TON, 66.4" WIDE, 3X2, SOIL COMPACTOR	101 HP D-off		$129,141	43.23	8.67	11.96	2.69	7.33	166
	R50BO008	BW213DH-4	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 11.5 TON, 83.9" WIDE, 3X2, SOIL COMPACTOR	155 HP D-off		$152,331	54.26	10.11	13.86	3.18	11.24	269
	R50BO013	BW213PDH-3	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 14.1 TON, 83.9" WIDE, 3X2, SOIL COMPACTOR	131 HP D-off		$163,273	55.18	10.84	14.88	3.40	9.50	283
	R50BO009	BW219DH-4	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 20.6 TON, 83.9" WIDE, 3X2, SOIL COMPACTOR	195 HP D-off		$214,304	74.22	14.31	19.67	4.47	14.15	412
			CATERPILLAR INC. (MACHINE DIVISION)									
	R50CA001	CS-323C	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.6 TON, 50" WIDE, 3X2, SOIL COMPACTOR	70 HP D-off		$78,820	27.09	5.28	7.28	1.64	5.08	97
	R50CA003	CS-431C	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 6.9 TON, 66" WIDE, 3X2, SOIL COMPACTOR	97 HP D-off		$106,380	36.79	7.14	9.83	2.22	7.04	138
	R50CA005	CS-433E	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 7.1 TON, 66" WIDE, 3X2, SOIL COMPACTOR	100 HP D-off		$115,400	39.45	7.75	10.68	2.41	7.25	147
	R50CA009	CS-563E	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 12.2 TON, 84" WIDE, 3X2, SOIL COMPACTOR	150 HP D-off		$147,255	52.47	9.77	13.39	3.07	10.88	253
	R50CA011	CS-583E	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 16.5 TON, 84" WIDE, 3X2, SOIL COMPACTOR	150 HP D-off		$180,557	61.40	12.02	16.52	3.76	10.88	340
	R50CA002	CP-323C (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 4.6 TON, 50" WIDE, 3X2, SOIL COMPACTOR	70 HP D-off		$91,715	30.55	6.16	8.49	1.91	5.08	105

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R50			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	R50CA010	CP-563E (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 12.5 TON, 84" WIDE, 3X2 SOIL COMPACTOR	150 HP D-off		$175,673	60.09	11.69	16.06	3.66	10.88	262
	R50CA004	CP-433E (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 7.1 TON, 66" WIDE, 3X2, SOIL COMPACTOR	100 HP D-off		$127,095	42.58	8.54	11.77	2.65	7.25	150
	R50CA012	CP-563E (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, PAD FOOT, 12.5 TON, 84" WIDE, 3X2, SOIL COMPACTOR	150 HP D-off		$176,034	60.19	11.72	16.09	3.67	10.88	275
			INGERSOLL RAND ROAD MACHINERY DIV									
	R50IP001	SD-40D	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.9 TON, 54" WIDE, SOIL COMPACTOR	76 HP D-off		$85,747	29.54	5.72	7.86	1.79	5.51	91
			SAKAI AMERICA, INC.									
	R50SI024	TW350 Combo	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 1.5 TON, 39.5" WIDE, 2X1, ASPHALT COMPACTOR	28 HP D-off		$51,757	16.33	3.46	4.76	1.08	2.03	25
	R50SI025	TW500 Combo	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 3.9 TON, 51" WIDE, 2X1, ASPHALT COMPACTOR	30 HP D-off		$63,953	19.78	4.28	5.90	1.33	2.18	36
	R50SI006	SV201D	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.8 TON, 54" WIDE, 3X2, SOIL COMPACTOR	60 HP D-off		$71,446	24.33	4.77	6.56	1.49	4.35	41
	R50SI007	SV201T (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 4.9 TON, 54" WIDE, 3X2, SOIL COMPACTOR	60 HP D-off		$78,007	26.09	5.22	7.17	1.63	4.35	43
	R50SI022	SV400D	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 7.7 TON, 67" WIDE, 3X2, SOIL COMPACTOR	138 HP D-off		$100,843	38.74	6.74	9.28	2.10	10.01	156
	R50SI026	TW750 Combo	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 8.7 TON, 66" WIDE, 2X1, ASPHALT COMPACTOR	104 HP D-off		$127,606	43.01	8.60	11.87	2.66	7.54	100
	R50SI023	SV400TB (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 9.6 TON, 67" WIDE, 3X2, SOIL COMPACTOR	82 HP D-off		$111,552	36.96	7.47	10.28	2.33	5.95	72

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
R50			***SAKAI AMERICA, INC. (continued)***										
	R50SI013	SV510D-1	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 11.5 TON, 84" WIDE, 3X2, SOIL COMPACTOR	138 HP	D-off		$120,255	44.23	7.94	10.85	2.51	10.01	507
	R50SI016	SV510T (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 11.9 TON, 60" WIDE, 3X2, SOIL COMPACTOR	118 HP	D-off		$127,681	44.56	8.44	11.55	2.66	8.56	110
	R50SI017	SV510TF (PADS)	ROLLER, VIBRATORY, SELF-PROPELLED, SINGLE DRUM, SMOOTH, 14.3 TON, 85" WIDE, 3X2, SOIL COMPACTOR	118 HP	D-off		$146,008	49.47	9.67	13.26	3.04	8.56	131
R55	**ROOFING EQUIPMENT**												
	SUBCATEGORY 0.00		**ROOFING EQUIPMENT**										
			AEROIL PRODUCTS COMPANY, INC.										
	R55AE001	EZ LOAD 270	ROOFING EQUIPMENT, KETTLE, 270 GAL, W/PUMP, TRAILER MTD	8 HP	G		$7,186	7.00	0.64	0.97	0.15	1.23	20
	R55AE002	EZ LOAD 410	ROOFING EQUIPMENT, KETTLE, 410 GAL, W/PUMP, TRAILER MTD	8 HP	G		$8,746	9.21	0.78	1.19	0.18	1.23	25
	R55AE003	EZ LOAD 680	ROOFING EQUIPMENT, KETTLE, 680 GAL, W/PUMP, TRAILER MTD	8 HP	G		$11,885	11.80	1.04	1.59	0.24	1.23	39
	R55AE004	EZ LOAD 1000	ROOFING EQUIPMENT, KETTLE, 1,000 GAL, W/PUMP, TRAILER MTD	8 HP	G		$15,765	13.39	1.33	2.02	0.32	1.23	54
	R55AE008	RHINO S PEELER	ROOFING EQUIPMENT, ROOF PEELER, 16" WIDE, WALK BEHIND, POWERED WHEEL 2X2	8 HP	G		$5,034	3.00	0.44	0.67	0.10	1.23	6
	R55AE009	MKI9	ROOFING EQUIPMENT, 1-BLADE CUTTER, 3.75" DEEP, WALK BEHIND (ADD BLADE COST)	9 HP	G		$1,823	2.13	0.17	0.26	0.04	1.38	2
	R55AE010	MK216R	ROOFING EQUIPMENT, 2-BLADE CUTTER, 20" WIDE, 3.75" DEEP, WALK BEHIND (ADD BLADE COST)	16 HP	G		$3,338	3.81	0.31	0.47	0.07	2.45	3
	R55AE011	BUFFALO 800	ROOFING EQUIPMENT, MATERIAL BUGGY, 36" WIDE, WALK BEHIND GRAVEL SPREADER, HOPPER 800 LBS, 8 CF, 4X2	5 HP	G		$3,431	1.94	0.27	0.40	0.07	0.77	4
			GARLOCK EQUIPMENT CO.										
	R55GL017	SUPER MINI SAW	ROOFING EQUIPMENT, 1-BLADE CUTTER, 18" HEIGHT & 2" WALL CLEARANCE	5 HP	G		$1,875	1.48	0.18	0.27	0.04	0.77	2

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			REGION 12										
R55			***GARLOCK EQUIPMENT CO. (continued)***										
	R55GL016	DUST MASTER ULTRA CU	ROOFING EQUIPMENT, 1-BLADE CUTTER, W/WATER DAMPENING SYSTEM AND H.E.P.A. VACUUM SYSTEM	9 HP	G		$5,260	3.26	0.49	0.75	0.11	1.38	3
	R55GL011	ENFORCER TWIN CUTTER	ROOFING EQUIPMENT, 2-BLADE CUTTER, 30" WIDE, SELF PROPELLED (ADD BLADE COST)	16 HP	G		$5,623	4.56	0.51	0.80	0.11	2.45	4
	R55GL018	NO.12	ROOFING EQUIPMENT, SCRATCHER, 4.5" WIDE	5 HP	G		$1,930	1.49	0.18	0.27	0.04	0.77	1
	R55GL019	NO. 30	ROOFING EQUIPMENT, SCRATCHER, 13" WIDE	8 HP	G		$3,751	2.60	0.35	0.53	0.08	1.23	3
	R55GL009	ROTARY PLANER	ROOFING EQUIPMENT, ROTARY PLANER, 12" WIDE	11 HP	G		$2,307	2.55	0.22	0.33	0.05	1.61	2
	R55GL008	ROCK MASTER SWEEPER	ROOFING EQUIPMENT, POWER SWEEPER, 48" WIDE	11 HP	G		$4,859	3.43	0.40	0.59	0.10	1.69	2
	R55GL015	MODEL 1000	ROOFING EQUIPMENT, HYDRAULIC HOIST, W/175' CABLE, 1,000 LB CAP	9 HP	G		$9,485	4.63	0.86	1.34	0.19	1.38	8
	R55GL007	SUPER MAX HYDR HOIST	ROOFING EQUIPMENT, HYDRAULIC SWING HOIST, W/275' CABLE, 1,400 LB CAP	18 HP	G		$11,581	6.87	1.06	1.64	0.24	2.76	10
	R55GL013	MODEL 30	ROOFING EQUIPMENT, KETTLE, 30 GAL, WHEEL MTD				$1,314	0.62	0.08	0.09	0.03	0.00	3
	R55GL014	MODEL 90	ROOFING EQUIPMENT, KETTLE, 90 GAL, SKID MTD				$2,992	1.33	0.27	0.42	0.06	0.00	7
	R55GL001	MODEL 115	ROOFING EQUIPMENT, KETTLE, 115 GAL, TRAILER MTD				$3,446	1.61	0.30	0.46	0.07	0.00	8
	R55GL002	MODEL 175	ROOFING EQUIPMENT, KETTLE, 175 GAL, W/PUMP, TRAILER MTD	5 HP	G		$6,743	3.54	0.60	0.91	0.14	0.77	17
	R55GL012	MODEL 300	ROOFING EQUIPMENT, KETTLE, 300 GAL, W/PUMP, TRAILER MTD	9 HP	G		$10,601	5.73	0.95	1.46	0.22	1.38	23
	R55GL003	MODEL 412	ROOFING EQUIPMENT, KETTLE, 412 GAL, W/PUMP, TRAILER MTD	9 HP	G		$13,492	6.66	1.20	1.85	0.27	1.38	30
	R55GL004	MODEL 612	ROOFING EQUIPMENT, KETTLE, 612 GAL, W/PUMP, TRAILER MTD	9 HP	G		$16,231	7.81	1.45	2.24	0.33	1.38	40

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S10	**SCRAPERS, ELEVATING**											
	SUBCATEGORY 0.01		**0 THRU 200 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	S10CA001	613-C SERIES II	SCRAPER, ELEVATING LOADING, 11 CY, 13 TON, 7.7' CUT WIDTH, 4X2 - SINGLE POWERED	175 HP D-off		$259,623	71.36	15.21	20.11	5.15	12.69	336
	SUBCATEGORY 0.02		**OVER 200 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	S10CA002	615-C SERIES II	SCRAPER, ELEVATING LOADING, 17 CY, 19 TON, 9.5' CUT WIDTH, 4X2 - SINGLE POWERED	265 HP D-off		$399,038	97.91	18.68	21.31	8.02	19.22	526
	S10CA003	623-G	SCRAPER, ELEVATING LOADING, 23 CY, 25 TON, 11.5' CUT WIDTH, 4X2 - SINGLE POWERED	365 HP D-off		$590,752	136.37	28.22	32.69	11.87	26.48	810
S15	**SCRAPERS, CONVENTIONAL**											
	SUBCATEGORY 0.00		**SCRAPERS, CONVENTIONAL**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	S15CA001	621-G	SCRAPER, CONVENTIONAL, STANDARD LOADING, 21 CY, 24 TON, 9.1' CUT WIDTH, 4X2 - SINGLE POWERED	365 HP D-off		$518,924	107.93	23.23	26.47	9.99	24.77	714
	S15CA002	631-G	SCRAPER, CONVENTIONAL, STANDARD LOADING, 34 CY, 37.5 TON, 11.5' CUT WIDTH, 4X2 - SINGLE POWERED	450 HP D-off		$782,350	155.50	34.98	39.83	15.06	30.54	1,020
	S15CA003	651-E	SCRAPER, CONVENTIONAL, STANDARD LOADING, 44 CY, 52 TON, 12.6' CUT WIDTH, 4X2 - SINGLE POWERED	550 HP D-off		$970,181	190.57	43.48	49.62	18.67	37.32	1,323

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			ATI-Bell									
	S15JU001	4206DTIS28	SCRAPER, CONVENTIONAL, STANDARD LOADING, 28 CY, 32 TON, 14' CUT WIDTH, 4X4 - SINGLE POWERED, TRACTOR EQUIPPED WITH ATI RUBBER TRACKS	422 HP D-off		$519,960	106.47	23.59	27.15	10.01	28.64	940
	S15JU002	4206DTIS33	SCRAPER, CONVENTIONAL, STANDARD LOADING, 33 CY, 37 TON, 14' CUT WIDTH, 4X4 - SINGLE POWERED, TRACTOR EQUIPPED WITH ATI RUBBER TRACKS	422 HP D-off		$538,058	108.96	24.42	28.12	10.36	28.64	953
S20	**SCRAPERS, TANDEM POWERED**											
	SUBCATEGORY 0.00		**SCRAPERS, TANDEM POWERED**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	S20CA001	627-G	SCRAPER, TANDEM POWERED, STANDARD LOADING, 21 CY, 24 TON, 9.1' CUT WIDTH, 4X4, D-9 ASSISTED LOADING	330 HP D-off	225 HP D-off	$589,214	137.82	26.45	30.22	11.34	38.97	791
	S20CA002	627-G PP	SCRAPER, TANDEM POWERED, STANDARD LOADING, 20 CY, 24 TON, 9.1' CUT WIDTH, 4X4, PUSH-PULL	330 HP D-off	225 HP D-off	$617,938	141.87	27.77	31.75	11.89	38.97	824
	S20CA003	637-G	SCRAPER, TANDEM POWERED, STANDARD LOADING, 34 CY, 37.5 TON, 11.5' CUT WIDTH, 4X4, D-10 ASSISTED LOADING	450 HP D-off	250 HP D-off	$989,642	212.09	44.49	50.88	19.05	49.14	1,084
	S20CA004	637-G PP	SCRAPER, TANDEM POWERED, STANDARD LOADING, 34 CY, 37.5 TON, 11.5' CUT WIDTH, 4X4, PUSH-PULL	450 HP D-off	250 HP D-off	$1,030,242	217.83	46.36	53.05	19.83	49.14	1,117
	S20CA005	657-E	SCRAPER, TANDEM POWERED, STANDARD LOADING, 44 CY, 52 TON, 12.6' CUT WIDTH, 4X4, D-11 ASSISTED LOADING	550 HP D-off	400 HP D-off	$1,172,215	268.27	52.28	59.43	22.56	66.69	1,516
	S20CA006	657-E PP	SCRAPER, TANDEM POWERED, STANDARD LOADING, 44 CY, 52 TON, 12.6' CUT WIDTH, 4X4, PUSH-PULL	550 HP D-off	400 HP D-off	$1,289,344	276.14	58.15	66.65	24.82	66.69	1,550

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S25	**SCRAPERS, TRACTOR DRAWN**											
	SUBCATEGORY 0.00		**SCRAPERS, TRACTOR DRAWN**									
			DEERE & COMPANY									
	S25JD001	1510C	SCRAPER, TOWED, STANDARD LOADING, 11 CY, 17 TON, 10' CUT WIDTH (ADD 225 HP TRACTOR)			$44,333	9.42	2.17	2.60	0.87	0.00	168
	S25JD002	1814C	SCRAPER, TOWED, STANDARD LOADING, 14 CY, 23 TON, 14' CUT WIDTH (ADD 360HP TRACTOR)			$56,408	11.78	2.72	3.23	1.10	0.00	213
			REYNOLDS INTERNATIONAL, L.P.									
	S25RI001	14CS10	SCRAPER, TOWED, PIVOT DUMP, 10.7-14 CY, 15 TON, 10' CUT WIDTH (ADD 250 - 300 HP TRACTOR)			$42,199	8.43	2.17	2.70	0.82	0.00	138
	S25RI002	17C12 (RG)	SCRAPER, TOWED, PIVOT DUMP, 13-17 CY, 17 TON, 12' CUT WIDTH (ADD 350 - 400 HP TRACTOR)			$48,390	9.56	2.47	3.05	0.94	0.00	170
			ROME PLOW CO.									
	S25RM003	R56H	SCRAPER, TOWED, 9-12 CY, 12.5 TON, 8.5' CUT WIDTH (ADD 120-165 HP TRACTOR)			$92,847	19.09	4.50	5.37	1.81	0.00	203
	S25RM001	R67H	SCRAPER, TOWED, 12-17 CY, 17 TON, 9.9' CUT WIDTH (ADD 165-215 HP TRACTOR)			$117,561	22.97	5.80	7.02	2.29	0.00	238
	S25RM002	R89H	SCRAPER, TOWED, 18-26 CY, 25 TON, 10.8' CUT WIDTH (ADD 285-370 HP TRACTOR)			$159,884	30.60	7.89	9.54	3.12	0.00	382
S30	**SCREENING & CRUSHING PLANTS**											
	SUBCATEGORY 0.10		**CONVEYORS**									
			KOLBERG - PIONEER, INC									
	S30KB034	12-3050	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 30" WIDE X 50' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 500 TPH	15 HP	E	$42,809	11.42	2.54	3.50	0.79	1.97	15

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
S30			***KOLBERG - PIONEER, INC (continued)***										
	S30KB035	12-3070	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 30" WIDE X 70' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 500 TPH	20 HP	E		$49,183	13.68	2.92	4.02	0.91	2.63	18
	S30KB036	12-3650	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 36" WIDE X 50' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 750 TPH	20 HP	E		$45,977	13.05	2.73	3.76	0.85	2.63	16
	S30KB041	12-3670	SCREENING & CRUSHING PLANTS, FEEDER CONVEYOR, 36" WIDE X 70' LONG, 7 CY HOPPER & 6' FEED, PORTABLE, 750 TPH	20 HP	E		$52,981	14.43	3.15	4.33	0.98	2.63	19
	S30KB001	13-2480	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 24" WIDE X 80' LONG, PORTABLE, 250 TPH	10 HP	E		$31,121	8.11	1.84	2.52	0.58	1.31	14
	S30KB002	13-24100	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 24" WIDE X 100' LONG, PORTABLE, 250 TPH	15 HP	E		$36,937	10.26	2.18	3.00	0.68	1.97	18
	S30KB003	13-3080	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 30" WIDE X 80' LONG, PORTABLE, 500 TPH	20 HP	E		$33,035	10.49	2.01	2.80	0.61	2.63	20
	S30KB004	13-30100	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 30" WIDE X 100' LONG, PORTABLE, 500 TPH	25 HP	E		$46,041	14.05	2.63	3.56	0.85	3.28	25
	S30KB005	13-3680	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 36" WIDE X 80' LONG, PORTABLE, 750 TPH	25 HP	E		$38,694	12.62	2.28	3.12	0.72	3.28	30
	S30KB006	13-36100	SCREENING & CRUSHING PLANTS, CONVEYOR, STACKING, 36" WIDE X 100' LONG, PORTABLE, 750 TPH	30 HP	E		$50,295	15.90	2.89	3.92	0.93	3.94	38
	S30KB007	31-2480	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 24" WIDE X 80' LONG, WHEEL MTD, 750 TPH	10 HP	E		$33,398	8.56	1.99	2.73	0.62	1.31	22
	S30KB008	31-24100	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 24" WIDE X 100' LONG, PORTABLE, 250 TPH	15 HP	E		$41,306	11.11	2.48	3.42	0.77	1.97	27
	S30KB009	31-24125	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 24" WIDE X 125' LONG, PORTABLE, 250 TPH	15 HP	E		$57,233	14.25	3.35	4.57	1.06	1.97	33
	S30KB010	31-3080	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 30" WIDE X 80' LONG, PORTABLE, 500 TPH	20 HP	E		$35,424	10.99	2.09	2.85	0.66	2.63	32

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S30			***KOLBERG - PIONEER, INC (continued)***										
	S30KB011	31-30100	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 30" WIDE X 100' LONG, PORTABLE, 550 TPH	25 HP	E		$50,545	14.93	3.03	4.18	0.94	3.28	39
	S30KB012	31-30125	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 30" WIDE X 125' LONG, PORTABLE, 500 TPH	25 HP	E		$61,076	17.01	3.57	4.88	1.13	3.28	47
	S30KB013	31-3680	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 36" WIDE X 80' LONG, PORTABLE, 750 TPH	25 HP	E		$41,088	13.08	2.43	3.33	0.76	3.28	42
	S30KB014	31-36100	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 36" WIDE X 100' LONG, PORTABLE, 750 TPH	30 HP	E		$54,995	16.82	3.30	4.56	1.02	3.94	59
	S30KB015	31-36125	SCREENING & CRUSHING PLANTS, CONVEYOR, SIDE FOLDING STACKER, 36" WIDE X 125' LONG, PORTABLE, 750 TPH	40 HP	E		$74,215	22.58	4.39	6.03	1.37	5.25	70
	S30KB018	35-24150	SCREENING & CRUSHING PLANTS, CONVEYOR, FIXED HEIGHT STACKER, 24" WIDE X 150' LONG, PORTABLE, 750 TPH	25 HP	E		$89,171	22.50	5.48	7.65	1.65	3.28	39
	S30KB021	35-30150	SCREENING & CRUSHING PLANTS, CONVEYOR, FIXED HEIGHT STACKER, 30" WIDE X 150' LONG, PORTABLE, 1,500 TPH	40 HP	E		$105,006	28.59	6.46	9.03	1.94	5.25	56
	S30KB024	35-36150	SCREENING & CRUSHING PLANTS, CONVEYOR, FIXED HEIGHT STACKER, 36" WIDE X 150' LONG, PORTABLE, 2,000 TPH	60 HP	E		$123,499	36.24	7.62	10.66	2.29	7.88	84
	S30KB025	36-24100	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 24" WIDE X 100' LONG, PORTABLE, 750 TPH	20 HP	E		$63,744	16.51	3.89	5.41	1.18	2.63	52
	S30KB026	36-24125	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 24" WIDE X 120' LONG, PORTABLE, 750 TPH	20 HP	E		$75,761	18.87	4.64	6.47	1.40	2.63	57
	S30KB027	36-24150	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 24" WIDE X 150' LONG, PORTABLE, 750 TPH	25 HP	E		$95,691	23.76	5.89	8.23	1.77	3.28	65
	S30KB028	36-30100	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 30" WIDE X 100' LONG, PORTABLE, 1,500 TPH	30 HP	E		$72,635	20.27	4.44	6.18	1.35	3.94	64
	S30KB029	36-30125	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 30" WIDE X 120' LONG, PORTABLE, 1,500 TPH	30 HP	E		$89,185	23.51	5.48	7.65	1.65	3.94	71

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S30			***KOLBERG - PIONEER, INC (continued)***										
	S30KB030	36-30150	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 30" WIDE X 150' LONG, PORTABLE, 1,500 TPH	40 HP	E		$112,873	30.14	6.96	9.74	2.09	5.25	82
	S30KB031	36-36100	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 36" WIDE X 100' LONG, PORTABLE, 2,000 TPH	50 HP	E		$94,378	28.54	5.81	8.12	1.75	6.57	82
	S30KB032	36-36125	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 36" WIDE X 120' LONG, PORTABLE, 2,000 TPH	50 HP	E		$113,543	32.29	7.00	9.79	2.10	6.57	93
	S30KB033	36-36150	SCREENING & CRUSHING PLANTS, CONVEYOR, ADJUSTABLE HEIGHT RADIAL STACKER, 36" WIDE X 150' LONG, PORTABLE, 2,000 TPH	60 HP	E		$132,664	38.04	8.21	11.49	2.46	7.88	110
	S30KB042	1430-15	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 30" WIDE X 40' LONG CONVEYOR, PORTABLE, 1,500 TPH	25 HP	E		$63,831	17.52	3.89	5.42	1.18	3.28	18
	S30KB054	1936-2	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 30" WIDE X 40' LONG CONVEYOR, PORTABLE, 1,500 TPH	15 HP	E		$76,204	17.94	4.68	6.53	1.41	1.97	18
	S30KB053	1436-25	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 36" WIDE X 40' LONG CONVEYOR, PORTABLE, 2,000 TPH	35 HP	E		$70,177	20.79	4.29	5.97	1.30	4.60	20
	S30KB043	1936-3	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 36" WIDE X 40' LONG CONVEYOR, PORTABLE, 2,000 TPH	15 HP	E		$109,964	24.57	6.82	9.55	2.04	1.97	20
	S30KB044	1936-4	SCREENING & CRUSHING PLANTS, SURGE BIN, 25CY, BELT FEEDER, & 36" WIDE X 40' LONG CONVEYOR, PORTABLE, 2,000 TPH	15 HP	E		$134,951	29.45	8.40	11.80	2.50	1.97	20
			PUTZMEISTER INC.										
	S30PU001	TELEBELT TB 50	SCREENING & CRUSHING PLANTS, CONVEYOR, 16" WIDE X 50' LONG, 1 CY HOPPER & TREMIE, 2X4, TRUCK MTD, 80 CY/HR	215 HP	D-off		$223,680	61.61	14.04	19.79	4.14	15.60	201
	S30PU002	TELEBELT TB 80	SCREENING & CRUSHING PLANTS, CONVEYOR, 18" WIDE X 80' LONG, 3 CY HOPPER & TREMIE, 4X6, TRUCK MTD, 360 CY/HR	350 HP	D-off		$420,450	111.37	26.43	37.27	7.79	25.39	332
	S30PU003	TELEBELT TB 105	SCREENING & CRUSHING PLANTS, CONVEYOR, 18" WIDE X 105' LONG, 3 CY HOPPER & TREMIE, 4X8, TRUCK MTD, 360 CY/HR	350 HP	D-off		$583,015	143.19	36.72	51.84	10.80	25.39	592

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			TELSMITH INC.										
	S30TS001	PTC 24IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 24" WIDE X 50' LONG, WHEEL MTD, 300 TPH	12 HP	E		$28,590	8.03	1.72	2.37	0.53	1.58	10
	S30TS002	PTC 24IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 24" WIDE X 70' LONG, WHEEL MTD, 300 TPH	17 HP	E		$49,761	13.18	3.04	4.24	0.92	2.23	13
	S30TS003	PTC 30IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 30" WIDE X 50' LONG, WHEEL MTD, 500 TPH	17 HP	E		$30,018	9.31	1.80	2.48	0.56	2.23	12
	S30TS004	PTC 30IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 30" WIDE X 70' LONG, WHEEL MTD, 1,500 TPH	22 HP	E		$51,690	14.58	3.15	4.38	0.96	2.89	17
	S30TS005	PTC 36IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 36" WIDE X 50' LONG, WHEEL MTD, 750 TPH	22 HP	E		$32,021	10.71	1.91	2.63	0.59	2.89	19
	S30TS006	PTC 36IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 36" WIDE X 70' LONG, WHEEL MTD, 2,000 TPH	27 HP	E		$54,037	16.03	3.28	4.55	1.00	3.55	26
	S30TS007	PTC 42IN X 50FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 42" WIDE X 50' LONG, WHEEL MTD, 1,200 TPH	32 HP	E		$37,021	13.70	2.22	3.06	0.69	4.20	25
	S30TS008	PTC 42IN X 70FT	SCREENING & CRUSHING PLANTS, CONVEYOR, TRUSS FRAME, 42" WIDE X 70' LONG, WHEEL MTD, 1,200 TPH	42 HP	E		$73,360	22.83	4.49	6.26	1.36	5.51	25
	SUBCATEGORY 0.20		**CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR**										
			HEWITT-ROBINS										
	S30HW001	MODEL 13654V	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 36"X54", SINGLE ROTOR, 250 TPH, W/3' X 16' FEEDER/ 4' GRIZZLY/ 24" X 8' REJECTION CONVEYOR/ & 36" X 37' DISCHARGE END DELIVERY CONVEYOR, TRAILER MTD (ADD 250 KW GENERATOR)	250 HP	E		$293,554	81.18	10.22	10.24	5.10	32.83	804

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S30			***HEWITT-ROBINS (continued)***										
	S30HW002	MODEL 14866V	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 48"X66" SINGLE ROTOR, 350 TPH, W/4'X16' FEEDER/ 6' GRIZZLY/ 30" X 9.5' REJECTION CONVEYOR/ & 48" X43' DISCHARGE END DELIVERY CONVEYOR, TRAILER MTD (ADD 350 KW GENERATOR)	350 HP	E		$396,456	111.97	13.84	13.89	6.89	45.96	1,280
	S30HW013	MODEL H4832S	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, SECONDARY, 48"X32" HAMMERMILL, 500 TPH, W/3' X 37' FEED CONVEYOR/ 5' X 16' VIBRATORY HORIZONTAL TRIPLE DECK SCREEN/ 36"X30' RETURN CONVEYOR/ & ROTOR LIFT, TRAILER MTD (ADD 450 KW GENERATOR)	450 HP	E		$355,085	127.54	12.40	12.46	6.17	59.09	600
			KOLBERG - PIONEER, INC										
	S30KB045	CS-4250	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 42" X 52", 500 TPH, W/18' X 42" VIBRATORY FEEDER/ ADJUSTABLE GRIZZLY/ & BYPASS FEED, TRAILER MTD	360 HP	D-off		$448,020	76.41	15.71	15.86	7.78	26.11	548
			TELSMITH INC.										
	S30TS009	4246	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 46" X 59", 600 TPH	300 HP	E		$252,010	89.06	8.92	9.07	4.38	39.39	595
	S30TS010	4856	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 56" X 85", 1,100 TPH	400 HP	E		$363,295	121.56	12.85	13.08	6.31	52.52	942
	S30TS011	6071	SCREENING & CRUSHING PLANTS, CRUSHER - SHAFT IMPACTOR, 71" X 100", 2,100 TPH	800 HP	E		$602,757	230.34	21.32	21.70	10.47	105.04	1,950
	SUBCATEGORY 0.21		**CRUSHERS - CONE**										
			KOLBERG - PIONEER, INC										
	S30KB046	1200 LS	SCREENING & CRUSHING PLANTS, CRUSHERS - CONE, SECONDARY, 120 TPH @ 3/8" -> 250 TPH @ 1", 42" X 50" IMPACT CRUSHER, W/HOPPER/ & 36" X 32' END DELIVERY CONVEYOR, TRAILER MTD (ADD 210KW GENERATOR)	272 HP	E		$442,332	105.20	15.50	15.62	7.69	35.71	810

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S30			***KOLBERG - PIONEER, INC (continued)***										
	S30KB047	1400 LS	SCREENING & CRUSHING PLANTS, CRUSHERS - CONE, SECONDARY PLANT, 630 TPH @ 1" ->1,050 TPH @ 2.5", 42" X 50" IMPACT CRUSHER, W/HOPPER/ & 42" X 32' END DELIVERY CONVEYOR, TRAILER MTD (INCLUDES GENERATOR)	315 HP	E		$390,651	107.78	13.71	13.84	6.79	41.36	741
	SUBCATEGORY 0.22		**CRUSHERS - JAW**										
			HEWITT-ROBINS										
	S30HW005	MODEL J1524PF	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15"X24", 21 TPH @ 1" -> 54 TPH @ 3", W/2.5' X 8' FEEDER/ 2' GRIZZLY/ & 24" X 20' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	40 HP	E		$158,898	22.23	5.52	5.52	2.76	5.25	86
	S30HW006	MODEL J1536V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15"X36", 45 TPH @1.5" -> 150 TPH @ 6", W/3' X 14' FEEDER/ 4' GRIZZLY/ & 30" X 31' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	100 HP	E		$264,288	43.32	9.24	9.30	4.59	13.13	128
	S30HW007	MODEL J2036V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 20" X 36", 65 TPH @ 2" -> 223 TPH @ 7", W/3' X 14' FEEDER/ 4' GRIZZLY/ & 30" X 31' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	125 HP	E		$287,042	50.28	10.05	10.12	4.99	16.41	128
	S30HW009	MODEL J2142V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 21" X 42", 183 TPH @ 4" -> 345 TPH @ 8", W/3.5' X 16' FEEDER/ 4' GRIZZLY/ & 36" X 34' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	150 HP	E		$311,217	57.66	10.86	10.89	5.41	19.70	152
	S30HW011	MODEL J2248V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 22" X 48", 115 TPH @ 2.5" -> 240 TPH @ 6", W/4' X 16' FEEDER/ 4' GRIZZLY/ & 48" X 37' END DELIVERY CONVEYOR (ADD 40 KW GENERATOR)	200 HP	E		$371,625	72.96	12.98	13.03	6.46	26.26	168
	S30HW008	MODEL J2436V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 24" X 36", 95 TPH @ 2.5" -> 230 TPH @ 6", W/3' X 14' FEEDER/ 4' GRIZZLY/ & 30" X 31' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	125 HP	E		$299,813	51.37	10.50	10.58	5.21	16.41	128

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S30			***HEWITT-ROBINS (continued)***										
	S30HW010	MODEL J3042V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 30" X 42", 200 TPH @ 4" -> 390 TPH @ 8", W/3.5' X 16' FEEDER/ 6' GRIZZLY/ & 36" X 55' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	200 HP	E		$378,811	73.53	13.23	13.30	6.58	26.26	156
	S30HW012	MODEL J3048V	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 30" X 48", 340 TPH @ 5" -> 615 TPH @ 10", W/4' X 16' FEEDER/ 4' GRIZZLY/ & 48" X 37' END DELIVERY CONVEYOR, TRAILER MTD (ADD 40 KW GENERATOR)	200 HP	E		$438,781	78.81	15.33	15.42	7.62	26.26	168
			KOLBERG - PIONEER, INC										
	S30KB055	CS-1536	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15" X 36", 45 TPH @ 1.5" -> 150 TPH @ 6", W/36"' X 14' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 36" X 22' END DELIVERY CONVEYOR, TRAILER MTD, INCLUDES GENERATOR	245 HP	D-off		$291,491	45.72	10.20	10.28	5.06	17.77	548
	S30KB058	1524-2416 DUPLEX PL	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 15" X 36", 200 TPH @ 1/4" -> 250 TPH @ 6", W/36" X 14' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ SCREEN CONVEYOR/ & TRIPLE VIBRATORY SCREENS, TRAILER MTD	130 HP	E		$314,970	53.58	11.06	11.17	5.47	17.07	391
	S30KB056	CS-2036	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 20" X 36", 65 TPH @ 2" -> 223 TPH @ 7", W/36"' X 14' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 36" X 22' END DELIVERY CONVEYOR, TRAILER MTD, INCLUDES GENERATOR	245 HP	D-off		$298,981	46.36	10.47	10.55	5.19	17.77	590
	S30KB059	2036-3024 DUPLEX PL	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 20" X 36", 270 TPH @ 1/4" -> 320 TPH @ 7", W/36" X 14' RECIPROCATING PLATE FEEDER/ 12' LONG ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 18" X 15' SCREEN CONVEYOR, TRAILER MTD (ADD 300KW GENERATOR)	300 HP	E		$490,411	102.92	17.22	17.39	8.52	39.39	415

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S30			***KOLBERG - PIONEER, INC (continued)***									
	S30KB057	CS-2436	SCREENING & CRUSHING PLANTS, JAW CRUSHER, 24" X 36", 95 TPH @ 2.5" -> 230 TPH @ 6", W/36"' X 16' VIBRATING FEEDER/ ADJUSTABLE GRIZZLY & BYPASS/ HOPPER/ & 36" X 22' END DELIVERY CONVEYOR, TRAILER MTD, INCLUDES GENERATOR	245 HP D-off		$333,029	49.30	11.68	11.78	5.79	17.77	701
	SUBCATEGORY 0.30		**SCREENING PLANT**									
			HEWITT-ROBINS									
	S30HW014	V-11 6X16FT, DD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 16' VIBRATORY SLOPE DOUBLE DECK SCREENS, W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	15 HP E		$115,961	27.12	7.22	10.13	2.15	1.97	101
	S30HW016	V-11 6X20FT, DD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 20' VIBRATORY SLOPE DOUBLE DECK SCREENS, W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	20 HP E		$120,738	29.12	7.52	10.56	2.24	2.63	115
	S30HW015	V-11 6X16FT, TD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 16' VIBRATORY SLOPE TRIPLE DECK SCREENS W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	25 HP E		$127,771	31.58	7.97	11.20	2.37	3.28	138
	S30HW017	V-11 6X20FT, TD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 20' VIBRATORY SLOPE TRIPLE DECK SCREENS W/36" X 16.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD,	25 HP E		$130,389	32.13	8.14	11.43	2.42	3.28	167
	S30HW018	V-11 8X20FT, TD	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 8' X 20' VIBRATORY SLOPE TRIPLE DECK SCREENS, W/48" X 15.5' UNDER SCREEN CONVEYOR/ 7 CY HOPPER/ & FEEDER, TRAILER MTD	40 HP E		$156,138	40.47	9.63	13.48	2.89	5.25	243

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			KOLBERG - PIONEER, INC										
	S30KB048	616 E-3	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 16', VIBRATORY SLOPE TRIPLE DECK SCREENS, W/HOPPER/ 36" X 28.5' FEEDER CONVEYOR/ 48" X27' UNDER SCREEN CONVEYOR/ & 24" X 20' SIDE DELIVERY CONVEYOR, TRAILER MTD	85 HP	E		$133,164	44.73	8.27	11.59	2.47	11.16	280
	S30KB049	620 E-3	SCREENING & CRUSHING PLANTS, SCREENING PLANT, 6' X 20' VIBRATORY SLOPE TRIPLE DECK SCREENS, W/HOPPER/ 42" X 34' FEEDER CONVEYOR/ 60" X 25' UNDER SCREEN CONVEYOR/ & 30" X 15' SIDE DELIVERY CONVEYOR, TRAILER MTD	90 HP	E		$155,750	50.51	9.30	12.83	2.88	11.82	355
	S30KB050	1822	SCREENING & CRUSHING PLANTS, WASHING/SCREENING PLANT, 6' X 16' VIBRATORY SLOPE TRIPLE DECK SCREENS, W/HOPPER / 3 PRODUCT CHUTES/ ONE FINES CHUTE TO 8' X 32' CLASSIFYING TANK/ 36" DIA X 32' SLOPED SCREW & CHUTE, TRAILER MTD (ADD WATER & FEEDER)	250 HP	E		$203,850	92.44	12.73	17.89	3.78	32.83	416
	S30KB051	1830	SCREENING & CRUSHING PLANTS, WASHING/SCREENING PLANT, 6' X 20' VIBRATORY SLOPED TRIPLE DECK SCREENS, W/HOPPER/ 3 PRODUCT CHUTES/ ONE FINES CHUTE/ 8' X 32' CLASSIFYING TANK/ & 44" DIA X 32' SLOPED SCREW & CHUTE, TRAILER MTD (ADD WATER & FEEDER)	250 HP	E		$257,811	103.64	16.04	22.52	4.78	32.83	420
	S30KB052	7208-32 S/P	SCREENING & CRUSHING PLANTS, CLASSIFYING PLANT (SAND SORT) 8'W X 32'L TANK & 44" DIA SCREW	250 HP	E		$244,667	100.95	15.43	21.79	4.53	32.83	450
			METSO MINERALS										
	S30RA002	CV 50D	SCREENING & CRUSHING PLANTS, GRIZZLY-SINGLE SCREEN, 120 CY/HR, TRAILER MTD	25 HP	D-off		$56,998	13.91	3.57	5.01	1.06	1.81	130
	S30RA003	CV 90D	SCREENING & CRUSHING PLANTS, GRIZZLY-SINGLE SCREEN, 200 CY/HR, TRAILER MTD	49 HP	D-off		$105,504	25.94	6.58	9.25	1.95	3.55	195

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S35	**SNOW REMOVAL EQUIPMENT**											
	SUBCATEGORY 0.00		**SNOW REMOVAL EQUIPMENT**									
			AMERICAN ROAD MACHINERY, INC.									
	S35AR001	112	SNOW REMOVAL EQUIPMENT, SNOW PLOW, REVERSIBLE (ADD DUMP TRUCK)			$3,161	0.77	0.22	0.32	0.06	0.00	15
	S35AR002	713	SNOW REMOVAL EQUIPMENT, SNOW PLOW, 1-WAY TRIP (ADD DUMP TRUCK)			$4,747	1.16	0.34	0.47	0.10	0.00	20
S40	**SOIL & ROAD STABILIZERS**											
	SUBCATEGORY 0.00		**SOIL & ROAD STABILIZERS**									
			COMPACTION AMERICA									
	S40BO002	MPH-362 R-2 RECYCLER	SOIL & ROAD STABILIZER, 12" DEEP X 79" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	360 HP D-off		$372,411	108.73	22.05	29.33	7.38	28.64	390
	S40BO003	MPH-362 S-2	SOIL & ROAD STABILIZER, 14" DEEP X 79" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	360 HP D-off		$364,796	107.19	21.59	28.72	7.23	28.64	390
	S40BO004	MPH-362 SDM-2	SOIL & ROAD STABILIZER, 21" DEEP X 79" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	360 HP D-off		$358,077	105.83	21.20	28.19	7.10	28.64	390
			CATERPILLAR INC. (MACHINE DIVISION)									
	S40CA001	RR-250B	SOIL & ROAD STABILIZER, 12" DEEP X 96" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	309 HP D-off		$339,196	97.80	20.07	26.70	6.72	24.58	370
	S40CA002	SS-250B	SOIL & ROAD STABILIZER, 18" DEEP X 96" WIDE, HYDROSTATIC RECLAIMER/ SOIL STABILIZER, 4X2	309 HP D-off		$324,839	94.26	19.16	25.44	6.44	24.58	308
	S40CA003	RM-300	SOIL & ROAD STABILIZER, 18" DEEP X 96" WIDE, HYDROSTATIC ROAD RECLAIMER/ SOIL STABILIZER, 4X4	350 HP D-off		$274,862	93.74	15.61	20.31	5.45	27.85	518

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
S40			*CATERPILLAR INC. (MACHINE DIVISION) (continued)*									
	S40CA004	RM-500	SOIL & ROAD STABILIZER, 16" DEEP X 96" WIDE, HYDROSTATIC ROAD RECLAIMER/ SOIL STABILIZER, 4X4	540 HP D-off		$454,870	145.69	26.58	35.11	9.02	42.96	599
S45	**SPLITTERS, ROCK & CONCRETE**											
	SUBCATEGORY 0.00		**SPLITTERS, ROCK & CONCRETE**									
			ELCO INTERNATIONAL INC.									
	S45DA004	02-2	SPLITTER, ROCK & CONCRETE, 220 TON SFORCE, 1.75" DIA, SIZE 2, 5 GAL, 12" DEEP HOLE REQ'D (ADD 80 CFM COMPRESSOR)	80 CFM A		$11,511	4.41	1.01	1.53	0.24	0.00	1
	S45DA005	02-9	SPLITTER, ROCK & CONCRETE, 220 TON SFORCE, 1.75" DIA, SIZE 9, 5 GAL, 18" DEEP HOLE REQ'D (ADD 80 CFM COMPRESSOR)	80 CFM A		$13,759	5.22	1.21	1.83	0.29	0.00	1
	S45DA007	02-12	SPLITTER, ROCK & CONCRETE, 385 TON SFORCE, 1.75" DIA, SIZE 12, 5 GAL, 26" DEEP HOLE REQ'D (ADD 80 CFM COMPRESSOR)	80 CFM A		$14,502	5.49	1.27	1.93	0.30	0.00	1
T10	**TRACTOR BLADES & ATTACHMENTS (including agricultural)**											
	SUBCATEGORY 0.00		**TRACTOR BLADES & ATTACHMENTS (including agricultural)**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T10CA001	D3-61-9722	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D3, 1.65 CY (ADD D3 TRACTOR)			$12,535	2.55	0.75	1.00	0.25	0.00	22
	T10CA002	D3-PA 30B	TRACTOR ATTACHMENTS, POWER WINCH, W/250' CABLE, FOR D3 (ADD D3 TRACTOR)			$18,647	3.76	1.12	1.49	0.37	0.00	21
	T10CA004	D4-104-5683	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D4, 2.17 CY (ADD D4 TRACTOR)			$13,870	2.81	0.83	1.11	0.27	0.00	24

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T10			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	T10CA005	D4-PA 30B	TRACTOR ATTACHMENTS, POWER WINCH, W/250' CABLE, FOR D4 (ADD D4 TRACTOR)			$18,647	3.76	1.12	1.49	0.37	0.00	21
	T10CA007	D5 N - ANGLE BLADE	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D5, 2.53 CY (ADD D5 TRACTOR)			$20,863	4.19	1.25	1.67	0.41	0.00	26
	T10CA008	D5-PA 55	TRACTOR ATTACHMENTS, POWER WINCH, FOR D5 (ADD D5 TRACTOR)			$27,770	5.56	1.66	2.22	0.55	0.00	26
	T10CA009	D6-108-3970	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D6, 5.09 CY (ADD D6 TRACTOR)			$25,783	5.16	1.54	2.06	0.51	0.00	57
	T10CA010	D6-108-3982	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D6, 4.16 CY (ADD D6 TRACTOR)			$28,280	5.66	1.69	2.26	0.56	0.00	69
	T10CA011	D6-PA56 WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D6 (ADD D6 TRACTOR)			$38,556	7.68	2.30	3.08	0.76	0.00	27
	T10CA012	D7-S	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D7, 6.75 CY (ADD D7 TRACTOR)			$37,887	7.55	2.27	3.03	0.75	0.00	77
	T10CA013	D7-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D7, 10.09 CY (ADD D7 TRACTOR)			$41,623	8.30	2.50	3.33	0.83	0.00	86
	T10CA014	D7-A	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D7, 5.08 CY (ADD D7 TRACTOR)			$34,710	6.93	2.08	2.78	0.69	0.00	78
	T10CA015	D7-PA57 WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D7 (ADD D7 TRACTOR)			$50,810	10.12	3.04	4.06	1.01	0.00	45
	T10CA016	D8-SU	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D8, 6.09 CY (ADD D8 TRACTOR)			$50,520	10.09	3.02	4.04	1.00	0.00	107
	T10CA017	D8-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D8, 15.30 CY (ADD D8 TRACTOR)			$54,929	10.97	3.29	4.39	1.09	0.00	124
	T10CA018	D8-A	TRACTOR ATTACHMENTS, BLADE, POWER ANGLE, HYDRAULIC, FOR D8, 6.09 CY (ADD D8 TRACTOR)			$48,763	9.75	2.92	3.90	0.97	0.00	123
	T10CA019	D8-PP	TRACTOR ATTACHMENTS, BLADE, PUSH PLATE, FOR D8 (ADD D8 TRACTOR)			$1,421	0.33	0.09	0.11	0.03	0.00	5

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T10			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	T10CA020	D8, PA58VS WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D8 (ADD D8 TRACTOR)			$50,704	10.16	3.04	4.06	1.01	0.00	50
	T10CA021	D9-SU	TRACTOR ATTACHMENTS, BLADE, SEMI-U, HYDRAULIC, FOR D9, 17.70 CY (ADD D9 TRACTOR)			$68,608	13.73	4.11	5.49	1.36	0.00	143
	T10CA022	D9-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D9, 21.40 CY (ADD D9 TRACTOR)			$74,169	14.82	4.44	5.93	1.47	0.00	137
	T10CA023	D9, PA59VS WINCH	TRACTOR ATTACHMENTS, POWER WINCH, W/CABLE, FOR D9 (ADD D9 TRACTOR)			$68,416	13.70	4.10	5.47	1.36	0.00	86
	T10CA024	D10-SU ABRASION	TRACTOR ATTACHMENTS, BLADE, SEMI-U, HYDRAULIC, FOR D10, 24.20 CY (ADD D10 TRACTOR)			$103,587	20.72	6.20	8.29	2.05	0.00	357
	T10CA025	D10-U ABRASION	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D10, 28.70 CY (ADD D10 TRACTOR)			$109,419	21.88	6.55	8.75	2.17	0.00	251
	T10CA026	D11-SU	TRACTOR ATTACHMENTS, BLADE, STRAIGHT, HYDRAULIC, FOR D11, 35.50 CY (ADD D11 TRACTOR)			$148,673	29.74	8.90	11.89	2.95	0.00	367
	T10CA027	D11-U	TRACTOR ATTACHMENTS, BLADE, UNIVERSAL, HYDRAULIC, FOR D11, 45.00 CY (ADD D11 TRACTOR)			$159,894	31.97	9.57	12.79	3.17	0.00	423
			DEERE & COMPANY									
	T10JD001	915 V-RIPPER	TRACTOR ATTACHMENTS, DEEP TILLER, 5x7 V SHAPED, 175" WIDE, 7 SHANKS (ADD 200HP TRACTOR W/PTO)			$12,350	2.69	0.72	0.95	0.24	0.00	17
T15	**TRACTORS, CRAWLER (DOZER) (includes blade)**											
	SUBCATEGORY 0.01		**0 THRU 225 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T15CA002	D-3G LGP	TRACTOR, CRAWLER (DOZER), 70 HP, LOW GROUND PRESSURE, W/2.0 CY SEMI-U BLADE (ADD ATTACHMENTS)	70 HP D-off		$87,556	26.23	4.92	6.13	1.85	5.57	175

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T15			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	T15CA020	D-4G XL	TRACTOR, CRAWLER (DOZER), 80 HP, POWERSHIFT, W/2.18 CY SEMI-U BLADE (ADD ATTACHMENTS)	80 HP D-off		$109,928	32.18	6.17	7.69	2.32	6.36	181
	T15CA005	D-4G LGP	TRACTOR, CRAWLER (DOZER), 80 HP, LOW GROUND PRESSURE, W/2.39 CY SEMI-U BLADE (ADD ATTACHMENTS)	80 HP D-off		$107,785	31.70	6.05	7.54	2.28	6.36	184
	T15CA021	D-5G XL	TRACTOR, CRAWLER (DOZER), 90 HP, POWERSHIFT, W/2.85 CY POWER ANGLE BLADE (ADD ATTACHMENTS)	90 HP D-off		$113,887	34.02	6.40	7.97	2.41	7.16	195
	T15CA022	D-5G LGP	TRACTOR, CRAWLER (DOZER), 90 HP, LOW GROUND PRESSURE, W/3.04 CY POWER ANGLE BLADE (ADD ATTACHMENTS)	90 HP D-off		$120,539	35.52	6.77	8.44	2.55	7.16	203
	T15CA024	D-5M XL	TRACTOR, CRAWLER (DOZER), 110 HP, POWERSHIFT, W/3.37 CY SEMI-U BLADE (ADD ATTACHMENTS)	110 HP D-off		$154,518	45.02	8.67	10.82	3.26	8.75	277
	T15CA008	D-6N PS XL FTC	TRACTOR, CRAWLER (DOZER), 145 HP, POWERSHIFT, W/5.60 CY SEMI-U BLADE (ADD ATTACHMENTS)	145 HP D-off		$213,992	61.68	12.01	14.98	4.52	11.54	321
	T15CA023	D-6R	TRACTOR, CRAWLER (DOZER), 165 HP, LOW GROUND PRESSURE, POWERSHIFT, W/5.09 CY SEMI-U BLADE (ADD ATTACHMENTS)	165 HP D-off		$304,630	83.94	17.09	21.32	6.43	13.13	519
	T15CA009	D-6R WHA	TRACTOR, CRAWLER (DOZER), 165 HP, W/14.3 CY BLADE, TRASH/WASTE HANDLING ARRANGEMENT	165 HP D-off		$304,630	83.94	17.09	21.32	6.43	13.13	519
	T15CA011	D-6R LGP	TRACTOR, CRAWLER (DOZER), 165 HP, LOW GROUND PRESSURE, W/5.09 CY SEMI-U BLADE (ADD ATTACHMENTS)	185 HP D-off		$297,645	84.24	16.71	20.84	6.29	14.72	461
			CASE CORPORATION									
	T15CS004	550H WT	TRACTOR, CRAWLER (DOZER), 67 HP, POWERSHIFT, W/1.90 CY UNIVERSAL BLADE (ADD ATTACHMENTS)	67 HP D-off		$97,917	28.28	5.50	6.85	2.07	5.33	146
	T15CS007	1150H WT	TRACTOR, CRAWLER (DOZER), 119 HP, POWERSHIFT, W/3.90 CY UNIVERSAL BLADE (ADD ATTACHMENTS)	119 HP D-off		$171,257	49.64	9.62	11.99	3.62	9.47	263

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			DEERE & COMPANY									
	T15JD005	450H LT	TRACTOR, CRAWLER (DOZER), 70 HP, POWERSHIFT, W/2.00 CY ANGLE BLADE (ADD ATTACHMENTS)	70 HP D-off		$78,782	24.24	4.42	5.51	1.66	5.57	155
	T15JD006	450H LGP	TRACTOR, CRAWLER (DOZER), 74 HP, LOW GROUND PRESSURE, W/2.15 CY ANGLE BLADE (ADD ATTACHMENTS)	74 HP D-off		$93,455	27.92	5.24	6.54	1.97	5.89	165
	T15JD007	650H	TRACTOR, CRAWLER (DOZER), 90 HP, POWERSHIFT, W/2.60 CY ANGLE BLADE (ADD ATTACHMENTS)	90 HP D-off		$107,318	32.54	6.03	7.51	2.27	7.16	185
	T15JD008	750C-II LT	TRACTOR, CRAWLER (DOZER), 140 HP, POWERSHIFT, W/5.60 CY ANGLE BLADE (ADD ATTACHMENTS)	140 HP D-off		$189,007	55.58	10.61	13.23	3.99	11.14	317
	T15JD009	750C-II LGP	TRACTOR, CRAWLER (DOZER), 140 HP, LOW GROUND PRESSURE, W/4.84 CY ANGLE BLADE (ADD ATTACHMENTS)	140 HP D-off		$199,221	57.89	11.19	13.95	4.21	11.14	365
	T15JD010	850C	TRACTOR, CRAWLER (DOZER), 185 HP, POWERSHIFT, W/7.44 CY SEMI-U BLADE (ADD ATTACHMENTS)	185 HP D-off		$245,700	72.54	13.79	17.20	5.19	14.72	404
	T15JD011	850C LGP	TRACTOR, CRAWLER (DOZER), 185 HP, LOW GROUND PRESSURE, W/7.14 CY SEMI-U BLADE (ADD ATTACHMENTS)	185 HP D-off		$265,814	77.07	14.92	18.61	5.61	14.72	420
	SUBCATEGORY 0.02		**226 HP THRU 425 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T15CA012	D-7R SERIES II	TRACTOR, CRAWLER (DOZER), 240 HP, POWERSHIFT, W/8.98 CY SEMI-U BLADE (ADD ATTACHMENTS)	240 HP D-off		$353,042	91.21	17.71	21.18	7.12	19.09	563
	T15CA014	D-7R II LGP	TRACTOR, CRAWLER (DOZER), 240 HP, LOW GROUND PRESSURE, W/7.70 CY STRAIGHT BLADE (ADD ATTACHMENTS)	240 HP D-off		$417,772	103.98	20.96	25.07	8.42	19.09	530
	T15CA016	D-8R II	TRACTOR, CRAWLER (DOZER), 310 HP, POWERSHIFT, W/15.3 CY SEMI-U BLADE (ADD ATTACHMENTS)	310 HP D-off		$460,775	118.76	23.12	27.65	9.29	24.66	898
	T15CA017	D-9R	TRACTOR, CRAWLER (DOZER), 410 HP, POWERSHIFT, W/17.7 CY SEMI-U BLADE (ADD ATTACHMENTS)	410 HP D-off		$612,434	157.66	30.72	36.75	12.34	32.62	1,033

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			Komatsu America International Company									
	T15KM008	D155AX-5	TRACTOR, CRAWLER (DOZER), 310 HP, POWERSHIFT, W/11.5 CY SEMI-U BLADE	310 HP D-off		$526,614	131.73	26.41	31.60	10.61	24.66	803
	SUBCATEGORY 0.03		**OVER 425 HP**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T15CA018	D-10R	TRACTOR, CRAWLER (DOZER), 580 HP, POWERSHIFT, W/28.7 CY SEMI-U BLADE (ADD ATTACHMENTS)	580 HP D-off		$869,868	190.19	39.94	46.39	16.74	39.36	1,421
	T15CA019	D-11R	TRACTOR, CRAWLER (DOZER), 850 HP, POWERSHIFT, W/44.0 CY SEMI-U BLADE (ADD ATTACHMENTS)	850 HP D-off		$1,350,212	291.56	62.00	72.01	25.99	57.68	2,029
T20	**TRACTORS, WHEEL TYPE (DOZER)**											
	SUBCATEGORY 0.00		**TRACTORS, WHEEL TYPE (DOZER)**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T20CA001	814-F	TRACTOR, WHEEL (DOZER), 240 HP, ARTICULATING, 4X4, W/3.77 CY STRAIGHT BLADE	240 HP D-off		$320,629	64.07	15.45	18.93	5.98	16.29	479
	T20CA002	824-G II	TRACTOR, WHEEL (DOZER), 339 HP, ARTICULATING, 4X4, W/6.70 CY STRAIGHT BLADE	339 HP D-off		$464,159	95.15	22.10	26.90	8.65	23.00	633
	T20CA003	834-G	TRACTOR, WHEEL (DOZER), 481 HP, ARTICULATING, 4X4, W/10.33 CY STRAIGHT BLADE	481 HP D-off		$692,970	135.37	32.91	39.97	12.92	32.64	902
T25	**TRACTORS, AGRICULTURAL**											
	SUBCATEGORY 0.10		**CRAWLER**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T25CA006	CH 65E	TRACTOR, AGRICULTURAL, CRAWLER-RUBBER TRACK, 267 HP, 3 POINT HITCH	267 HP D-off		$186,618	60.83	11.51	15.86	3.58	19.37	331

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T25			***CATERPILLAR INC. (MACHINE DIVISION) (continued)***									
	T25CA007	CH 75E	TRACTOR, AGRICULTURAL, CRAWLER-RUBBER TRACK, 292 HP, 3 POINT HITCH	292 HP D-off		$204,517	66.60	12.61	17.38	3.92	21.18	341
	T25CA008	CH 85E	TRACTOR, AGRICULTURAL, CRAWLER-RUBBER TRACK, 353 HP, 3 POINT HITCH	353 HP D-off		$221,330	75.12	13.65	18.81	4.24	25.61	350
	SUBCATEGORY 0.20		**WHEEL**									
			DEERE & COMPANY									
	T25JD015	5105	TRACTOR, AGRICULTURAL, WHEEL, 50 HP, 4X2, PTO, 3 POINT HITCH	50 HP D-off		$17,624	8.32	1.19	1.68	0.35	3.63	39
	T25JD016	5205	TRACTOR, AGRICULTURAL, WHEEL, 56 HP, 4X2, PTO, 3 POINT HITCH	56 HP D-off		$20,692	9.52	1.42	2.01	0.41	4.06	39
	T25JD017	5205 W/609 MOWER	TRACTOR, AGRICULTURAL, WHEEL, 56 HP, 4X2, PTO, 3 POINT HITCH, WITH 60" HEAVY DUTY ROTARY MOWER	56 HP D-off		$24,413	10.38	1.68	2.40	0.48	4.06	51
	T25JD018	5325	TRACTOR, AGRICULTURAL, WHEEL, 67 HP, 4X2, PTO, 3 POINT HITCH	67 HP D-off		$31,826	13.02	2.22	3.19	0.62	4.86	49
	T25JD019	5425	TRACTOR, AGRICULTURAL, WHEEL, 81 HP, 4X2, PTO, 3 POINT HITCH	81 HP D-off		$34,852	14.90	2.41	3.46	0.68	5.88	54
	T25JD008	7320	TRACTOR, AGRICULTURAL, WHEEL, 105 HP, 4X4, PTO, 3 POINT HITCH	105 HP D-off		$73,549	25.92	5.22	7.55	1.44	7.62	115
	T25JD020	5525	TRACTOR, AGRICULTURAL, WHEEL, 91 HP, 4X2, PTO, 3 POINT HITCH	91 HP D-off		$38,148	16.69	2.50	3.50	0.75	6.60	59
	T25JD009	7720	TRACTOR, AGRICULTURAL, WHEEL, 140 HP, 4X4, PTO, 3 POINT HITCH	140 HP D-off		$96,910	34.24	6.92	10.03	1.90	10.16	155
	T25JD010	8130	TRACTOR, AGRICULTURAL, WHEEL, 170 HP, 4X4, PTO, 3 POINT HITCH	170 HP D-off		$111,525	40.23	7.80	11.22	2.19	12.33	208
	T25JD012	9220	TRACTOR, AGRICULTURAL, WHEEL, 325 HP, 4X4, PTO, 3 POINT HITCH	325 HP D-off		$163,634	65.54	10.87	15.32	3.21	23.58	329
	T25JD013	9420	TRACTOR, AGRICULTURAL, WHEEL, 425 HP, 4X4, PTO, 3 POINT HITCH	425 HP D-off		$213,981	85.49	14.54	20.67	4.20	30.83	349
	T25JD014	8330	TRACTOR, AGRICULTURAL, WHEEL, 215 HP, 4X4, PTO, 3 POINT HITCH	215 HP D-off		$146,709	52.14	10.36	14.96	2.88	15.60	211

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T30	**TRENCHERS, CHAIN TYPE CUTTER**												
	SUBCATEGORY 0.00		**TRENCHERS, CHAIN TYPE CUTTER**										
			DITCH WITCH(The Charles Machine Works)l										
	T30DW012	1230	TRENCHER, CHAIN TYPE CUTTER, 36" DEEP X 6" WIDE, WALK BEHIND	13 HP	G		$8,356	4.61	0.58	0.82	0.17	2.18	8
	T30DW013	1820	TRENCHER, CHAIN TYPE CUTTER, 48" DEEP X 16" WIDE, WALK BEHIND	18 HP	G		$11,789	6.46	0.80	1.12	0.24	3.02	13
	T30DW014	3610	TRENCHER, CHAIN TYPE CUTTER, 60" DEEP X 16" WIDE, 4X4 (W/BLADE)	35 HP	D-off		$30,954	10.90	2.07	2.87	0.63	2.54	39
	T30DW005	3700	TRENCHER, CHAIN TYPE CUTTER, 63" DEEP X 12" WIDE, 4X4 (W/DBL PIVOT)	44 HP	D-off		$32,874	12.13	2.23	3.12	0.67	3.19	42
	T30DW016	5700	TRENCHER, CHAIN TYPE CUTTER, 52" DEEP X 12" WIDE, 4X4 (W/BLADE)	57 HP	D-off		$53,800	18.59	3.70	5.21	1.09	4.13	95
	T30DW017	RT 70 M	TRENCHER, CHAIN TYPE CUTTER, 96" DEEP X 24" WIDE, 4X4 (W/BLADE)	70 HP	D-off		$66,917	23.06	4.59	6.47	1.35	5.08	69
	T30DW018	RT 90 M	TRENCHER, CHAIN TYPE CUTTER, 96" DEEP X 24" WIDE, 4X4 (W/BLADE)	78 HP	D-off		$74,916	25.79	5.16	7.27	1.52	5.66	77
	T30DW011	HT185 (H1812)	TRENCHER, CHAIN TYPE CUTTER, 84" DEEP X 9"-24" WIDE, CRAWLER (W/BLADE)	185 HP	D-off		$185,986	63.25	13.07	18.60	3.77	13.42	195
			TESMEC USA, INC.										
	T30TM001	TRS 900-A	TRENCHER, CHAIN TYPE CUTTER, 3' DEEP X 4"-8" WIDE, CRAWLER (W/CRUMBSHOE)	185 HP	D-off		$281,835	88.02	19.80	28.18	5.71	13.42	375
	T30TM004	TRS 900-A-SL	TRENCHER, CHAIN TYPE CUTTER, 3' DEEP X 4"-8" WIDE, CRAWLER (W/CRUMBSHOE) SELF LEVEL	185 HP	D-off		$304,286	93.83	21.38	30.43	6.16	13.42	400
	T30TM009	TRS 1000-A	TRENCHER, CHAIN TYPE CUTTER, 4' DEEP X 5"-12" WIDE, CRAWLER (W/CRUMBSHOE)	270 HP	D-off		$393,366	123.83	27.63	39.34	7.96	19.59	550
	T30TM007	TRS 900-SLO	TRENCHER, CHAIN TYPE CUTTER, 4' DEEP X 12" WIDE, CRAWLER (W/CRUMBSHOE) SELF LEVEL, OFFSET	240 HP	D-off		$382,528	118.56	26.87	38.25	7.74	17.41	450
	T30TM008	TRS 900-SLO	TRENCHER, CHAIN TYPE CUTTER, 6' DEEP X 18" WIDE, CRAWLER (W/CRUMBSHOE) SELF LEVEL, OFFSET	240 HP	D-off		$397,359	122.40	27.91	39.74	8.04	17.41	470
	T30TM012	TRS 1100	TRENCHER, CHAIN TYPE CUTTER, 8' DEEP X 26" WIDE, CRAWLER (W/CRUMBSHOE)	350 HP	D-off		$516,255	162.16	36.27	51.63	10.45	25.39	850

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T30			*TESMEC USA, INC. (continued)*										
	T30TM014	TRS 1300	TRENCHER, CHAIN TYPE CUTTER, 10' DEEP X 26" WIDE, CRAWLER (W/CRUMBSHOE)	503 HP	D-off		$789,370	245.31	55.45	78.94	15.98	36.49	1,550
	T30TM013	TRS 1300	TRENCHER, CHAIN TYPE CUTTER, 14' DEEP X 42" WIDE, CRAWLER (W/CRUMBSHOE)	402 HP	D-off		$806,016	241.32	56.62	80.60	16.32	29.16	1,550
	T30TM015	TRS 1300	TRENCHER, CHAIN TYPE CUTTER, 16' DEEP X 42" WIDE, CRAWLER (W/CRUMBSHOE)	503 HP	D-off		$834,870	257.07	58.65	83.49	16.90	36.49	1,550
			VERMEER MANUFACTURING CO.										
	T30VE007	T-455	TRENCHER, CHAIN TYPE CUTTER, 6' DEEP X 7.5"-24" WIDE, CRAWLER, HYDROSTATIC	125 HP	D-off		$145,168	47.79	10.20	14.52	2.94	9.07	195
	T30VE008	T-555 II	TRENCHER, CHAIN TYPE CUTTER, 8' DEEP X 8"-24" WIDE, CRAWLER, HYDROSTATIC	185 HP	D-off		$292,250	90.72	20.54	29.23	5.92	13.42	225
	T30VE009	T-655 II	TRENCHER, CHAIN TYPE CUTTER, 8' DEEP X 10"-24" WIDE, CRAWLER, HYDROSTATIC	250 HP	D-off		$316,258	102.26	22.22	31.63	6.40	18.14	425
	T30VE010	T-755	TRENCHER, CHAIN TYPE CUTTER, 10' DEEP X 14"-36" WIDE, CRAWLER, HYDROSTATIC	250 HP	D-off		$404,532	125.08	28.42	40.45	8.19	18.14	660
T35	**TRENCHERS, WHEEL TYPE CUTTER**												
	SUBCATEGORY 0.00		**TRENCHERS, WHEEL TYPE CUTTER**										
			CLEVELAND TRENCHER										
	T35CT001	9624	TRENCHER, WHEEL TYPE CUTTER, 72" DEEP X 21.5" WIDE, ROUND BUCKET, CRAWLER	140 HP	D-off		$210,725	65.96	14.81	21.07	4.27	10.16	170
	T35CT002	9600-S	TRENCHER, WHEEL TYPE CUTTER, 72" DEEP X 24" WIDE, ROUND BUCKET, CRAWLER	140 HP	D-off		$259,770	78.64	18.25	25.98	5.26	10.16	228
	T35CT003	246-FD	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 24" WIDE, ROUND BUCKET, CRAWLER	185 HP	D-off		$292,219	90.71	20.53	29.22	5.92	13.42	320
	T35CT005	7036	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off		$260,710	75.76	18.32	26.07	5.28	7.40	263
	T35CT006	7036	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off		$260,710	75.76	18.32	26.07	5.28	7.40	263
	T35CT004	7036-HD	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off		$275,731	79.64	19.37	27.57	5.58	7.40	286
	T35CT007	7036-SD	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	102 HP	D-off		$288,395	82.92	20.26	28.84	5.84	7.40	340

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T35			***CLEVELAND TRENCHER (continued)***									
	T35CT008	8700	TRENCHER, WHEEL TYPE CUTTER, 84" DEEP X 36" WIDE, ROUND BUCKET, CRAWLER	150 HP D-off		$368,614	107.58	25.89	36.86	7.46	10.88	424
	T35CT009	7648-SD	TRENCHER, WHEEL TYPE CUTTER, 90" DEEP X 48" WIDE, ROUND BUCKET, CRAWLER	150 HP D-off		$428,531	123.07	30.11	42.85	8.68	10.88	445
	T35CT010	7648	TRENCHER, WHEEL TYPE CUTTER, 90" DEEP X 48" WIDE, ROUND BUCKET, CRAWLER	150 HP D-off		$419,876	120.84	29.50	41.99	8.50	10.88	445
	T35CT011	400W-HD	TRENCHER, WHEEL TYPE CUTTER, 108" DEEP X 72" WIDE, ROUND BUCKET, CRAWLER	175 HP D-off		$503,475	144.50	35.37	50.35	10.19	12.69	700
T40	**TRUCK OPTIONS**											
	SUBCATEGORY 0.10		**CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING**									
			AUTO CRANE CO.									
	T40AH001	A50A	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 3.5 TON, 32' BOOM (ADD 21,000 GVW TRUCK & FLATBED)			$22,473	5.75	1.58	2.25	0.45	0.00	34
	T40AH002	A72A	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 5.0 TON, 32' BOOM (ADD 26,000 GVW TRUCK & FLATBED)			$26,945	6.84	1.90	2.69	0.55	0.00	44
	T40AH003	A95	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 6.6 TON, 36' BOOM (ADD 32,500 GVW TRUCK & FLATBED)			$35,099	8.84	2.47	3.51	0.71	0.00	63
	T40AH004	A125	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 8.6 TON, 41' BOOM (ADD 46,000 GVW TRUCK & FLATBED)			$39,202	9.84	2.75	3.92	0.79	0.00	71
			PALFINGER INC.									
	T40PA001	PC 2300	TRUCK OPTIONS, CRANE, HYDRAULIC, 2-ARM ARTICULATING, 2.4 TON, 21' BOOM (ADD 25,000 GVW TRUCK & FLATBED)			$7,099	1.97	0.50	0.71	0.14	0.00	9
	T40PA002	PK 12502	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 5.3 TON, 61' BOOM (ADD 28,000 GVW TRUCK & FLATBED)			$38,907	9.76	2.74	3.89	0.79	0.00	35
	T40PA003	PK 20002	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 8.3 TON, 70' BOOM (ADD 30,000 GVW TRUCK & FLATBED)			$48,415	12.11	3.40	4.84	0.98	0.00	51

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T40			***PALFINGER INC. (continued)***									
	T40PA004	PK 26502	TRUCK OPTIONS, CRANE, HYDRAULIC, 3-ARM ARTICULATING, 9.0 TON, 69' BOOM (ADD 52,000 GVW TRUCK & FLATBED)			$56,554	14.10	3.97	5.66	1.14	0.00	61
	T40PA005	PK 50002	TRUCK OPTIONS, CRANE, HYDRAULIC, 2-ARM ARTICULATING, 12.5 TON, 82' BOOM (ADD 60,000 GVW TRUCK & FLATBED)			$106,662	26.38	7.50	10.67	2.16	0.00	1,072
	T40PA006	PK 65002	TRUCK OPTIONS, CRANE, HYDRAULIC, 2-ARM ARTICULATING, 14.9 TON, 82' BOOM (ADD 62,000 GVW TRUCK & FLATBED)			$110,985	27.44	7.80	11.10	2.25	0.00	126
	SUBCATEGORY 0.20		**DUMP BODY, REAR**									
			GALION DUMP BODIES, INC.									
	T40GN001	PACKAGE 89-F	TRUCK OPTIONS, DUMP BODY, REAR, 16-23.5 CY (W/HOIST) (ADD 36,000 GVW TRUCK)			$14,298	3.44	1.08	1.61	0.27	0.00	42
			MIDLAND MANUFACTURING INC.									
	T40MY002	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 7.5 CY, AIR GATE (W/HOIST) (ADD 30,000 GVW TRUCK)			$4,843	1.16	0.36	0.54	0.09	0.00	21
	T40MY003	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 8.9 CY, AIR GATE (W/HOIST) (ADD 27,000 GVW TRUCK)			$6,016	1.45	0.45	0.68	0.11	0.00	26
	T40MY004	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 10.0 CY, AIR GATE (W/HOIST) (ADD 35,000 GVW TRUCK)			$6,977	1.67	0.52	0.78	0.13	0.00	31
	T40MY005	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 13.6 CY, AIR GATE (W/HOIST) (ADD 35,000 GVW TRUCK)			$9,684	2.33	0.73	1.09	0.18	0.00	33
	T40MY006	KLEENSIDE	TRUCK OPTIONS, DUMP BODY, REAR, 20.0 CY, AIR GATE (W/HOIST) (ADD 50,000 GVW TRUCK)			$11,066	2.66	0.83	1.24	0.21	0.00	40
	SUBCATEGORY 0.30		**FLATBEDS, WITH SIDES**									
			KNAPHEIDE MANUFACTURING CO.									
	T40KF011	8' X 8'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 8'			$2,523	0.54	0.18	0.25	0.05	0.00	11

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T40			***KNAPHEIDE MANUFACTURING CO. (continued)***									
	T40KF013	8' X 10'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 10'			$3,728	0.80	0.27	0.37	0.08	0.00	14
	T40KF014	8' X 12'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 12'			$3,364	0.72	0.24	0.34	0.07	0.00	16
	T40KF016	8' X 16'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 16'			$4,762	1.02	0.34	0.48	0.10	0.00	16
	T40KF018	8' X 20'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 20'			$5,718	1.22	0.41	0.57	0.12	0.00	18
	T40KF020	8' X 24'	TRUCK OPTIONS, FLATBED, W/SIDE RACKS, 8' X 24'			$6,633	1.41	0.46	0.66	0.13	0.00	20
	SUBCATEGORY 0.41		**HOIST, ELECTRIC DRIVE**									
			KNAPHEIDE MANUFACTURING CO.									
	T40KF021	KH-1416L	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, PTO, 10' TO 14', 7-16 TON			$2,684	0.71	0.19	0.27	0.05	0.00	6
	T40KF023	KH-1416L-EE	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, 10' TO 14', 7-16 TON			$3,572	0.87	0.25	0.36	0.07	0.00	6
	T40KF024	KH-1627L-EE	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, 15' TO 20', 14-37 TON			$4,244	1.02	0.30	0.42	0.09	0.00	10
	T40KF022	KH-2538L	TRUCK OPTIONS, HOIST, ELECTRIC DRIVE, PTO, 20' TO 24', 20-45 TON			$5,370	1.34	0.38	0.54	0.11	0.00	15
	SUBCATEGORY 0.50		**TRANSIT MIXERS**									
			NO SPECIFIC MANUFACTURER									
	T40XX034	RDTM-8	TRUCK OPTIONS, TRANSIT MIXER, 8 CY, HYDROSTATIC, 100 GAL, (ADD 60,000 GVW TRUCK)	235 HP D-on		$133,806	51.01	9.73	14.22	2.62	17.05	266
	T40XX035	RDTM-9	TRUCK OPTIONS, TRANSIT MIXER, 9 CY, HYDROSTATIC, 100 GAL, (ADD 66,000 GVW TRUCK)	250 HP D-on		$135,940	52.78	9.89	14.44	2.67	18.14	270
	T40XX036	RDTM-10	TRUCK OPTIONS, TRANSIT MIXER, 10 CY, HYDROSTATIC, 100 GAL, (ADD 66,000 GVW TRUCK)	285 HP D-on		$162,350	61.88	11.81	17.25	3.18	20.67	274

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T40			***NO SPECIFIC MANUFACTURER (continued)***									
	T40XX037	RDTM-11	TRUCK OPTIONS, TRANSIT MIXER, 11 CY, HYDROSTATIC, 100 GAL, (ADD 70,000 GVW TRUCK)	285 HP D-on		$159,592	61.24	11.61	16.96	3.13	20.67	285
	T40XX038	RDTM-12	TRUCK OPTIONS, TRANSIT MIXER, 12 CY, HYDROSTATIC, 100 GAL, (ADD 75,000 GVW TRUCK)	285 HP D-on		$166,978	62.96	12.14	17.74	3.27	20.67	295
	SUBCATEGORY 0.60		**WATER TANKS**									
			ROSCO, A LeeBoy COMPANY									
	T40RS001	DS 2000	TRUCK OPTIONS, WATER TANK, 2,000 GAL (ADD 28,000 GVW TRUCK)			$26,152	5.44	1.78	2.45	0.55	0.00	38
	T40RS002	DS 3000	TRUCK OPTIONS, WATER TANK, 3,000 GAL (ADD 40,000 GVW TRUCK)			$27,085	5.63	1.83	2.54	0.56	0.00	45
	T40RS003	DS 4000	TRUCK OPTIONS, WATER TANK, 4,000 GAL (ADD 50,000 GVW TRUCK)			$29,209	6.08	1.98	2.74	0.61	0.00	55
	SUBCATEGORY 0.70		**ALL OTHER OPTIONS**									
			ARROW-MASTER, INC.									
	T40AG001	1350	TRUCK OPTIONS, GUILLOTINE CONCRETE BREAKER, W/8" DIA BREAKING TOOL AND CAB	80 HP D-off		$74,048	23.68	5.10	7.19	1.50	5.80	96
T45	**TRUCK TRAILERS**											
	SUBCATEGORY 0.10		**BOTTOM DUMP**									
			MIDLAND MANUFACTURING INC.									
	T45MY004	40' MC 2000	TRUCK TRAILER, BOTTOM DUMP, 21 CY, 28 TON, 40' - 2 AXLE, CLAMSHELL (ADD TOWING TRUCK)			$29,496	6.70	1.64	2.17	0.55	0.00	152
	T45MY005	40' TC 3000	TRUCK TRAILER, BOTTOM DUMP, 21 CY, 30 TON, 40' - 3 AXLE, CLAMSHELL (ADD TOWING TRUCK)			$38,929	8.82	2.11	2.77	0.72	0.00	138

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T45			***MIDLAND MANUFACTURING INC. (continued)***									
	T45MY006	38' MC 3000	TRUCK TRAILER, BOTTOM DUMP, 23 CY, 30 TON, 38' - 3 AXLE, CLAMSHELL (ADD TOWING TRUCK)			$40,022	9.04	2.18	2.87	0.74	0.00	145
	T45MY007	40' MC 3000	TRUCK TRAILER, BOTTOM DUMP, 23 CY, 30 TON, 40' - 3 AXLE, CLAMSHELL (ADD TOWING TRUCK)			$38,958	8.83	2.11	2.77	0.72	0.00	152
			NO SPECIFIC MANUFACTURER									
	T45XX001		TRUCK TRAILER, BOTTOM DUMP, 27 TON (ADD TOWING TRUCK)			$35,547	7.81	2.08	2.83	0.66	0.00	122
	T45XX003		TRUCK TRAILER, BOTTOM DUMP, 30 TON (ADD TOWING TRUCK)			$47,506	10.15	2.84	3.91	0.88	0.00	160
	SUBCATEGORY 0.20		**END DUMP**									
			MIDLAND MANUFACTURING INC.									
	T45MY015	28' SK2000	TRUCK TRAILER, END DUMP, 28 CY, 36 TON, 28' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			$30,905	6.89	1.72	2.29	0.57	0.00	115
	T45MY016	32' ST 2400	TRUCK TRAILER, END DUMP, 28 CY, 36 TON, 32' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			$31,668	7.05	1.77	2.36	0.59	0.00	130
	T45MY017	39' SK 2300	TRUCK TRAILER, END DUMP, 39 CY, 50 TON, 39' - 3 AXLE (W/HOIST) (ADD TOWING TRUCK)			$35,465	8.08	1.89	2.46	0.66	0.00	170
			NO SPECIFIC MANUFACTURER									
	T45XX008		TRUCK TRAILER, END DUMP, 20 CY, 24 TON (ADD TOWING TRUCK)			$29,976	6.56	1.73	2.33	0.56	0.00	110
	SUBCATEGORY 0.30		**PUP TRAILER**									
			MIDLAND MANUFACTURING INC.									
	T45MY018	14' SK 2100	TRUCK TRAILER, PUP TRAILER, 10 CY, 13 TON, 14' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			$20,828	5.55	1.27	1.73	0.40	0.00	80

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T45			***MIDLAND MANUFACTURING INC. (continued)***									
	T45MY019	14' SL 2100	TRUCK TRAILER, PUP TRAILER, 12 CY, 15 TON, 14' - 2 AXLE (W/HOIST) (ADD TOWING TRUCK)			$20,670	5.50	1.25	1.71	0.39	0.00	80
			NO SPECIFIC MANUFACTURER									
	T45XX009		TRUCK TRAILER, PUP TRAILER, 8 CY, LONG TONGUE (ADD TOWING TRUCK)			$30,112	7.51	2.04	2.93	0.57	0.00	86
	T45XX010		TRUCK TRAILER, PUP TRAILER, 10 CY, LONG TONGUE (ADD TOWING TRUCK)			$30,209	7.53	2.04	2.94	0.57	0.00	86
	T45XX032		TRUCK TRAILER, PUP TRAILER, 13 CY, 14.5 TON, 3 AXLE (ADD TOWING TRUCK)			$37,638	9.21	2.66	3.89	0.71	0.00	92
	T45XX033		TRUCK TRAILER, PUP TRAILER, 16 CY, 18.0 TON, 4 AXLE (ADD TOWING TRUCK)			$44,230	10.89	3.10	4.52	0.84	0.00	100
	SUBCATEGORY 0.41		**LOWBOY, RIGID NECK, DROP DECK**									
			EAGER BEAVER									
	T45EA006	35GSL-BR	TRUCK TRAILER, LOWBOY, 35 TON, 2 AXLE, DETATCHABLE GOOSENECK (ADD TOWING TRUCK)			$36,606	7.77	1.99	2.62	0.68	0.00	150
	T45EA007	50GSL/3	TRUCK TRAILER, LOWBOY, 50 TON, 3 AXLE , DETATCHABLE GOOSENECK (ADD TOWING TRUCK)			$51,298	10.77	2.75	3.60	0.95	0.00	205
			NO SPECIFIC MANUFACTURER									
	T45XX011		TRUCK TRAILER, LOWBOY, 25 TON, 2 AXLE (ADD TOWING TRUCK)			$29,959	5.99	1.74	2.37	0.55	0.00	95
	T45XX012		TRUCK TRAILER, LOWBOY, 30 TON, 2 AXLE (ADD TOWING TRUCK)			$32,020	6.35	1.87	2.56	0.59	0.00	115
	T45XX013		TRUCK TRAILER, LOWBOY, 35 TON, 2 AXLE (ADD TOWING TRUCK)			$33,434	6.65	1.94	2.64	0.62	0.00	110
	T45XX014		TRUCK TRAILER, LOWBOY, 35 TON, 3 AXLE (ADD TOWING TRUCK)			$40,723	8.17	2.34	3.18	0.75	0.00	127
	T45XX015		TRUCK TRAILER, LOWBOY, 40 TON, 3 AXLE (ADD TOWING TRUCK)			$41,776	8.35	2.41	3.27	0.77	0.00	136
	T45XX016		TRUCK TRAILER, LOWBOY, 50 TON, 3 AXLE (ADD TOWING TRUCK)			$46,637	9.28	2.69	3.65	0.86	0.00	145

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T45			***NO SPECIFIC MANUFACTURER (continued)***									
	T45XX017		TRUCK TRAILER, LOWBOY, 60 TON, 3 AXLE (ADD TOWING TRUCK)			$49,879	9.97	2.85	3.85	0.92	0.00	175
	T45XX018		TRUCK TRAILER, LOWBOY, 70 TON, 3 AXLE (ADD TOWING TRUCK)			$50,837	10.14	2.91	3.94	0.94	0.00	213
	T45XX019		TRUCK TRAILER, LOWBOY, 75 TON, 3 AXLE (ADD TOWING TRUCK)			$57,748	11.32	3.35	4.56	1.07	0.00	220
	T45XX020		TRUCK TRAILER, LOWBOY, 80 TON, 4 AXLE (ADD TOWING TRUCK)			$57,236	11.46	3.27	4.42	1.06	0.00	268
	T45XX021		TRUCK TRAILER, LOWBOY, 90 TON, 4 AXLE (ADD TOWING TRUCK)			$62,188	12.31	3.59	4.87	1.15	0.00	293
	T45XX022		TRUCK TRAILER, LOWBOY, 100 TON, 4 AXLE (ADD TOWING TRUCK)			$69,040	13.67	3.96	5.36	1.28	0.00	312
	T45XX023		TRUCK TRAILER, LOWBOY, 120 TON, 4 AXLE (ADD TOWING TRUCK)			$82,303	16.21	4.71	6.37	1.52	0.00	350
	SUBCATEGORY 0.50		**FLATBED TRAILER**									
			NO SPECIFIC MANUFACTURER									
	T45XX025		TRUCK TRAILER, FLATBED, 25 TON, 2 AXLE (ADD TOWING TRUCK)			$28,676	5.54	1.64	2.21	0.53	0.00	110
	T45XX034	32	TRUCK TRAILER, FLATBED, 40 TON, 2 AXLE (ADD TOWING TRUCK)			$28,102	5.74	1.60	2.16	0.52	0.00	103
	T45XX035	40	TRUCK TRAILER, FLATBED, 40 TON, 2 AXLE (ADD TOWING TRUCK)			$29,876	6.04	1.71	2.32	0.55	0.00	110
	SUBCATEGORY 0.60		**MISCELLANEOUS / UTILITY**									
			NO SPECIFIC MANUFACTURER									
	T45XX026		TRUCK TRAILER, MISCELLANEOUS/UTILITY, TILT BED, 12 TON, 2 AXLE (ADD TOWING TRUCK)			$16,215	3.47	0.94	1.27	0.30	0.00	62
	T45XX027		TRUCK TRAILER, MISCELLANEOUS/UTILITY, TILT BED, 16 TON, 2 AXLE (ADD TOWING TRUCK)			$18,263	3.92	1.03	1.38	0.34	0.00	65
	T45XX028		TRUCK TRAILER, MISCELLANEOUS/UTILITY, TILT BED, 20 TON, 2 AXLE (ADD TOWING TRUCK)			$20,930	4.48	1.16	1.54	0.39	0.00	67

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T45			***NO SPECIFIC MANUFACTURER (continued)***									
	T45XX024		TRUCK TRAILER, MISCELLANEOUS/UTILITY, ATTACHMENT, HELPER DOLLY, 60 TON TRAILER MAX (ADD TOWING TRUCK)			$25,953	5.07	1.47	1.97	0.48	0.00	62
	SUBCATEGORY 0.70		**WATER TANKER TRAILER**									
			NO SPECIFIC MANUFACTURER									
	T45XX029		TRUCK TRAILER, WATER TANKER, 4,000 GAL, W/PUMP (ADD TOWING TRUCK)	63 HP D-off		$73,273	17.80	4.16	5.31	1.50	4.57	170
	T45XX030		TRUCK TRAILER, WATER TANKER, 5,000 GAL, W/PUMP (ADD TOWING TRUCK)	63 HP D-off		$74,106	18.19	4.12	5.19	1.52	4.57	240
	T45XX031		TRUCK TRAILER, WATER TANKER, 6,000 GAL, W/PUMP (ADD TOWING TRUCK)	63 HP D-off		$89,612	20.82	5.01	6.35	1.83	4.57	250
T50	**TRUCKS, HIGHWAY (Add attachments as required)**											
	SUBCATEGORY 0.01		**0 THRU 10,000 GVW**									
			GMC AND CHEVROLET									
	T50GM001	S10	TRUCK, HIGHWAY, 3,500 GVW, 4X2 (COMPACT)	120 HP G		$14,551	8.78	0.99	1.39	0.29	4.77	26
	T50GM004	R26	TRUCK, HIGHWAY, 8,600 GVW, 4X2 (SUBURBAN)	285 HP G		$35,829	21.04	2.49	3.51	0.73	11.33	50
	T50GM005	V26	TRUCK, HIGHWAY, 8,600 GVW, 4X4 (SUBURBAN)	285 HP G		$38,484	21.65	2.67	3.78	0.78	11.33	52
			NO SPECIFIC MANUFACTURER									
	T50XX001	4X2 1/2 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	130 HP G		$14,893	9.39	0.99	1.37	0.30	5.17	45
	T50XX002	4X2 3/4 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X2	130 HP G		$17,595	9.94	1.20	1.68	0.36	5.17	40
	T50XX003	4X2 1 180 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X2	180 HP G		$19,941	12.73	1.36	1.92	0.40	7.16	41
	T50XX004	4X4 1/2 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X4	130 HP G		$17,722	10.05	1.19	1.65	0.36	5.17	43
	T50XX005	4X4 3/4 130 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	130 HP G		$20,719	10.67	1.42	1.99	0.42	5.17	45

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T50			***NO SPECIFIC MANUFACTURER (continued)***										
	T50XX006	4X4 1 180 CONV GAS	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X4	180 HP	G		$21,327	13.06	1.46	2.05	0.43	7.16	41
	T50XX007	4X2 1/2 130 CREW GAS	TRUCK, HIGHWAY, CREW, 1/2 TON PICKUP, 4X2	130 HP	G		$15,682	9.57	1.05	1.45	0.32	5.17	45
	T50XX008	4X2 3/4 130 CREW GAS	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP, 4X2	130 HP	G		$18,751	10.21	1.28	1.80	0.38	5.17	47
	T50XX009	4X2 1 180 CREW GAS	TRUCK, HIGHWAY, CREW, 1 TON PICKUP, 4X2	180 HP	G		$22,810	13.37	1.56	2.20	0.46	7.16	45
	T50XX010	4X4 1/2 130 CREW GAS	TRUCK, HIGHWAY, CREW, 1/2 TON PICKUP, 4X4	130 HP	G		$20,994	10.80	1.42	1.98	0.43	5.17	48
	T50XX011	4X4 3/4 180 CREW GAS	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP, 4X4	180 HP	G		$22,606	13.35	1.55	2.18	0.46	7.16	55
	T50XX012	4X4 1 180 CREW GAS	TRUCK, HIGHWAY, CREW, 1 TON PICKUP, 4X4	180 HP	G		$23,453	13.54	1.61	2.27	0.47	7.16	45
	T50XX013	4X2 1/2 75 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X2	75 HP	D-on		$18,978	5.84	1.27	1.78	0.38	1.23	39
	T50XX014	4X2 3/4 75 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X2	75 HP	D-on		$20,984	6.23	1.43	2.02	0.42	1.23	40
	T50XX015	4X2 1 130 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X2	130 HP	D-on		$24,133	7.96	1.66	2.34	0.49	2.13	43
	T50XX016	4X4 1/2 130 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 1/2 TON PICKUP, 4X4	130 HP	D-on		$22,548	7.67	1.53	2.13	0.46	2.13	43
	T50XX017	4X4 3/4 130 CONV DSL	TRUCK, HIGHWAY, CONVENTIONAL, 3/4 TON PICKUP, 4X4	130 HP	D-on		$22,790	7.66	1.56	2.20	0.46	2.13	45
	T50XX018	CONV DSL 4X4 1 130	TRUCK, HIGHWAY, CONVENTIONAL, 1 TON PICKUP, 4X4	130 HP	D-on		$27,178	8.66	1.87	2.64	0.55	2.13	49
	T50XX019	4X2 3/4 130 CREW DSL	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP, 4X2	130 HP	D-on		$21,859	7.43	1.50	2.11	0.44	2.13	47
	T50XX020	4X4 3/4 130 CREW DSL	TRUCK, HIGHWAY, CREW, 3/4 TON PICKUP 4X4	130 HP	D-on		$26,400	8.48	1.81	2.56	0.53	2.13	55
	T50XX021	4X2 1 130 CREW DSL	TRUCK, HIGHWAY, CREW, 1 TON PICKUP, 4X2	130 HP	D-on		$23,934	7.90	1.64	2.32	0.48	2.13	48
	SUBCATEGORY 0.02		**OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)**										
			NO SPECIFIC MANUFACTURER										
	T50XX023	4X2 20KGVW GAS	TRUCK, HIGHWAY, 20,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	210 HP	G		$37,515	28.72	2.16	2.84	0.74	19.08	70

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
T50			***NO SPECIFIC MANUFACTURER (continued)***										
	T50XX024	4X2 25KGVW GAS	TRUCK, HIGHWAY, 25,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	210 HP	G		$32,814	27.88	1.88	2.46	0.65	19.08	72
	T50XX022	4X2 25KGVW DSL	TRUCK, HIGHWAY, 25,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	180 HP	D-on		$47,595	16.81	2.77	3.65	0.94	7.16	88
	T50XX025	4X4 30KGVW DSL	TRUCK, HIGHWAY, 30,000 LBS GVW, 2 AXLE, 4X4 (CHASSIS ONLY-ADD OPTIONS)	170 HP	D-on		$62,396	19.19	3.61	4.74	1.24	6.76	97
	T50XX026	4X2 30KGVW DSL	TRUCK, HIGHWAY, 30,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	210 HP	D-on		$63,531	21.15	3.68	4.83	1.26	8.35	105
	T50XX035	4X2 30KGVW DSL	TRUCK, HIGHWAY, 30,000 LBS GVW, 2 AXLE, 4X2, WITH 3-ARM ARTICULATING CRANE, 3.5 TON, 32' BOOM, WITH 8' X 20' FLATBED	210 HP	D-on		$88,017	25.53	5.14	6.79	1.74	8.35	135
	SUBCATEGORY 0.03		**OVER 30,000 GVW (Chassis only - Add options)**										
			NO SPECIFIC MANUFACTURER										
	T50XX027	4X2 35KGVW DSL	TRUCK, HIGHWAY, 35,000 LBS GVW, 2 AXLE, 4X2 (CHASSIS ONLY-ADD OPTIONS)	265 HP	D-on		$100,245	32.50	5.20	6.47	1.96	14.88	126
	T50XX032	4X2 35KGVW DSL	DUMP TRUCK, HIGHWAY, 35,000 LBS GVW, 2 AXLE, 4X2 WITH REAR 10 - 13 CY DUMP BODY	265 HP	D-on		$109,147	33.85	5.66	7.06	2.13	14.88	160
	T50XX028	6X4 45KGVW DSL	TRUCK, HIGHWAY, 45,000 LBS GVW, 2 AXLE, 6X4 (CHASSIS ONLY-ADD OPTIONS)	230 HP	D-on		$100,585	30.56	5.16	6.39	1.96	12.92	135
	T50XX029	6X4 55KGVW DSL	TRUCK, HIGHWAY, 50,000 LBS GVW, 2 AXLE, 6X4 (CHASSIS ONLY-ADD OPTIONS)	310 HP	D-on		$93,044	34.49	4.76	5.88	1.82	17.41	144
	T50XX030	6X6 70KGVW DSL	TRUCK, HIGHWAY, 70,000 LBS GVW, 2 AXLE, 6X6 (CHASSIS ONLY-ADD OPTIONS)	350 HP	D-on		$118,456	40.90	6.10	7.58	2.31	19.66	180
	T50XX031	6X4 75KGVW DSL	TRUCK, HIGHWAY, 75,000 LBS GVW, 2 AXLE, 6X4 (CHASSIS ONLY-ADD OPTIONS)	400 HP	D-on		$109,554	42.69	5.64	7.00	2.14	22.46	197
	T50XX033	6X4 75KGVW DSL	DUMP TRUCK, HIGHWAY, 75,000 LBS GVW, 2 AXLE, 6X4 WITH REAR 16 - 20 CY DUMP BODY	400 HP	D-on		$119,783	44.25	6.18	7.68	2.34	22.46	240

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T55	**TRUCKS, OFF-HIGHWAY**											
	SUBCATEGORY 0.10		**RIGID FRAME**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T55CA007	769D	TRUCK, OFF-HIGHWAY, RIGID FRAME, 31.7 CY, 41.6 TON, 4X4, REAR DUMP	487 HP D-off		$565,901	98.33	21.84	23.00	10.34	19.37	668
	T55CA002	773D	TRUCK, OFF-HIGHWAY, RIGID FRAME, 46.9 CY, 57.7 TON, 4X4, REAR DUMP	650 HP D-off		$755,202	125.68	29.02	30.42	13.81	25.86	872
	T55CA003	777D	TRUCK, OFF-HIGHWAY, RIGID FRAME, 78.6 CY, 100 TON, 4X4, REAR DUMP	938 HP D-off		$1,044,039	176.61	39.97	41.76	19.09	37.31	1,419
			Komatsu America International Company									
	T55KM009	HD325-6	TRUCK, OFF-HIGHWAY, RIGID FRAME, 31.4 CY, 44 TON, 4X4, REAR DUMP	488 HP D-off		$566,616	98.46	21.88	23.03	10.36	19.41	707
	T55KM012	HD785-5	TRUCK, OFF-HIGHWAY, RIGID FRAME, 78.7 CY, 100 TON, 4X4, REAR DUMP	1,042 HP D-off		$827,897	155.85	31.42	32.58	15.13	41.45	1,542
	T55KM013	HD1500-5	TRUCK, OFF-HIGHWAY, RIGID FRAME, 102 CY, 165 TON, 4X4, REAR DUMP	1,486 HP D-off		$1,916,703	311.23	73.66	77.24	35.04	59.11	5,500
	T55KM014	730E	TRUCK, OFF-HIGHWAY, RIGID FRAME, 145 CY, 205 TON, 4X4, REAR DUMP	2,000 HP D-off		$2,265,460	393.13	85.21	87.60	41.41	79.56	7,150
	SUBCATEGORY 0.20		**ARTICULATED FRAME**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T55CA008	D25D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 18 CY, 25 TON, 4X4, REAR DUMP	260 HP D-off		$358,328	80.22	17.79	22.16	6.71	14.60	429
	T55CA009	D30D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 22 CY, 30 TON, 4X4, REAR DUMP	285 HP D-off		$424,116	92.98	21.13	26.35	7.95	16.01	473
	T55CA010	D250D SERIES II	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 18 CY, 25 TON, 6X6, REAR DUMP	214 HP D-off		$357,058	74.91	17.99	22.59	6.69	12.02	424
	T55CA011	D300E SERIES II	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 22 CY, 30 TON, 6X6, REAR DUMP	260 HP D-off		$421,944	89.63	21.18	26.56	7.90	14.60	488
	T55CA012	D350E SERIES II	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 25 CY, 35 TON, 6X6, REAR DUMP	355 HP D-off		$517,541	115.26	25.67	31.93	9.70	19.94	666
	T55CA013	D400E SERIES II	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 28 CY, 40 TON, 6X6, REAR DUMP	405 HP D-off		$569,630	129.09	28.12	34.90	10.67	22.74	698

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
			DEERE & COMPANY									
	T55JD001	250D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 18 CY, 25 TON, 6X6, REAR DUMP	265 HP D-off		$280,381	66.89	13.90	17.30	5.25	14.88	355
	T55JD002	300D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 22 CY, 29 TON, 6X6, REAR DUMP	285 HP D-off		$322,219	74.93	16.06	20.03	6.04	16.01	401
	T55JD003	350D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 25 CY, 35 TON, 6X6, REAR DUMP	380 HP D-off		$415,253	99.88	20.43	25.30	7.78	21.34	571
	T55JD004	400D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 29 CY, 40 TON, 6X6, REAR DUMP	413 HP D-off		$466,024	112.07	22.84	28.22	8.73	23.19	635
			Komatsu America International Company									
	T55KM015	HM350-1	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 19.1-25.9 CY, 35.7 TON, 6 X 6 X 2, REAR DUMP	389 HP D-off		$506,020	115.20	25.10	31.23	9.48	21.85	630
	T55KM016	HM400-1	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 21.6-29.2 CY, 40.3 TON, 6 X 6 X 2, REAR DUMP	430 HP D-off		$577,753	131.32	28.59	35.53	10.82	24.15	668
			VOLVO CONSTRUCTION EQUIPMENT GROUP									
	T55VO002	A-25D 4X4	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 14-18 CY, 25 TON, 4X4, REAR DUMP	251 HP D-off		$290,495	68.65	14.33	17.77	5.44	14.10	348
	T55VO003	A-25D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 14-18 CY, 25 TON, 6X6, REAR DUMP	251 HP D-off		$306,995	70.71	15.24	18.97	5.75	14.10	392
	T55VO005	A-30D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 17-22 CY, 30 TON, 6X6, REAR DUMP	296 HP D-off		$358,509	79.54	18.06	22.68	6.72	16.62	461
	T55VO004	A-35D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 19-25 CY, 35 TON, 6X6, REAR DUMP	322 HP D-off		$423,030	97.84	20.80	25.75	7.92	18.08	567
	T55VO006	A-40D	TRUCK, OFF-HIGHWAY, ARTICULATED FRAME, 21-29 CY, 40 TON, 6X6, REAR DUMP	395 HP D-off		$476,123	114.19	23.20	28.56	8.92	22.18	660
T56	**TRUCKS,OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS**											
	SUBCATEGORY 0.10		**PRIME MOVER TRACTORS**									
			CATERPILLAR INC. (MACHINE DIVISION)									
	T56CA006	776D	TRUCK, OFF-HIGHWAY, RIGID FRAME, PRIME MOVER TRACTOR, 4X4	938 HP D-off		$1,160,857	197.04	44.59	46.73	21.22	41.70	1,164

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
T57	**TRUCKS, VACUUM**											
	SUBCATEGORY 0.00		**TRUCKS, VACUUM**									
			CUSCO INDUSTRIES									
	T57CU001	INDUSTRIAL VAC 130	TRUCK, VACUUM, 5,500 GAL, 750 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	76 HP D-off		$86,321	23.82	5.14	6.85	1.71	5.51	76
	T57CU002	SS INDUST. VAC 130	TRUCK, VACUUM, 5,500 GAL, 750 CFM, STAINLESS STEEL, REAR DOOR & HYDRAULIC DUMP SYSTEM	76 HP D-off		$105,267	27.61	6.28	8.37	2.09	5.51	76
	T57CU003	2527	TRUCK, VACUUM, 5,500 GAL, 2,100 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	115 HP D-off		$155,823	40.89	9.30	12.41	3.09	8.34	115
	T57CU004	3827	TRUCK, VACUUM, 5,500 GAL, 3,170 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	177 HP D-off		$178,602	50.52	10.66	14.23	3.54	12.84	177
	T57CU005	5327	TRUCK, VACUUM, 5,500 GAL, 4,550 CFM, REAR DOOR & HYDRAULIC DUMP SYSTEM	335 HP D-off		$195,245	66.80	11.66	15.57	3.87	24.30	335
T60	**TRUCKS, WATER, OFF-HIGHWAY**											
	SUBCATEGORY 0.00		**TRUCKS, WATER, OFF-HIGHWAY**									
			KLEIN PRODUCTS, INC.									
	T60KI001	KT-50	TRUCK, WATER, OFF-HIGHWAY, 5,000 GAL, W/CAT 613C TRACTOR	175 HP D-off		$232,921	54.33	11.99	14.88	4.55	12.69	320
	T60KI002	KT-60	TRUCK, WATER, OFF-HIGHWAY, 6,000 GAL, W/CAT 621E TRACTOR	330 HP D-off		$359,261	91.80	18.18	22.34	7.01	23.94	580
	T60KI003	KT-80	TRUCK, WATER, OFF-HIGHWAY, 8,000 GAL, W/CAT 631E TRACTOR	450 HP D-off		$577,667	137.92	29.61	36.66	11.28	32.64	751
	T60KI004	KT-100	TRUCK, WATER, OFF-HIGHWAY, 10,000 GAL, W/CAT 631E TRACTOR	450 HP D-off		$124,701	65.08	5.66	6.46	2.43	32.64	811
	T60KI006	KT-120	TRUCK, WATER, OFF-HIGHWAY, 12,000 GAL, W/CAT 651E TRACTOR	550 HP D-off		$700,230	174.10	35.09	42.83	13.67	39.90	1,097
			SOUTHWEST CONSTRUCTION EQUIPMENT CO.									
	T60SO001	STT-60	TRUCK, WATER, OFF-HIGHWAY, 6,000 GAL, W/CAT 621E TRACTOR	330 HP D-off		$415,642	100.87	21.16	26.10	8.11	23.94	610

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	ID.NO.	MODEL	REGION 12 EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		ENGINE HORSEPOWER FUEL TYPE CARRIER		VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	TOTAL HOURLY RATES ($/HR) STANDBY	ADJUSTABLE ELEMENTS DEPR	ADJUSTABLE ELEMENTS FCCM	ADJUSTABLE ELEMENTS FUEL	CWT
T60			***SOUTHWEST CONSTRUCTION EQUIPMENT CO. (continued)***											
	T60SO002	STT-80	TRUCK, WATER, OFF-HIGHWAY, 8,000 GAL, W/CAT 631E TRACTOR	450 HP	D-off			$572,958	142.30	28.72	35.08	11.18	32.64	812
	T60SO003	STT-100	TRUCK, WATER, OFF-HIGHWAY, 10,000 GAL, W/CAT 631E TRACTOR	450 HP	D-off			$581,928	143.75	29.20	35.68	11.36	32.64	897
	T60SO004	STT-120	TRUCK, WATER, OFF-HIGHWAY, 12,000 GAL, W/CAT 651E TRACTOR	550 HP	D-off			$723,338	172.91	36.91	45.57	14.12	39.90	1,149
	T60SO005	STT-140	TRUCK, WATER, OFF-HIGHWAY, 14,000 GAL, W/CAT 651E TRACTOR	550 HP	D-off			$735,518	174.87	37.55	46.38	14.36	39.90	1,184
T65	**TUNNEL/MINING EQUIPMENT**													
	SUBCATEGORY 0.10		**DRIFTING & TUNNELING DRILLS**											
			ATLAS COPCO WAGNER											
	T65WG012	L2C	TUNNELING DRILL, 2 BOOM, 560-1,120 SF CROSS SECTION, RUBBER TIRED (ADD DRILL BITS AND DRILL STEEL COST)	158 HP	E	156 HP	D-off	$1,408,830	276.06	68.82	85.10	26.27	27.72	520
	T65WG013	WL2C	TUNNELING DRILL, 4 BOOM, 700-1,600 SF CROSS SECTION, RUBBER TIRED (ADD DRILL BITS AND DRILL STEEL COST)	158 HP	E	156 HP	D-off	$2,117,109	392.61	103.52	128.10	39.47	27.72	728
	T65WG014	WL4C	TUNNELING DRILL, 4 BOOM, 700-1,650 SF CROSS SECTION, RUBBER TIRED (ADD DRILL BITS AND DRILL STEEL COST)	380 HP	E	224 HP	D-off	$2,306,448	481.64	112.80	139.59	43.00	64.55	1,058
W25	**WATER & CO2 BLASTERS**													
	SUBCATEGORY 0.10		**LOW PRESSURE, (< 5,000 PSI)**											
			SIOUX STEAM CLEANER CORPORATION											
	W25SD006	S1.7 D250	WATER BLASTER, LOW PRESSURE, STEAM CLEANER, 100 GPH, 250 PSI, 1.7 GPM	1 HP	E		D-off	$4,026	6.56	0.50	0.81	0.09	0.19	4
	W25SD007	S2 D250	WATER BLASTER, LOW PRESSURE, STEAM CLEANER, 120 GPH, 250 PS, 2.0 GPM	1 HP	E		D-off	$4,268	7.69	0.53	0.85	0.10	0.19	5
	W25SD008	S2.7 D250	WATER BLASTER, LOW PRESSURE, STEAM CLEANER, 160 GPH, 250 PSI, 2.7 GPM	1 HP	E		D-off	$4,569	8.85	0.56	0.91	0.10	0.19	6
	W25SD001	513-5-E	WATER BLASTER, LOW PRESSURE, COLD WATER, 1,440 PSI, 5 GPM	5 HP	E			$5,668	4.61	0.70	1.13	0.13	0.96	4

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
W25			***SIOUX STEAM CLEANER CORPORATION (continued)***										
	W25SD005	514-4-G	WATER BLASTER, LOW PRESSURE, COLD WATER, 2,500 PSI, 4 GPM	11 HP	G		$7,972	7.49	0.98	1.59	0.18	2.69	4
	W25SD003	515-5-G	WATER BLASTER, LOW PRESSURE, COLD WATER, 3,000 PSI, 5 GPM	14 HP	G		$9,439	9.13	1.16	1.89	0.21	3.42	5
	W25SD004	H3.5*3000	WATER BLASTER, LOW PRESSURE, HOT WATER, 3,000 PSI, 3.5 GPM, TRAILER MTD	8 HP	G		$7,687	6.43	0.91	1.48	0.17	1.95	6
	W25SD009	SF11	WATER BLASTER, LOW PRESSURE, STEAM GENERATOR, 15 PSI, 355 LB/HR STEAM, 55 GAL BOILER	11 HP	E		$10,602	15.08	1.30	2.12	0.24	2.11	9
	W25SD002	EN-140-H4-1800	WATER BLASTER, LOW PRESSURE, HOT WATER, 1,800 PSI, 2.3 GPM	3 HP	E		$10,829	6.97	1.33	2.17	0.24	0.58	7
			NO SPECIFIC MANUFACTURER										
	W25XX005	COLD 3/1000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 700 PSI, 3 GPM	5 HP	G		$1,773	2.36	0.22	0.35	0.04	1.22	4
	W25XX006	COLD 4/1000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 1,200 PSI, 3 GPM	5 HP	G		$2,458	2.74	0.30	0.49	0.05	1.22	4
	W25XX007	COLD 4/2000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 2,000 PSI, 4 GPM	8 HP	G		$3,248	4.00	0.40	0.65	0.07	1.95	2
	W25XX008	COLD 4/3000G	WATER BLASTER, LOW PRESSURE, COLD WATER, 3,000 PSI, 4 GPM	11 HP	G		$3,433	4.94	0.43	0.69	0.08	2.69	6
	W25XX009	HOT 4/1000G	WATER BLASTER, LOW PRESSURE, HOT WATER/STEAM, 1,000 PSI, 4 GPM	8 HP	G		$6,815	6.01	0.83	1.36	0.15	1.95	6
	W25XX010	HOT 6/3000G	WATER BLASTER, LOW PRESSURE, HOT WATER/STEAM, 3,000 PSI, 6 GPM	24 HP	G		$10,449	12.41	1.28	2.09	0.23	5.86	10
	SUBCATEGORY 0.20		**HIGH PRESSURE, (>= 5,000 PSI)**										
			NLB CORPORATION										
	W25NL001	6200E	WATER BLASTER, HIGH PRESSURE, 6,000 PSI, 50 GPM, SKID MTD, W/MODEL 10200 PUMP	200 HP	E		$64,748	94.86	7.93	12.95	1.45	38.38	118
	W25NL003	201536D	WATER BLASTER, HIGH PRESSURE, 20,000 PSI, 13.2 GPM, SKID MTD, W/50 LF HOSE & CLEANING LANCE	150 HP	D-off		$69,228	59.12	8.48	13.85	1.55	15.80	78
	W25NL002	20253D	WATER BLASTER, HIGH PRESSURE, 20,000 PSI, 22 GPM, SKID MTD (ADD TRUCK, FLATBED TRAILER & WATER TANKER)	335 HP	D-off		$108,266	104.40	13.25	21.65	2.42	35.28	140

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
W25			***NLB CORPORATION (continued)***									
	W25NL005	20600D	WATER BLASTER, HIGH PRESSURE, 20,000 PSI, 53 GPM, SKID MTD (ADD TRUCK, FLATBED TRAILER & WATER TANKER)	700 HP D-off		$263,771	240.50	32.27	52.75	5.89	73.71	200
	W25NL004	4400	WATER BLASTER, HIGH PRESSURE, HYDRODEMOLITION UNIT, CONCRETE BUSTER, SELF PROPELLED (ADD MODEL 20600D WATER BLASTER)	34 HP D-off		$140,958	87.19	16.94	27.58	3.15	3.58	80
	SUBCATEGORY 0.30		**STEAM CLEANERS**									
			ALKOTA CLEANING SYSTEMS, INC.									
	W25AO002	122	WATER BLASTER, STEAM CLEANER, 400 PSI, 1.7 GPM	1 HP E		$3,653	3.09	0.45	0.73	0.08	0.19	4
	W25AO003	181	WATER BLASTER, STEAM CLEANER, 250 PSI, 3.0 GPM	1 HP E		$5,277	4.02	0.65	1.06	0.12	0.19	6
	W25AO004	240	WATER BLASTER, STEAM CLEANER, 350 PSI, 4.0 GPM	2 HP E		$5,148	4.46	0.63	1.03	0.11	0.38	7
	W25AO005	301	WATER BLASTER, STEAM CLEANER, 400 PSI, 5.0 GPM	4 HP E		$10,537	8.59	1.30	2.11	0.24	0.77	14
	W25AO006	246	WATER BLASTER, STEAM GENERATOR, 100 PSI, 1.0 GPM	1 HP E		$8,035	5.57	0.99	1.61	0.18	0.19	7
	SUBCATEGORY 0.40		**CO2 BLASTERS**									
			COLD JET									
	W25CJ001	P750B	CARBON DIOXIDE (CO2) BLASTER, 600 LBS/HR, SINGLE HOSE DELIVERY (ADD 65-100 CFM COMPRESSOR)	20 HP E		$61,882	26.87	5.43	8.25	1.30	2.83	34
	W25CJ002	P1500B	CARBON DIOXIDE (CO2) BLASTER, 1,200 LBS/HR, SINGLE HOSE DELIVERY (ADD 65-150 CFM COMPRESSOR)	24 HP E		$97,476	40.64	8.54	13.00	2.04	3.39	37
	W25CJ003	P3000B	CARBON DIOXIDE (CO2) BLASTER, 1,200 LBS/HR, DUAL HOSE DELIVERY (ADD 65-200 CFM COMPRESSOR)	24 HP E		$152,879	60.67	13.39	20.38	3.20	3.39	66

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN	CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
	SUBCATEGORY 0.50		**WET ABRASIVE BLASTING SYSTEM (TORBO)**									
			KEIZER TECHNOLOGIES AMERICAS, INC									
	W25KZ001	TORBO M120	WATER BLASTER, WET ABRASIVE BLASTER, 4.2 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 350 CFM AIR COMPRESSOR)	350 CFM A		$18,326	2.50	1.00	1.19	0.40	0.00	4
	W25KZ002	TORBO M120	WATER BLASTER, WET ABRASIVE BLASTER, 4.2 CF TANK CAP, 170 PSI, W/MIX RUST INHIBITOR INJECTOR (INCLUDES HOSES & NOZZLE, ADD 350 CFM AIR COMPRESSOR)	350 CFM A		$20,283	2.77	1.10	1.32	0.44	0.00	4
	W25KZ003	LOC RESTORATION UNIT	WATER BLASTER, WET ABRASIVE BLASTER, 4.2 CF TANK CAP, 170 PSI, W/LOC RESTORATION UNIT (INCLUDES HOSES & NOZZLE, ADD 350 CFM AIR COMPRESSOR)	350 CFM A		$20,735	2.83	1.13	1.35	0.45	0.00	4
	W25KZ004	TORBO M320	WATER BLASTER, WET ABRASIVE BLASTER, 13.0 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM A		$29,528	4.03	1.60	1.92	0.64	0.00	8
	W25KZ005	TORBO XL320	WATER BLASTER, WET ABRASIVE BLASTER, 13.0 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM A		$34,847	4.77	1.90	2.27	0.76	0.00	8
	W25KZ006	TORBO XL320	WATER BLASTER, WET ABRASIVE BLASTER, 19.0 CF TANK CAP, 170 PSI, (INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM A		$35,527	4.85	1.93	2.31	0.77	0.00	9
	W25KZ007	TORBO XL320	WATER BLASTER, WET ABRASIVE BLASTER, 19.0 CF TANK CAP, 170 PSI, W/MIX RUST INHIBATOR INJECTOR,(INCLUDES HOSES & NOZZLE, ADD 385 CFM AIR COMPRESSOR)	385 CFM A		$37,886	5.17	2.05	2.46	0.82	0.00	9

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
W30	**WATER TANKS**												
	SUBCATEGORY 0.10		**PORTABLE WITH WHEELS**										
			SOUTHWEST CONSTRUCTION EQUIPMENT CO.										
	W30SO001	EWT-8C	WATER TANK, PORTABLE, TRAILER MTD, SELF ELEVATING, 8,000 GAL, 10" PIPE	8 HP	G		$47,762	8.93	2.46	3.05	0.93	1.34	130
	W30SO002	EWT-10C	WATER TANK, PORTABLE, TRAILER MTD, SELF ELEVATING, 10,000 GAL, 10" PIPE	8 HP	G		$57,195	10.35	2.96	3.68	1.12	1.34	170
	W30SO003	EWT-12C	WATER TANK, PORTABLE, TRAILER MTD, SELF ELEVATING, 12,000 GAL, 10" PIPE	8 HP	G		$62,241	11.09	3.22	4.01	1.21	1.34	185
	SUBCATEGORY 0.20		**SKID MOUNTED**										
			SOUTHWEST CONSTRUCTION EQUIPMENT CO.										
	W30SO004	WST-8	WATER TANK, PORTABLE, SKID MTD, 8,000 GAL, 10" PIPE				$30,887	4.31	1.63	2.06	0.60	0.00	107
	W30SO005	WST-10	WATER TANK, PORTABLE, SKID MTD, 10,000 GAL, 10" PIPE				$34,525	4.82	1.82	2.30	0.67	0.00	122
	W30SO006	WST-12	WATER TANK, PORTABLE, SKID MTD, 12,000 GAL, 10" PIPE				$39,845	5.57	2.11	2.66	0.78	0.00	142
W35	**WELDERS**												
	SUBCATEGORY 0.10		**ENGINE DRIVEN**										
			NO SPECIFIC MANUFACTURER										
	W35XX020	GAS 150 AC	WELDER, ENGINE DRIVEN, GAS, AC, 150 AMP, 4.5 KW, PORTABLE, SKID MTD	11 HP	G		$2,161	3.00	0.15	0.20	0.05	2.25	2
	W35XX021	GAS 225 AC/DC-CC	WELDER, ENGINE DRIVEN, GAS, AC/DC-CC, 225 AMP, 5-8 KW, TRAILER MTD	17 HP	G		$5,719	5.19	0.38	0.52	0.12	3.48	6
	W35XX022	GAS 250 AC/DC-CC/CV	WELDER, ENGINE DRIVEN, GAS, AC/DC-CC/CV, 250 AMP, 9 KW, TRAILER MTD	18 HP	G		$5,891	5.44	0.39	0.53	0.12	3.68	6
	W35XX023	GAS 300 DC-CC	WELDER, ENGINE DRIVEN, GAS, DC-CC, 300 AMP, 3 KW, TRAILER MTD	45 HP	G		$10,231	12.59	0.68	0.94	0.21	9.20	14
	W35XX024	DIESEL 400 DC-CC/CV	WELDER, ENGINE DRIVEN, DIESEL, DC-CC/CV, 400 AMP, 2-10 KW, TRAILER MTD	48 HP	D-off		$15,113	8.25	1.02	1.40	0.32	4.27	21

Table 2-1. HOURLY EQUIPMENT OWNERSHIP AND OPERATING EXPENSE

CAT	REGION 12 ID.NO.	MODEL	EQUIPMENT DESCRIPTION	ENGINE HORSEPOWER FUEL TYPE MAIN		CARRIER	VALUE (TEV) 2004 ($)	TOTAL HOURLY RATES ($/HR) AVERAGE	STANDBY	ADJUSTABLE ELEMENTS DEPR	FCCM	FUEL	CWT
W35			***NO SPECIFIC MANUFACTURER (continued)***										
	W35XX025	DIESEL 500 DC-CC/CV	WELDER, ENGINE DRIVEN, DIESEL, DC-CC/CV, 500 AMP, 4 KW, TRAILER MTD	42 HP	D-off		$14,466	7.49	0.97	1.34	0.30	3.73	18
	SUBCATEGORY 0.20		**ELECTRIC DRIVEN**										
			LINCOLN ELECTRIC COMPANY										
	W35LC018	SP-175T	WELDER, ELECTRIC DRIVEN, 170 AMP, WIRE FEEDER	5 HP	E		$921	0.68	0.08	0.12	0.02	0.30	1
	W35LC010	LINCWELD 225/125	WELDER, ELECTRIC DRIVEN, 225 AMP, STICK	15 HP	E		$505	1.46	0.05	0.07	0.01	0.91	1
	W35LC011	IDEAL ARC R3R-300	WELDER, ELECTRIC DRIVEN, 300 AMP, STICK	27 HP	E		$2,776	3.12	0.25	0.37	0.06	1.64	4
	W35LC012	IDEAL ARC R3R-400	WELDER, ELECTRIC DRIVEN, 400 AMP, STICK	35 HP	E		$3,202	3.94	0.29	0.43	0.07	2.12	5
	W35LC013	IDEAL ARC R3R-500	WELDER, ELECTRIC DRIVEN, 500 AMP, STICK	41 HP	E		$3,202	4.47	0.29	0.43	0.07	2.48	5
	W35LC020	PROCUT 80	WELDER, ELECTRIC DRIVEN, 85 AMP, PLASMA CUTTING TORCH	26 HP	E		$3,530	3.23	0.31	0.47	0.07	1.58	1

Table 2-2. Hourly Rate Elements

This Table Contains All Hourly Rate Elements as

Described in Chapter 2

For

Average and Severe Operating Conditions.

Refer to Chapter 2, Section II. Operating Condition

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
A10																	
	A10AR001	0.51	0.08	0.00	0.00	0.00	0.00	0.48	1.07								
	A10AR002	1.30	0.20	0.00	0.20	0.00	0.00	1.21	2.91								
	A10RS003	9.62	2.00	12.09	1.35	0.61	0.10	11.27	37.04								
	A10RS004	9.69	2.02	12.09	1.35	0.61	0.10	11.35	37.21								
	A10RS005	9.74	2.03	12.09	1.35	0.61	0.10	11.41	37.33								
	A10RS006	9.76	2.03	12.09	1.35	0.61	0.10	11.43	37.37								
	A10RS007	9.88	2.06	12.09	1.35	0.61	0.10	11.58	37.67								
	A10RS008	18.99	3.93	16.31	1.82	0.92	0.15	22.23	64.35								
	A10SE001	1.62	0.25	0.00	0.00	0.00	0.00	1.51	3.38								
	A10SE002	1.92	0.30	0.00	0.00	0.00	0.00	1.79	4.01								
A15																	
	A15IA001	1.62	0.41	4.72	0.62	0.07	0.01	1.85	9.30								
	A15IA002	3.53	0.88	9.27	1.21	0.07	0.01	4.01	18.98								
	A15IA003	4.20	1.06	14.66	1.92	0.17	0.03	4.79	26.83								
	A15IA004	4.20	1.06	14.66	1.92	0.17	0.03	4.79	26.83								
	A15IA005	4.20	1.06	14.66	1.92	0.17	0.03	4.79	26.83								
	A15IA006	9.32	2.34	25.27	3.30	0.35	0.06	10.61	51.25								
	A15IA007	9.77	2.45	25.27	3.30	0.35	0.06	11.12	52.32								
	A15IA008	7.34	1.85	28.22	3.69	0.35	0.06	8.36	49.87								
	A15IA009	7.36	1.86	26.11	3.41	0.35	0.06	8.38	47.53								
	A15IA010	13.17	3.30	33.70	4.40	0.35	0.06	14.98	69.96								
	A15SR002	11.44	2.88	37.07	4.84	0.52	0.09	13.02	69.86								
	A15SR004	1.17	0.30	6.57	0.86	0.07	0.01	1.33	10.31								
	A15SR005	1.55	0.39	6.74	0.88	0.07	0.01	1.76	11.40								
	A15SR006	1.07	0.27	6.40	0.84	0.07	0.01	1.22	9.88								
	A15SR007	1.07	0.27	6.49	0.85	0.07	0.01	1.22	9.98								
	A15SR008	2.46	0.63	10.36	1.35	0.17	0.03	2.80	17.80								
	A15SR009	2.46	0.63	10.45	1.37	0.17	0.03	2.80	17.91								
	A15SR010	4.51	1.15	19.38	2.53	0.35	0.06	5.15	33.13								
	A15SR011	5.17	1.31	25.27	3.30	0.35	0.06	5.89	41.35								
	A15SR012	5.09	1.29	25.27	3.30	0.35	0.06	5.80	41.16								
	A15SR013	9.59	2.41	37.91	4.95	0.35	0.06	10.91	66.18								
	A15SR014	10.10	2.57	37.91	4.95	0.68	0.11	11.52	67.84								
	A15SR015	9.82	2.50	44.23	5.78	0.68	0.11	11.21	74.33								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
A15	***cont.***																
	A15XX019	0.68	0.18	5.79	0.86	0.07	0.01	0.78	8.37								
	A15XX020	1.33	0.34	2.53	0.33	0.07	0.01	1.51	6.12								
	A15XX021	0.91	0.23	9.66	1.44	0.07	0.01	1.04	13.36								
	A15XX022	1.35	0.34	2.95	0.39	0.07	0.01	1.54	6.65								
	A15XX023	0.97	0.25	12.55	1.87	0.07	0.01	1.10	16.82								
	A15XX024	1.52	0.38	4.21	0.55	0.07	0.01	1.73	8.47								
	A15XX025	1.06	0.27	11.59	1.73	0.07	0.01	1.21	15.94								
	A15XX026	1.71	0.43	5.90	0.77	0.07	0.01	1.95	10.84								
	A15XX027	1.10	0.28	17.38	2.59	0.07	0.01	1.26	22.69								
	A15XX028	1.75	0.44	6.74	0.88	0.07	0.01	1.99	11.88								
	A15XX029	1.19	0.30	13.52	2.02	0.07	0.01	1.36	18.47								
	A15XX030	2.32	0.58	7.16	0.94	0.07	0.01	2.64	13.72								
	A15XX031	3.40	0.85	9.27	1.21	0.07	0.01	3.86	18.67								
	A15XX032	3.06	0.77	9.69	1.27	0.17	0.03	3.49	18.48								
	A15XX033	4.09	1.05	14.32	1.87	0.35	0.06	4.67	26.41								
	A15XX034	5.69	1.44	21.06	2.75	0.35	0.06	6.49	37.84								
	A15XX035	6.06	1.53	23.17	3.03	0.35	0.06	6.91	41.11								
	A15XX036	6.54	1.65	23.17	3.03	0.35	0.06	7.45	42.25								
	A15XX037	6.98	1.76	26.11	3.41	0.35	0.06	7.95	46.62								
	A15XX038	10.67	2.68	30.33	3.96	0.35	0.06	12.14	60.19								
	A15XX039	11.16	2.81	38.75	5.06	0.46	0.08	12.70	71.02								
	A15XX040	11.98	3.01	42.12	5.50	0.46	0.08	13.63	76.78								
	A15XX041	0.16	0.04	0.76	0.40	0.00	0.00	0.14	1.50								
	A15XX042	0.21	0.06	1.06	0.56	0.00	0.00	0.19	2.08								
	A15XX043	0.31	0.08	1.52	0.80	0.00	0.00	0.29	3.00								
	A15XX044	0.37	0.10	2.27	1.19	0.00	0.00	0.34	4.27								
	A15XX045	0.52	0.14	3.79	1.99	0.00	0.00	0.48	6.92								
	A15XX046	0.64	0.17	4.55	2.39	0.00	0.00	0.59	8.34								
A20																	
	A20CK001	0.24	0.03	0.00	0.00	0.00	0.00	0.49	0.76								
	A20CK002	0.14	0.02	0.00	0.00	0.00	0.00	0.28	0.44								
	A20CK003	0.27	0.04	0.00	0.00	0.00	0.00	0.54	0.85								
	A20CK005	0.34	0.04	0.00	0.00	0.00	0.00	0.68	1.06								
	A20CK006	0.19	0.02	0.00	0.00	0.00	0.00	0.37	0.58								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
A20	***cont.***																
	A20CK008	0.20	0.03	0.00	0.00	0.00	0.00	0.41	0.64								
	A20CK010	0.22	0.03	0.00	0.00	0.00	0.00	0.44	0.69								
	A20CM010	0.50	0.07	0.00	0.06	0.00	0.00	1.00	1.63								
	A20CM011	0.55	0.07	0.00	0.06	0.00	0.00	1.12	1.80								
	A20CM012	0.59	0.08	0.00	0.13	0.00	0.00	1.20	2.00								
	A20CM013	2.59	0.35	0.00	0.28	0.11	0.02	5.25	8.60								
	A20CM014	3.16	0.45	0.00	0.41	0.29	0.05	6.43	10.79								
	A20CM015	3.60	0.51	0.00	0.50	0.31	0.05	7.33	12.30								
	A20CM016	2.16	0.28	0.00	0.30	0.00	0.00	4.36	7.10								
	A20CM017	0.13	0.01	0.00	0.00	0.00	0.00	0.27	0.41								
	A20CM018	0.14	0.01	0.00	0.00	0.00	0.00	0.29	0.44								
	A20CM019	0.16	0.01	0.00	0.00	0.00	0.00	0.34	0.51								
	A20CM020	0.13	0.01	0.00	0.00	0.00	0.00	0.28	0.42								
	A20WC002	0.23	0.03	0.26	0.28	0.00	0.00	0.46	1.26								
	A20WC004	0.60	0.08	0.67	0.10	0.00	0.00	1.21	2.66								
	A20XX001	0.33	0.03	0.00	0.00	0.00	0.00	0.63	0.99								
	A20XX002	0.38	0.03	0.00	0.00	0.00	0.00	0.73	1.14								
	A20XX003	0.48	0.04	0.00	0.00	0.00	0.00	0.91	1.43								
	A20XX004	0.62	0.05	0.00	0.00	0.00	0.00	1.18	1.85								
	A20XX005	0.88	0.07	0.00	0.00	0.00	0.00	1.68	2.63								
	A20XX006	1.08	0.09	0.00	0.00	0.00	0.00	2.06	3.23								
	A20XX007	1.33	0.11	0.00	0.00	0.00	0.00	2.55	3.99								
	A20XX008	1.78	0.14	0.00	0.00	0.00	0.00	3.41	5.33								
	A20XX021	0.17	0.02	0.00	0.00	0.00	0.00	0.34	0.53								
	A20XX022	0.20	0.03	0.00	0.00	0.00	0.00	0.40	0.63								
	A20XX023	0.24	0.03	0.00	0.00	0.00	0.00	0.48	0.75								
	A20XX024	0.24	0.03	0.00	0.00	0.00	0.00	0.49	0.76								
	A20XX025	0.34	0.05	0.00	0.00	0.00	0.00	0.70	1.09								
A25																	
	A25RS006	8.14	1.07	0.00	1.16	0.00	0.00	9.56	19.93								
	A25RS008	9.36	1.23	0.00	1.80	0.00	0.00	10.99	23.38								
	A25XX001	6.88	0.91	0.00	0.64	0.00	0.00	8.08	16.51								
	A25XX002	8.04	1.06	0.00	1.51	0.00	0.00	9.44	20.05								
	A25XX003	8.81	1.16	0.00	2.09	0.00	0.00	10.35	22.41								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
A30																	
	A30BG003	36.12	6.97	12.57	3.14	3.29	0.54	53.18	115.81								
	A30BG004	32.63	6.02	8.91	2.66	0.00	0.00	47.72	97.94								
	A30BG005	37.83	6.98	12.57	3.14	0.00	0.00	55.31	115.83								
	A30BG007	28.02	5.35	7.80	2.52	1.92	0.32	41.18	87.11								
	A30BG009	30.48	5.81	11.06	1.45	2.37	0.39	44.79	96.35								
	A30BK010	14.42	2.78	3.74	0.49	1.41	0.23	21.22	44.29								
	A30BK011	25.42	4.87	8.51	1.11	1.92	0.32	37.38	79.53								
	A30BK013	26.99	5.16	11.54	1.51	2.05	0.34	39.69	87.28								
	A30BK015	31.07	5.92	14.64	1.91	2.37	0.39	45.65	101.95								
	A30BK017	33.84	6.25	14.64	1.91	0.00	0.00	49.48	106.12								
	A30BK018	34.80	6.42	14.64	1.91	0.00	0.00	50.89	108.66								
	A30BK019	20.29	3.81	8.35	1.09	0.67	0.11	29.75	64.07								
	A30BK020	26.18	4.90	13.76	1.80	0.80	0.13	38.36	85.93								
	A30BK021	34.35	6.34	14.00	1.83	0.00	0.00	50.23	106.75								
	A30BK022	25.20	4.83	11.54	1.51	2.05	0.34	37.07	82.54								
	A30BK023	29.46	5.44	11.54	1.51	0.00	0.00	43.08	91.03								
	A30BK024	24.43	6.22	13.35	1.74	1.54	0.25	30.52	78.05								
	A30CA002	26.36	5.04	8.51	1.11	1.93	0.32	38.76	82.03								
	A30CA007	8.57	2.18	7.76	1.01	0.42	0.07	10.70	30.71								
	A30CA008	30.62	5.88	13.84	1.81	2.66	0.44	45.04	100.29								
	A30CA009	38.95	7.19	13.76	1.80	0.00	0.00	56.95	118.65								
	A30CA013	27.60	5.09	9.63	1.26	0.00	0.00	40.35	83.93								
	A30CA014	27.82	5.32	12.17	1.59	2.37	0.39	40.90	90.56								
	A30CA015	45.97	8.48	13.84	1.81	0.00	0.00	67.22	137.32								
	A30CA016	35.73	6.59	13.76	1.80	0.00	0.00	52.25	110.13								
	A30CH001	24.50	4.70	8.75	1.14	1.92	0.32	36.04	77.37								
	A30CH002	26.73	5.12	12.09	1.58	2.05	0.34	39.31	87.22								
	A30CH003	27.96	5.16	12.09	1.58	0.00	0.00	40.88	87.67								
	A30CH004	28.05	5.39	12.09	1.58	2.25	0.37	41.26	90.99								
	A30CH005	30.64	5.88	13.76	1.80	2.66	0.44	45.08	100.26								
	A30CH006	37.06	6.84	15.91	2.08	0.00	0.00	54.20	116.09								
	A30EJ001	20.66	3.98	10.34	1.35	1.62	0.27	30.40	68.62								
	A30EJ002	23.92	4.42	10.34	1.35	0.00	0.00	34.98	75.01								
	A30EJ003	23.97	4.62	13.68	1.79	2.33	0.38	35.29	82.06								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
A30	***cont.***																
	A30EJ004	27.63	5.10	13.68	1.79	0.00	0.00	40.40	88.60								
	A30EJ005	25.98	5.17	13.68	1.79	3.96	0.65	38.43	89.66								
	A30EJ006	30.64	5.65	13.68	1.79	0.00	0.00	44.80	96.56								
	A30GC002	3.62	0.68	1.99	0.26	0.18	0.03	5.32	12.08								
	A30GC004	5.32	0.98	3.26	0.43	0.00	0.00	7.78	17.77								
	A30LD001	9.66	2.50	7.98	1.04	1.01	0.17	12.11	34.47								
	A30MP001	9.64	2.39	5.80	0.76	0.00	0.00	11.98	30.57								
	A30MP002	12.58	3.12	7.25	0.95	0.00	0.00	15.64	39.54								
	A30RT001	35.98	8.92	19.95	2.61	0.05	0.01	44.71	112.23								
	A30RT002	37.70	9.36	19.95	2.61	0.17	0.03	46.86	116.68								
	A30XX001	8.56	2.56	7.46	0.82	0.75	0.12	7.35	27.62								
	A30XX002	10.70	3.13	7.46	0.82	0.00	0.00	9.15	31.26								
A35																	
	A35AE001	1.15	0.19	0.84	2.08	0.07	0.01	1.45	5.79								
	A35AE002	1.20	0.20	0.84	2.78	0.07	0.01	1.51	6.61								
	A35AE003	1.32	0.21	0.84	3.13	0.04	0.01	1.65	7.20								
	A35AE004	1.45	0.24	0.84	4.03	0.04	0.01	1.82	8.43								
	A35AE005	1.56	0.26	0.84	6.23	0.09	0.01	1.95	10.94								
A40																	
	A40CA008	57.55	9.04	52.65	6.88	0.00	0.00	89.42	215.54								
	A40CA009	80.83	12.69	65.81	8.60	0.00	0.00	125.60	293.53								
	A40CW001	101.80	15.99	84.24	11.01	0.00	0.00	158.16	371.20								
	A40RT001	37.92	6.19	24.22	3.17	1.84	0.30	59.38	133.02								
	A40RT002	51.41	8.07	26.33	3.44	0.00	0.00	79.87	169.12								
	A40RT003	63.17	9.92	48.44	6.33	0.00	0.00	98.14	226.00								
	A40RT004	80.77	12.68	84.24	11.01	0.00	0.00	125.49	314.19								
	A40RT005	85.91	13.49	84.24	11.01	0.00	0.00	133.48	328.13								
	A40RT006	95.14	14.94	84.24	11.01	0.00	0.00	147.83	353.16								
A45																	
	A45AE001	1.27	0.18	0.00	7.10	0.03	0.00	1.79	10.37								
	A45AE002	2.50	0.34	0.00	14.25	0.03	0.00	3.51	20.63								
	A45AE003	2.95	0.40	0.00	16.85	0.04	0.01	4.14	24.39								
	A45RS001	6.76	0.92	5.80	1.26	0.08	0.01	9.48	24.31								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
A45	***cont.***																
	A45RS002	21.98	2.95	15.23	2.49	0.00	0.00	30.74	73.39								
	A45SE003	5.48	0.75	2.18	2.28	0.09	0.01	7.69	18.48								
	A45SE004	3.55	0.50	2.18	0.83	0.13	0.02	5.01	12.22								
B10																	
	B10CC007	4.16	0.87	3.02	3.45	0.16	0.03	6.49	18.18								
	B10CC008	11.15	2.34	27.31	7.57	0.82	0.14	17.46	66.79								
	B10CC009	12.39	2.65	33.51	8.75	1.44	0.24	19.47	78.45								
	B10CC010	13.40	2.86	33.51	9.00	1.44	0.24	21.04	81.49								
	B10CC011	1.99	0.40	2.63	2.38	0.00	0.00	3.09	10.49								
	B10CC012	1.95	0.39	3.02	1.20	0.00	0.00	3.03	9.59								
	B10CC013	2.36	0.48	3.02	1.25	0.00	0.00	3.67	10.78								
	B10CC014	0.61	0.12	0.66	0.85	0.00	0.00	0.95	3.19								
	B10CL005	26.37	5.46	15.76	10.27	0.83	0.14	41.16	99.99								
	B10CL006	26.82	5.55	15.76	10.27	0.83	0.14	41.87	101.24								
	B10CL015	14.04	2.96	3.94	4.57	0.78	0.13	21.99	48.41								
	B10CL021	7.50	1.59	4.60	2.41	0.44	0.07	11.76	28.37								
	B10CL025	24.50	5.00	26.26	13.78	0.26	0.04	38.13	107.97								
	B10CL027	2.08	0.42	0.00	0.00	0.00	0.00	3.23	5.73								
	B10CL032	0.39	0.08	1.31	0.69	0.00	0.00	0.60	3.07								
	B10CL034	0.78	0.16	2.63	1.38	0.00	0.00	1.20	6.15								
	B10CL036	0.33	0.07	1.05	0.55	0.00	0.00	0.50	2.50								
	B10CL040	0.45	0.09	2.63	1.38	0.00	0.00	0.71	5.26								
	B10CL042	0.29	0.06	0.66	0.35	0.00	0.00	0.45	1.81								
	B10CL045	0.38	0.08	1.31	0.69	0.00	0.00	0.59	3.05								
	B10EM001	35.23	7.34	4.19	3.13	1.37	0.23	55.05	106.54								
	B10EM002	1.99	0.47	1.31	1.69	0.42	0.07	3.19	9.14								
	B10EM003	2.75	0.56	0.00	0.00	0.00	0.00	4.28	7.59								
	B10KB001	10.23	2.60	12.47	6.54	0.48	0.08	15.98	48.38								
	B10KB002	18.27	4.60	28.89	15.16	0.53	0.09	28.48	96.02								
	B10RC006	16.96	3.58	5.97	7.63	0.95	0.16	26.57	61.82								
	B10RC007	12.88	2.69	1.97	3.53	0.56	0.09	20.14	41.86								
	B10RC008	14.35	2.99	3.94	4.57	0.56	0.09	22.43	48.93								
	B10RC016	20.83	4.36	9.85	10.67	0.95	0.16	32.59	79.41								
	B10RC027	13.12	2.66	5.25	4.75	0.00	0.00	20.38	46.16								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
B10	***cont.***																
	B10RC028	14.75	2.99	7.88	6.38	0.00	0.00	22.91	54.91								
	B10RC029	16.68	3.38	10.50	8.01	0.00	0.00	25.91	64.48								
	B10RC030	18.19	3.68	13.13	10.64	0.00	0.00	28.26	73.90								
	B10RC031	19.21	3.89	15.76	12.27	0.00	0.00	29.85	80.98								
	B10RC032	18.25	3.84	6.57	7.95	0.95	0.16	28.58	66.30								
	B10SN031	4.12	0.99	1.97	2.38	0.99	0.16	6.63	17.24								
	B10SN032	9.97	2.17	3.94	3.82	1.00	0.17	15.73	36.80								
	B10SN033	8.35	1.84	3.94	3.57	0.98	0.16	13.20	32.04								
	B10SN034	9.68	2.11	2.63	2.88	1.00	0.17	15.28	33.75								
	B10SN035	10.69	2.32	2.63	3.03	1.00	0.17	16.85	36.69								
	B10SN036	13.21	2.83	5.91	4.85	1.00	0.17	20.76	48.73								
B15																	
	B15BM001	3.14	0.53	5.80	0.76	0.00	0.00	3.48	13.71								
	B15EC001	18.46	3.17	5.94	0.77	0.76	0.13	20.47	49.70								
	B15EC002	12.29	2.11	7.25	0.95	0.39	0.06	13.62	36.67								
	B15FS001	17.71	3.00	16.68	2.18	0.10	0.02	19.60	59.29								
	B15MB001	0.77	0.13	0.00	0.10	0.00	0.00	0.85	1.85								
	B15MB002	0.98	0.17	0.00	0.14	0.00	0.00	1.09	2.38								
	B15MB003	1.36	0.24	0.00	0.24	0.07	0.01	1.51	3.43								
	B15MB004	1.57	0.27	3.02	0.34	0.07	0.01	1.75	7.03								
	B15RS001	3.94	0.68	5.80	0.76	0.13	0.02	4.37	15.70								
	B15RS005	5.13	0.88	5.80	0.76	0.18	0.03	5.68	18.46								
	B15TB001	2.43	0.42	2.68	0.35	0.09	0.01	2.70	8.68								
	B15TB002	2.45	0.42	2.68	0.35	0.09	0.01	2.72	8.72								
	B15WD001	2.97	0.51	5.80	0.76	0.13	0.02	3.30	13.49								
	B15WD002	3.13	0.54	5.80	0.76	0.13	0.02	3.47	13.85								
B20																	
	B20BN001	1.12	0.19	4.19	0.63	0.03	0.00	1.40	7.56								
	B20BN002	1.78	0.31	6.20	0.92	0.06	0.01	2.22	11.50								
	B20BN003	2.28	0.39	11.90	1.78	0.07	0.01	2.84	19.27								
	B20BN004	3.46	0.59	9.07	1.19	0.07	0.01	4.32	18.71								
	B20BN005	1.95	0.34	11.73	1.75	0.07	0.01	2.43	18.28								
	B20BN006	2.16	0.37	19.94	2.97	0.07	0.01	2.69	28.21								
	B20BN007	3.85	0.68	9.07	1.19	0.26	0.04	4.81	19.90								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
B20	***cont.***																
	B20MQ001	2.21	0.38	6.24	0.82	0.04	0.01	2.75	12.45								
	B20MQ003	3.09	0.53	9.07	1.19	0.07	0.01	3.85	17.81								
	B20MQ004	3.58	0.62	9.07	1.19	0.17	0.03	4.48	19.14								
	B20MQ005	38.21	6.51	47.15	7.66	0.69	0.11	47.64	147.97								
B25																	
	B25HB001	1.88	0.32	0.00	0.00	0.00	0.00	1.83	4.03	2.31	0.33	0.00	0.00	0.00	0.00	2.57	5.21
	B25HB003	3.02	0.51	0.00	0.00	0.00	0.00	2.93	6.46	3.72	0.52	0.00	0.00	0.00	0.00	4.13	8.37
	B25HB005	3.93	0.66	0.00	0.00	0.00	0.00	3.82	8.41	4.84	0.68	0.00	0.00	0.00	0.00	5.37	10.89
	B25HB007	4.64	0.78	0.00	0.00	0.00	0.00	4.50	9.92	5.71	0.80	0.00	0.00	0.00	0.00	6.34	12.85
	B25HB008	5.41	0.91	0.00	0.00	0.00	0.00	5.25	11.57	6.65	0.94	0.00	0.00	0.00	0.00	7.39	14.98
	B25HB009	5.96	1.01	0.00	0.00	0.00	0.00	5.79	12.76	7.34	1.03	0.00	0.00	0.00	0.00	8.14	16.51
	B25HB010	6.31	1.06	0.00	0.00	0.00	0.00	6.13	13.50	7.77	1.09	0.00	0.00	0.00	0.00	8.62	17.48
	B25HB011	6.50	1.10	0.00	0.00	0.00	0.00	6.31	13.91	8.00	1.13	0.00	0.00	0.00	0.00	8.88	18.01
	B25HB012	6.89	1.16	0.00	0.00	0.00	0.00	6.69	14.74	8.48	1.20	0.00	0.00	0.00	0.00	9.41	19.09
	B25HB013	7.12	1.20	0.00	0.00	0.00	0.00	6.91	15.23	8.76	1.24	0.00	0.00	0.00	0.00	9.73	19.73
	B25HB014	7.43	1.25	0.00	0.00	0.00	0.00	7.22	15.90	9.15	1.29	0.00	0.00	0.00	0.00	10.16	20.60
	B25HB015	7.73	1.30	0.00	0.00	0.00	0.00	7.50	16.53	9.51	1.34	0.00	0.00	0.00	0.00	10.55	21.40
	B25XX001	0.85	0.14	0.00	0.00	0.00	0.00	0.83	1.82	1.05	0.15	0.00	0.00	0.00	0.00	1.16	2.36
	B25XX002	1.27	0.21	0.00	0.00	0.00	0.00	1.23	2.71	1.56	0.22	0.00	0.00	0.00	0.00	1.73	3.51
	B25XX003	1.57	0.26	0.00	0.00	0.00	0.00	1.52	3.35	1.93	0.27	0.00	0.00	0.00	0.00	2.14	4.34
	B25XX004	1.72	0.29	0.00	0.00	0.00	0.00	1.67	3.68	2.12	0.30	0.00	0.00	0.00	0.00	2.36	4.78
	B25XX005	2.01	0.34	0.00	0.00	0.00	0.00	1.95	4.30	2.47	0.35	0.00	0.00	0.00	0.00	2.74	5.56
	B25XX006	2.27	0.38	0.00	0.00	0.00	0.00	2.21	4.86	2.80	0.39	0.00	0.00	0.00	0.00	3.11	6.30
	B25XX007	2.43	0.41	0.00	0.00	0.00	0.00	2.35	5.19	2.98	0.42	0.00	0.00	0.00	0.00	3.31	6.71
	B25XX008	2.83	0.48	0.00	0.00	0.00	0.00	2.75	6.06	3.48	0.49	0.00	0.00	0.00	0.00	3.87	7.84
	B25XX009	2.99	0.50	0.00	0.00	0.00	0.00	2.90	6.39	3.68	0.52	0.00	0.00	0.00	0.00	4.09	8.29
	B25XX010	3.19	0.54	0.00	0.00	0.00	0.00	3.09	6.82	3.92	0.55	0.00	0.00	0.00	0.00	4.35	8.82
	B25XX011	3.35	0.56	0.00	0.00	0.00	0.00	3.25	7.16	4.12	0.58	0.00	0.00	0.00	0.00	4.57	9.27
	B25XX012	3.74	0.63	0.00	0.00	0.00	0.00	3.63	8.00	4.60	0.65	0.00	0.00	0.00	0.00	5.10	10.35
	B25XX013	5.01	0.84	0.00	0.00	0.00	0.00	4.86	10.71	6.16	0.87	0.00	0.00	0.00	0.00	6.84	13.87
	B25XX014	5.34	0.90	0.00	0.00	0.00	0.00	5.19	11.43	6.57	0.93	0.00	0.00	0.00	0.00	7.30	14.80
	B25XX015	6.41	1.08	0.00	0.00	0.00	0.00	6.22	13.71	7.89	1.11	0.00	0.00	0.00	0.00	8.76	17.76
	B25XX016	6.47	1.09	0.00	0.00	0.00	0.00	6.29	13.85	7.97	1.12	0.00	0.00	0.00	0.00	8.84	17.93
	B25XX017	6.99	1.18	0.00	0.00	0.00	0.00	6.78	14.95	8.60	1.21	0.00	0.00	0.00	0.00	9.55	19.36

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
B25	***cont.***																
	B25XX018	6.66	1.12	0.00	0.00	0.00	0.00	6.46	14.24	8.19	1.15	0.00	0.00	0.00	0.00	9.09	18.43
	B25XX019	7.42	1.25	0.00	0.00	0.00	0.00	7.21	15.88	9.14	1.29	0.00	0.00	0.00	0.00	10.14	20.57
B30																	
	B30CR001	0.50	0.08	0.00	0.00	0.00	0.00	0.52	1.10								
	B30CR002	0.53	0.08	0.00	0.00	0.00	0.00	0.56	1.17								
	B30CR003	0.58	0.09	0.00	0.00	0.00	0.00	0.61	1.28								
	B30CR004	0.60	0.09	0.00	0.00	0.00	0.00	0.63	1.32								
	B30CR005	0.71	0.11	0.00	0.00	0.00	0.00	0.74	1.56								
	B30CR006	0.83	0.13	0.00	0.00	0.00	0.00	0.88	1.84								
	B30CR009	0.74	0.11	0.00	0.00	0.00	0.00	0.78	1.63								
	B30CR010	0.87	0.13	0.00	0.00	0.00	0.00	0.91	1.91								
	B30CR011	1.02	0.16	0.00	0.00	0.00	0.00	1.08	2.26								
	B30CR012	1.18	0.18	0.00	0.00	0.00	0.00	1.24	2.60								
	B30GB001	0.45	0.07	0.00	0.00	0.00	0.00	0.41	0.93								
	B30GB002	0.59	0.09	0.00	0.00	0.00	0.00	0.54	1.22								
	B30GB003	0.72	0.11	0.00	0.00	0.00	0.00	0.67	1.50								
	B30GB004	1.05	0.16	0.00	0.00	0.00	0.00	0.96	2.17								
	B30GB005	1.25	0.19	0.00	0.00	0.00	0.00	1.15	2.59								
	B30GB006	2.30	0.36	0.00	0.00	0.00	0.00	2.26	4.92								
	B30GB007	2.48	0.38	0.00	0.00	0.00	0.00	2.45	5.31								
	B30GB008	2.77	0.43	0.00	0.00	0.00	0.00	2.73	5.93								
	B30GB009	3.17	0.49	0.00	0.00	0.00	0.00	3.12	6.78								
	B30GB010	3.93	0.61	0.00	0.00	0.00	0.00	3.88	8.42								
	B30GB011	1.82	0.28	0.00	0.00	0.00	0.00	1.91	4.01								
	B30GB012	1.88	0.29	0.00	0.00	0.00	0.00	1.98	4.15								
	B30GB013	1.96	0.30	0.00	0.00	0.00	0.00	2.06	4.32								
	B30GB014	2.60	0.40	0.00	0.00	0.00	0.00	2.73	5.73								
	B30GB015	2.69	0.42	0.00	0.00	0.00	0.00	2.83	5.94								
	B30GB016	3.88	0.60	0.00	0.00	0.00	0.00	4.08	8.56								
	B30GB017	4.66	0.72	0.00	0.00	0.00	0.00	4.90	10.28								
	B30GB018	0.35	0.05	0.00	0.00	0.00	0.00	0.33	0.73								
B35																	
	B35HE001	0.87	0.15	0.00	0.00	0.00	0.00	0.85	1.87	1.07	0.15	0.00	0.00	0.00	0.00	1.19	2.41
	B35HE002	1.02	0.17	0.00	0.00	0.00	0.00	0.99	2.18	1.26	0.18	0.00	0.00	0.00	0.00	1.40	2.84

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
B35	***cont.***																
	B35HE003	1.45	0.24	0.00	0.00	0.00	0.00	1.41	3.10	1.79	0.25	0.00	0.00	0.00	0.00	1.98	4.02
	B35HE004	1.75	0.30	0.00	0.00	0.00	0.00	1.70	3.75	2.16	0.30	0.00	0.00	0.00	0.00	2.39	4.85
	B35HE005	2.01	0.34	0.00	0.00	0.00	0.00	1.95	4.30	2.47	0.35	0.00	0.00	0.00	0.00	2.74	5.56
	B35HE006	2.50	0.42	0.00	0.00	0.00	0.00	2.43	5.35	3.08	0.43	0.00	0.00	0.00	0.00	3.42	6.93
	B35HE007	2.72	0.46	0.00	0.00	0.00	0.00	2.64	5.82	3.35	0.47	0.00	0.00	0.00	0.00	3.72	7.54
	B35HE008	3.57	0.60	0.00	0.00	0.00	0.00	3.47	7.64	4.40	0.62	0.00	0.00	0.00	0.00	4.88	9.90
	B35HE009	3.75	0.63	0.00	0.00	0.00	0.00	3.64	8.02	4.61	0.65	0.00	0.00	0.00	0.00	5.12	10.38
	B35HE010	4.34	0.73	0.00	0.00	0.00	0.00	4.22	9.29	5.34	0.75	0.00	0.00	0.00	0.00	5.93	12.02
	B35HE011	4.70	0.79	0.00	0.00	0.00	0.00	4.56	10.05	5.78	0.82	0.00	0.00	0.00	0.00	6.42	13.02
	B35HE012	5.14	0.87	0.00	0.00	0.00	0.00	4.99	11.00	6.33	0.89	0.00	0.00	0.00	0.00	7.02	14.24
	B35HE013	5.70	0.96	0.00	0.00	0.00	0.00	5.53	12.19	7.01	0.99	0.00	0.00	0.00	0.00	7.78	15.78
	B35HE014	6.52	1.10	0.00	0.00	0.00	0.00	6.33	13.95	8.02	1.13	0.00	0.00	0.00	0.00	8.90	18.05
	B35HE015	7.08	1.19	0.00	0.00	0.00	0.00	6.88	15.15	8.72	1.23	0.00	0.00	0.00	0.00	9.68	19.63
	B35HE016	8.46	1.43	0.00	0.00	0.00	0.00	8.22	18.11	10.41	1.47	0.00	0.00	0.00	0.00	11.56	23.44
	B35HE017	9.74	1.64	0.00	0.00	0.00	0.00	9.45	20.83	11.98	1.69	0.00	0.00	0.00	0.00	13.30	26.97
	B35HE018	0.84	0.16	0.00	0.00	0.00	0.00	0.81	1.81	1.08	0.16	0.00	0.00	0.00	0.00	1.20	2.44
	B35HE019	0.96	0.18	0.00	0.00	0.00	0.00	0.93	2.07	1.24	0.19	0.00	0.00	0.00	0.00	1.37	2.80
	B35HE020	1.37	0.26	0.00	0.00	0.00	0.00	1.33	2.96	1.76	0.26	0.00	0.00	0.00	0.00	1.96	3.98
	B35HE021	1.73	0.32	0.00	0.00	0.00	0.00	1.68	3.73	2.23	0.33	0.00	0.00	0.00	0.00	2.47	5.03
	B35HE022	2.00	0.37	0.00	0.00	0.00	0.00	1.94	4.31	2.57	0.39	0.00	0.00	0.00	0.00	2.85	5.81
	B35HE023	2.39	0.45	0.00	0.00	0.00	0.00	2.32	5.16	3.07	0.46	0.00	0.00	0.00	0.00	3.41	6.94
	B35HE024	2.63	0.49	0.00	0.00	0.00	0.00	2.56	5.68	3.38	0.51	0.00	0.00	0.00	0.00	3.76	7.65
	B35HE025	3.41	0.64	0.00	0.00	0.00	0.00	3.31	7.36	4.39	0.66	0.00	0.00	0.00	0.00	4.87	9.92
	B35HE026	3.48	0.65	0.00	0.00	0.00	0.00	3.38	7.51	4.48	0.67	0.00	0.00	0.00	0.00	4.97	10.12
	B35HE027	4.23	0.79	0.00	0.00	0.00	0.00	4.11	9.13	5.44	0.82	0.00	0.00	0.00	0.00	6.03	12.29
	B35HE028	4.37	0.82	0.00	0.00	0.00	0.00	4.25	9.44	5.62	0.84	0.00	0.00	0.00	0.00	6.24	12.70
	B35HE029	5.04	0.94	0.00	0.00	0.00	0.00	4.90	10.88	6.48	0.97	0.00	0.00	0.00	0.00	7.19	14.64
	B35HE030	5.55	1.04	0.00	0.00	0.00	0.00	5.39	11.98	7.14	1.07	0.00	0.00	0.00	0.00	7.93	16.14
	B35HE031	6.76	1.27	0.00	0.00	0.00	0.00	6.56	14.59	8.69	1.31	0.00	0.00	0.00	0.00	9.65	19.65
	B35HE032	7.20	1.35	0.00	0.00	0.00	0.00	6.99	15.54	9.26	1.39	0.00	0.00	0.00	0.00	10.28	20.93
	B35HE033	9.18	1.72	0.00	0.00	0.00	0.00	8.91	19.81	11.80	1.77	0.00	0.00	0.00	0.00	13.10	26.67
	B35HE034	10.23	1.92	0.00	0.00	0.00	0.00	9.93	22.08	13.15	1.97	0.00	0.00	0.00	0.00	14.59	29.71
	B35HE035	2.82	0.58	0.00	0.00	0.00	0.00	2.74	6.14	3.53	0.60	0.00	0.00	0.00	0.00	3.92	8.05
	B35HE036	2.95	0.61	0.00	0.00	0.00	0.00	2.86	6.42	3.68	0.62	0.00	0.00	0.00	0.00	4.09	8.39
	B35HE037	3.31	0.68	0.00	0.00	0.00	0.00	3.22	7.21	4.14	0.70	0.00	0.00	0.00	0.00	4.60	9.44

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
B35	***cont.***																
	B35HE038	4.50	0.93	0.00	0.00	0.00	0.00	4.37	9.80	5.63	0.95	0.00	0.00	0.00	0.00	6.25	12.83
	B35HE039	5.03	1.04	0.00	0.00	0.00	0.00	4.89	10.96	6.29	1.06	0.00	0.00	0.00	0.00	6.98	14.33
	B35HE040	5.20	1.07	0.00	0.00	0.00	0.00	5.05	11.32	6.50	1.10	0.00	0.00	0.00	0.00	7.21	14.81
	B35HE041	5.57	1.15	0.00	0.00	0.00	0.00	5.40	12.12	6.96	1.17	0.00	0.00	0.00	0.00	7.72	15.85
	B35HE042	7.16	1.47	0.00	0.00	0.00	0.00	6.95	15.58	8.95	1.51	0.00	0.00	0.00	0.00	9.94	20.40
	B35HE043	7.37	1.52	0.00	0.00	0.00	0.00	7.15	16.04	9.21	1.55	0.00	0.00	0.00	0.00	10.22	20.98
	B35HE044	9.58	1.97	0.00	0.00	0.00	0.00	9.30	20.85	11.97	2.02	0.00	0.00	0.00	0.00	13.29	27.28
	B35HE045	9.94	2.05	0.00	0.00	0.00	0.00	9.65	21.64	12.43	2.10	0.00	0.00	0.00	0.00	13.79	28.32
	B35HE046	11.82	2.43	0.00	0.00	0.00	0.00	11.48	25.73	14.78	2.49	0.00	0.00	0.00	0.00	16.40	33.67
	B35HE047	12.53	2.58	0.00	0.00	0.00	0.00	12.16	27.27	15.66	2.64	0.00	0.00	0.00	0.00	17.38	35.68
	B35SA001	1.92	0.32	0.00	0.00	0.00	0.00	1.86	4.10	2.36	0.33	0.00	0.00	0.00	0.00	2.62	5.31
	B35SA003	2.88	0.49	0.00	0.00	0.00	0.00	2.79	6.16	3.54	0.50	0.00	0.00	0.00	0.00	3.93	7.97
	B35SA004	3.95	0.67	0.00	0.00	0.00	0.00	3.83	8.45	4.86	0.68	0.00	0.00	0.00	0.00	5.39	10.93
	B35SA005	4.95	0.84	0.00	0.00	0.00	0.00	4.81	10.60	6.10	0.86	0.00	0.00	0.00	0.00	6.77	13.73
	B35SA006	5.84	0.98	0.00	0.00	0.00	0.00	5.67	12.49	7.18	1.01	0.00	0.00	0.00	0.00	7.98	16.17
	B35SA007	6.57	1.11	0.00	0.00	0.00	0.00	6.38	14.06	8.09	1.14	0.00	0.00	0.00	0.00	8.98	18.21
	B35SA008	7.77	1.31	0.00	0.00	0.00	0.00	7.54	16.62	9.56	1.35	0.00	0.00	0.00	0.00	10.61	21.52
	B35SA009	9.85	1.66	0.00	0.00	0.00	0.00	9.56	21.07	12.12	1.71	0.00	0.00	0.00	0.00	13.45	27.28
	B35SA010	12.02	2.03	0.00	0.00	0.00	0.00	11.68	25.73	14.80	2.09	0.00	0.00	0.00	0.00	16.43	33.32
	B35XX001	3.14	0.53	0.00	0.00	0.00	0.00	3.05	6.72	3.87	0.54	0.00	0.00	0.00	0.00	4.29	8.70
	B35XX002	3.53	0.60	0.00	0.00	0.00	0.00	3.43	7.56	4.35	0.61	0.00	0.00	0.00	0.00	4.83	9.79
	B35XX003	3.90	0.66	0.00	0.00	0.00	0.00	3.79	8.35	4.80	0.68	0.00	0.00	0.00	0.00	5.33	10.81
	B35XX004	4.45	0.75	0.00	0.00	0.00	0.00	4.32	9.52	5.48	0.77	0.00	0.00	0.00	0.00	6.08	12.33
	B35XX005	5.00	0.84	0.00	0.00	0.00	0.00	4.85	10.69	6.15	0.87	0.00	0.00	0.00	0.00	6.83	13.85
	B35XX006	6.14	1.04	0.00	0.00	0.00	0.00	5.96	13.14	7.56	1.07	0.00	0.00	0.00	0.00	8.39	17.02
	B35XX007	3.15	0.59	0.00	0.00	0.00	0.00	3.06	6.80	4.05	0.61	0.00	0.00	0.00	0.00	4.49	9.15
	B35XX008	3.60	0.67	0.00	0.00	0.00	0.00	3.50	7.77	4.63	0.70	0.00	0.00	0.00	0.00	5.14	10.47
	B35XX009	3.88	0.73	0.00	0.00	0.00	0.00	3.77	8.38	4.99	0.75	0.00	0.00	0.00	0.00	5.53	11.27
	B35XX010	4.62	0.86	0.00	0.00	0.00	0.00	4.48	9.96	5.94	0.89	0.00	0.00	0.00	0.00	6.59	13.42
	B35XX011	5.11	0.96	0.00	0.00	0.00	0.00	4.96	11.03	6.56	0.99	0.00	0.00	0.00	0.00	7.29	14.84
	B35XX012	6.47	1.21	0.00	0.00	0.00	0.00	6.28	13.96	8.31	1.25	0.00	0.00	0.00	0.00	9.23	18.79
	B35XX013	0.71	0.15	0.00	0.00	0.00	0.00	0.69	1.55	0.88	0.15	0.00	0.00	0.00	0.00	0.98	2.01
	B35XX014	0.80	0.16	0.00	0.00	0.00	0.00	0.77	1.73	0.99	0.17	0.00	0.00	0.00	0.00	1.10	2.26
	B35XX015	1.18	0.24	0.00	0.00	0.00	0.00	1.15	2.57	1.48	0.25	0.00	0.00	0.00	0.00	1.64	3.37
	B35XX016	1.35	0.28	0.00	0.00	0.00	0.00	1.32	2.95	1.69	0.29	0.00	0.00	0.00	0.00	1.88	3.86

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
B35	***cont.***																
	B35XX017	1.48	0.30	0.00	0.00	0.00	0.00	1.44	3.22	1.85	0.31	0.00	0.00	0.00	0.00	2.06	4.22
	B35XX018	3.18	0.65	0.00	0.00	0.00	0.00	3.09	6.92	3.98	0.67	0.00	0.00	0.00	0.00	4.41	9.06
	B35XX019	3.40	0.70	0.00	0.00	0.00	0.00	3.30	7.40	4.25	0.72	0.00	0.00	0.00	0.00	4.72	9.69
	B35XX020	3.83	0.79	0.00	0.00	0.00	0.00	3.72	8.34	4.79	0.81	0.00	0.00	0.00	0.00	5.32	10.92
	B35XX021	4.19	0.86	0.00	0.00	0.00	0.00	4.06	9.11	5.23	0.88	0.00	0.00	0.00	0.00	5.81	11.92
	B35XX022	5.26	1.08	0.00	0.00	0.00	0.00	5.11	11.45	6.57	1.11	0.00	0.00	0.00	0.00	7.29	14.97
	B35XX023	5.64	1.16	0.00	0.00	0.00	0.00	5.48	12.28	7.05	1.19	0.00	0.00	0.00	0.00	7.82	16.06
C05																	
	C05OL001	0.14	0.01	0.53	0.08	0.00	0.00	0.49	1.25								
	C05OL002	0.22	0.01	1.08	0.16	0.00	0.00	0.76	2.23								
	C05OL003	0.27	0.02	1.20	0.18	0.00	0.00	0.92	2.59								
	C05OL004	0.29	0.02	1.31	0.20	0.00	0.00	1.00	2.82								
C10																	
	C10BO001	0.97	0.09	0.69	0.08	0.00	0.00	1.53	3.36								
	C10BO003	0.53	0.05	0.92	0.10	0.00	0.00	0.84	2.44								
	C10BO004	0.59	0.05	1.38	0.15	0.00	0.00	0.93	3.10								
	C10BO007	2.40	0.21	0.40	0.04	0.00	0.00	3.78	6.83								
	C10BO008	3.28	0.29	0.91	0.10	0.00	0.00	5.16	9.74								
	C10BO009	1.23	0.13	0.92	0.10	0.00	0.00	2.16	4.54								
	C10BO011	3.31	0.34	0.80	0.09	0.00	0.00	5.81	10.35								
	C10BO013	8.74	0.90	1.91	0.21	0.00	0.00	15.36	27.12								
	C10BO015	2.84	0.29	0.50	0.06	0.00	0.00	4.99	8.68								
	C10BO016	4.15	0.43	0.91	0.10	0.00	0.00	7.29	12.88								
	C10RX001	5.71	0.59	0.80	0.09	0.00	0.00	10.04	17.23								
	C10RX002	7.91	0.81	1.41	0.16	0.00	0.00	13.90	24.19								
	C10RX003	13.28	1.37	3.32	0.37	0.00	0.00	23.34	41.68								
	C10WC003	1.14	0.10	0.40	0.04	0.00	0.00	1.79	3.47								
	C10WC006	1.07	0.09	1.84	0.21	0.00	0.00	1.68	4.89								
	C10WC007	2.14	0.19	2.07	0.23	0.00	0.00	3.36	7.99								
	C10WC008	3.04	0.27	0.91	0.10	0.00	0.00	4.77	9.09								
	C10WC010	2.59	0.27	2.53	0.28	0.00	0.00	4.55	10.22								
	C10WC015	5.43	0.48	1.41	0.16	0.00	0.00	8.54	16.02								
	C10WC016	8.12	0.83	2.01	0.22	0.00	0.00	14.27	25.45								
	C10WC017	3.44	0.35	0.91	0.10	0.00	0.00	6.05	10.85								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C10	*cont.*																
	C10WC019	8.00	0.82	2.01	0.22	0.00	0.00	14.07	25.12								
C15																	
	C15BL001	1.77	0.20	0.28	0.66	0.00	0.00	2.48	5.39								
	C15BL003	8.48	0.95	1.41	2.32	0.00	0.00	11.88	25.04								
	C15BL004	9.93	1.11	2.12	2.99	0.00	0.00	13.91	30.06								
	C15BL005	14.55	1.62	4.24	4.47	0.00	0.00	20.39	45.27								
	C15BL006	0.71	0.14	36.86	4.82	0.00	0.00	0.99	43.52								
	C15ED001	1.27	0.14	1.97	0.29	0.00	0.00	1.77	5.44								
	C15ED002	0.86	0.10	1.61	0.24	0.00	0.00	1.21	4.02								
	C15XX001	11.76	2.42	19.17	2.50	0.46	0.08	16.53	52.92								
C20																	
	C20WC002	1.87	0.23	2.33	0.35	0.19	0.03	2.08	7.08								
	C20XX001	1.32	0.16	1.43	0.21	0.13	0.02	1.47	4.74								
C25																	
	C25AJ001	0.66	0.09	1.07	0.16	0.00	0.00	0.82	2.80								
	C25AJ003	0.93	0.13	1.07	0.16	0.00	0.00	1.16	3.45								
	C25AJ004	1.34	0.18	1.43	0.21	0.00	0.00	1.67	4.83								
	C25AJ005	1.57	0.21	1.97	0.29	0.00	0.00	1.96	6.00								
	C25AJ006	1.87	0.25	1.97	0.29	0.00	0.00	2.33	6.71								
	C25AJ007	1.99	0.27	1.97	0.29	0.00	0.00	2.47	6.99								
	C25AJ008	1.23	0.30	0.92	0.18	0.00	0.00	1.31	3.94								
	C25AJ009	1.31	0.32	0.92	0.18	0.00	0.00	1.40	4.13								
	C25AJ010	1.40	0.34	0.92	0.18	0.00	0.00	1.49	4.33								
	C25AJ011	1.50	0.37	0.92	0.18	0.00	0.00	1.60	4.57								
	C25AJ012	1.59	0.39	0.92	0.18	0.00	0.00	1.70	4.78								
	C25AJ013	1.68	0.41	0.92	0.18	0.00	0.00	1.80	4.99								
	C25AJ015	1.76	0.24	3.58	0.53	0.00	0.00	2.19	8.30								
	C25AJ016	1.84	0.25	3.58	0.53	0.00	0.00	2.29	8.49								
	C25AJ018	2.14	0.29	4.47	0.67	0.00	0.00	2.66	10.23								
	C25AJ019	3.10	0.42	5.01	0.75	0.00	0.00	3.85	13.13								
	C25ST001	0.37	0.05	1.43	0.21	0.00	0.00	0.46	2.52								
	C25ST002	0.38	0.05	1.61	0.24	0.00	0.00	0.48	2.76								
	C25SV001	60.18	14.82	4.72	0.83	0.33	0.05	64.28	145.21								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C25	***cont.***																
	C25SV002	24.56	6.06	4.72	0.83	0.25	0.04	26.25	62.71								
	C25SV003	11.09	2.75	2.18	0.38	0.23	0.04	11.87	28.54								
	C25WC002	0.44	0.06	1.43	0.21	0.00	0.00	0.55	2.69								
C35																	
	C35AF001	2.52	0.50	0.00	0.30	0.04	0.01	3.78	7.15								
	C35AF002	1.34	0.27	0.00	2.00	0.04	0.01	2.01	5.67								
	C35AF004	4.39	0.87	5.79	2.86	0.05	0.01	6.57	20.54								
	C35AF005	6.33	1.26	4.55	2.59	0.12	0.02	9.49	24.36								
	C35AL002	3.55	0.74	2.19	1.29	0.24	0.04	5.38	13.43								
	C35AL003	1.15	0.26	0.76	0.59	0.24	0.04	1.78	4.82								
	C35AL008	2.66	0.52	0.00	0.30	0.00	0.00	3.97	7.45								
	C35AL013	1.14	0.24	0.00	0.40	0.12	0.02	1.74	3.66								
	C35AL014	6.01	1.19	4.46	1.08	0.05	0.01	9.00	21.80								
	C35AV006	8.87	1.76	3.03	3.59	0.11	0.02	13.29	30.67								
	C35AV008	2.67	0.53	1.06	2.56	0.00	0.00	3.98	10.80								
	C35AV009	3.26	0.64	2.42	3.27	0.00	0.00	4.87	14.46								
	C35AV010	5.86	1.16	3.94	4.07	0.00	0.00	8.76	23.79								
	C35AV011	4.55	0.90	1.82	2.96	0.00	0.00	6.81	17.04								
	C35AV012	13.45	2.65	3.03	4.09	0.00	0.00	20.10	43.32								
C40																	
	C40CC001	3.74	0.50	1.41	0.82	0.00	0.00	4.66	11.13								
	C40MU001	0.46	0.07	1.43	0.21	0.04	0.01	0.58	2.80								
	C40MU002	0.96	0.13	2.33	0.35	0.04	0.01	1.20	5.02								
	C40MU003	0.47	0.07	1.43	0.21	0.04	0.01	0.59	2.82								
	C40MU004	0.56	0.08	1.43	0.21	0.04	0.01	0.71	3.04								
	C40RC005	32.87	4.41	16.97	13.89	0.00	0.00	40.92	109.06								
	C40ST001	0.27	0.04	0.07	0.24	0.04	0.01	0.34	1.01								
	C40ST002	0.29	0.04	0.98	0.15	0.04	0.01	0.37	1.88								
	C40ST003	0.36	0.05	0.28	0.41	0.04	0.01	0.46	1.61								
	C40ST005	0.50	0.07	0.21	0.42	0.04	0.01	0.64	1.89								
	C40XX001	0.51	0.07	0.28	0.36	0.00	0.00	0.63	1.85								
	C40XX002	0.54	0.07	1.25	0.19	0.00	0.00	0.67	2.72								
	C40XX003	0.77	0.10	0.42	0.44	0.00	0.00	0.96	2.69								
	C40XX004	0.78	0.10	1.43	0.21	0.00	0.00	0.96	3.48								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C40	***cont.***																
	C40XX005	1.01	0.14	0.71	0.66	0.00	0.00	1.25	3.77								
	C40XX006	1.39	0.19	0.71	0.66	0.00	0.00	1.74	4.69								
	C40XX007	1.30	0.17	1.61	0.24	0.00	0.00	1.62	4.94								
C45																	
	C45GO010	18.51	2.91	7.75	1.01	0.00	0.00	28.77	58.95								
	C45GO011	28.54	4.48	15.58	2.04	0.00	0.00	44.35	94.99								
	C45GO012	38.04	5.97	14.24	1.86	0.00	0.00	59.11	119.22								
	C45GO013	15.30	2.40	7.75	1.01	0.00	0.00	23.77	50.23								
	C45GO014	21.14	3.32	8.26	1.08	0.00	0.00	32.85	66.65								
	C45GO016	41.48	6.51	19.38	2.53	0.00	0.00	64.44	134.34								
	C45GO018	51.69	8.12	28.22	3.69	0.00	0.00	80.31	172.03								
	C45GO020	61.06	9.59	37.91	4.95	0.00	0.00	94.87	208.38								
	C45GO026	6.62	1.04	6.95	1.04	0.00	0.00	10.28	25.93								
	C45GO027	8.43	1.32	4.21	0.55	0.00	0.00	13.10	27.61								
	C45GO028	13.38	2.10	4.21	0.55	0.00	0.00	20.78	41.02								
	C45GO029	8.91	1.40	6.95	1.04	0.00	0.00	13.84	32.14								
	C45GO031	50.10	7.87	32.43	4.24	0.00	0.00	77.85	172.49								
	C45MJ001	0.90	0.14	2.90	0.43	0.00	0.00	1.39	5.76								
	C45MW002	5.33	0.84	2.19	0.29	0.06	0.01	8.29	17.01								
	C45MW003	6.77	1.07	2.19	0.29	0.08	0.01	10.54	20.95								
C55																	
	C55M3001	2.35	0.40	8.23	1.23	0.04	0.01	3.25	15.51								
	C55M3002	5.59	0.94	4.77	0.62	0.00	0.00	7.73	19.65								
	C55M3003	7.05	1.19	8.43	1.10	0.00	0.00	9.75	27.52								
	C55OE001	26.24	4.43	0.00	0.00	0.00	0.00	36.30	66.97								
	C55OE002	33.65	5.68	0.00	0.00	0.00	0.00	46.55	85.88								
	C55OE003	51.16	8.63	0.00	0.00	0.00	0.00	70.77	130.56								
	C55OE006	4.93	0.84	5.89	0.77	0.08	0.01	6.83	19.35								
	C55OE009	9.30	1.59	10.10	1.32	0.15	0.02	12.87	35.35								
	C55OE011	8.60	1.47	14.40	1.88	0.15	0.02	11.91	38.43								
	C55OE012	10.94	1.86	14.40	1.88	0.15	0.02	15.14	44.39								
	C55SC001	8.14	1.38	6.36	0.83	0.05	0.01	11.27	28.04								
	C55SC002	17.30	2.95	14.08	1.84	0.24	0.04	23.96	60.41								
	C55SC005	33.85	5.80	16.71	2.18	0.92	0.15	46.90	106.51								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C55	*cont.*																
	C55SC006	42.78	7.30	16.71	2.18	0.92	0.15	59.24	129.28								
C60																	
	C60CQ001	1.77	0.23	8.05	1.20	0.00	0.00	2.44	13.69								
	C60CQ002	0.38	0.05	2.07	0.31	0.00	0.00	0.53	3.34								
	C60CQ003	0.41	0.05	2.99	0.45	0.00	0.00	0.57	4.47								
	C60CQ010	1.79	0.24	3.52	0.62	0.00	0.00	2.47	8.64								
	C60CQ011	2.19	0.29	14.95	2.23	0.00	0.00	3.04	22.70								
	C60CQ012	2.24	0.29	14.95	2.23	0.00	0.00	3.09	22.80								
	C60CQ013	2.27	0.30	14.95	2.23	0.00	0.00	3.14	22.89								
	C60CQ014	2.20	0.29	5.45	2.86	0.00	0.00	3.05	13.85								
	C60CQ016	3.75	0.49	8.45	1.50	0.00	0.00	5.18	19.37								
	C60FE002	0.20	0.03	0.46	0.07	0.00	0.00	0.27	1.03								
	C60FE006	0.41	0.05	2.07	0.31	0.00	0.00	0.57	3.41								
	C60FE007	0.43	0.06	2.99	0.45	0.00	0.00	0.60	4.53								
	C60FE009	1.38	0.18	4.60	0.69	0.00	0.00	1.91	8.76								
	C60LY001	3.51	0.46	2.30	0.34	0.00	0.00	4.85	11.46								
	C60LY002	5.19	0.68	8.05	1.20	0.00	0.00	7.18	22.30								
	C60LY005	0.41	0.05	2.99	0.45	0.00	0.00	0.56	4.46								
	C60LY011	10.05	1.32	3.22	0.57	0.00	0.00	13.90	29.06								
C65																	
	C65ST007	0.21	0.02	0.13	0.07	0.00	0.00	0.70	1.13								
	C65ST008	0.22	0.02	0.26	0.14	0.00	0.00	0.74	1.38								
	C65ST009	0.26	0.02	0.39	0.20	0.00	0.00	0.87	1.74								
	C65ST013	0.44	0.04	0.92	0.14	0.00	0.00	1.47	3.01								
	C65WC003	0.32	0.03	0.26	0.28	0.00	0.00	1.07	1.96								
	C65WC004	0.27	0.03	0.39	0.34	0.00	0.00	0.91	1.94								
	C65WC005	0.39	0.04	0.84	0.13	0.00	0.00	1.30	2.70								
C75																	
	C75BD004	4.51	1.40	8.11	1.21	0.26	0.04	5.31	20.84								
	C75BD005	5.67	1.78	13.33	1.99	0.53	0.09	6.68	30.07								
	C75BD006	8.27	2.60	21.24	3.17	0.94	0.16	9.75	46.13								
	C75BD007	3.27	1.01	7.34	1.09	0.15	0.02	3.85	16.73								
	C75BD008	4.36	1.35	8.11	1.21	0.15	0.02	5.12	20.32								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C75	***cont.***																
	C75BD009	5.86	1.84	13.33	1.99	0.53	0.09	6.91	30.55								
	C75BD010	9.82	3.08	7.16	1.00	0.94	0.16	11.58	33.74								
	C75BD011	12.99	4.07	10.95	1.53	1.90	0.31	15.31	47.06								
	C75GV014	26.24	8.55	20.22	2.83	13.14	2.17	31.13	104.28								
	C75GV016	61.75	19.45	25.27	3.54	13.12	2.16	72.85	198.14								
	C75GV019	26.23	8.54	20.22	2.83	13.14	2.17	31.11	104.24								
	C75GV020	42.87	13.65	21.06	2.95	13.12	2.16	50.67	146.48								
	C75GV021	6.54	2.05	11.97	1.79	0.56	0.09	7.71	30.71								
	C75GV022	8.09	2.55	9.27	1.30	0.99	0.16	9.55	31.91								
	C75GV023	15.21	4.99	12.80	1.79	8.51	1.40	18.05	62.75								
	C75GV024	23.36	7.49	14.57	2.04	8.51	1.40	27.64	85.01								
	C75GV025	42.61	13.57	21.06	2.95	12.44	2.05	50.36	145.04								
	C75GV028	15.11	4.76	12.80	1.79	2.86	0.47	17.83	55.62								
	C75PB001	19.90	6.28	10.70	1.50	2.54	0.42	23.49	64.83								
	C75PB002	25.21	7.91	15.58	2.18	2.54	0.42	29.73	83.57								
	C75TD003	20.23	6.36	15.16	2.12	3.89	0.64	23.86	72.26								
	C75TD007	37.52	11.94	20.81	2.91	6.38	1.05	44.34	124.95								
	C75TD008	34.70	11.08	20.81	2.91	11.39	1.88	41.02	123.79								
	C75TE001	19.18	5.99	10.95	1.53	2.32	0.38	22.60	62.95								
	C75TE002	26.29	8.22	12.80	1.79	3.43	0.57	30.98	84.08								
	C75TE004	29.19	9.51	18.11	2.53	5.19	0.86	34.62	100.01								
	C75TE005	40.21	12.90	21.90	3.06	5.19	0.86	47.57	131.69								
	C75TE006	43.63	13.95	21.90	3.06	5.19	0.86	51.60	140.19								
	C75TE007	50.80	15.99	21.90	3.06	10.65	1.76	59.93	164.09								
C80																	
	C80GV006	32.58	11.45	29.02	3.52	1.61	0.27	33.54	111.99	37.23	11.54	38.38	4.66	6.23	1.03	41.06	140.13
	C80GV013	76.95	33.45	19.64	2.38	9.61	1.59	101.92	245.54	85.50	33.62	25.11	3.05	39.00	6.44	119.49	312.21
	C80GV014	77.17	33.55	19.64	2.38	9.61	1.59	102.21	246.15	85.75	33.71	25.11	3.05	39.00	6.44	119.84	312.90
	C80GV015	77.61	33.74	19.64	2.38	9.61	1.59	102.80	247.37	86.24	33.90	25.11	3.05	39.00	6.44	120.52	314.26
	C80GV016	109.26	47.42	18.11	2.20	11.34	1.87	144.67	334.87	121.40	47.65	23.20	2.82	45.35	7.48	169.61	417.51
	C80GV020	36.35	14.30	29.02	3.52	2.27	0.37	42.80	128.63	40.90	14.39	38.38	4.66	8.85	1.46	51.13	159.77
	C80GV025	21.26	7.49	21.76	2.64	1.32	0.22	21.90	76.59	24.30	7.55	28.78	3.50	5.22	0.86	26.81	97.02
	C80GV026	31.95	11.29	25.24	3.07	2.41	0.40	32.93	107.29	36.52	11.38	33.39	4.05	9.46	1.56	40.30	136.66
	C80GV027	26.54	9.40	18.14	2.20	2.43	0.40	27.36	86.47	30.33	9.48	23.99	2.91	9.59	1.58	33.49	111.37

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C80	***cont.***																
	C80GV028	33.94	12.01	29.02	3.52	2.89	0.48	34.98	116.84	38.78	12.11	38.38	4.66	11.42	1.88	42.81	150.04
	C80GV029	32.30	11.44	29.02	3.52	2.89	0.48	33.30	112.95	36.92	11.53	38.38	4.66	11.42	1.88	40.76	145.55
	C80GV030	32.36	11.46	29.02	3.52	2.89	0.48	33.36	113.09	36.98	11.55	38.38	4.66	11.42	1.88	40.83	145.70
	C80GV031	32.61	12.88	29.02	3.52	2.89	0.48	38.41	119.81	36.68	12.97	38.38	4.66	11.42	1.88	45.90	151.89
	C80GV032	43.40	17.17	30.61	3.72	7.40	1.22	51.14	154.66	48.83	17.28	40.49	4.92	29.03	4.79	61.10	206.44
	C80LB001	25.95	10.28	26.48	3.22	2.76	0.46	30.59	99.74	29.20	10.35	35.02	4.25	10.94	1.81	36.54	128.11
	C80LB002	35.04	13.67	31.19	3.79	0.49	0.08	41.20	125.46	39.42	13.76	41.25	5.01	1.99	0.33	49.23	150.99
	C80LB005	17.54	5.51	13.78	2.32	1.90	0.31	15.51	56.87	20.46	5.57	18.23	3.06	7.88	1.30	19.62	76.12
	C80LI009	20.26	7.19	25.39	3.08	2.01	0.33	20.89	79.15	23.16	7.25	33.58	4.08	8.10	1.34	25.57	103.08
	C80LI010	23.13	8.22	22.85	2.77	2.52	0.42	23.86	83.77	26.44	8.29	30.22	3.67	9.96	1.64	29.21	109.43
	C80LI011	25.94	9.23	26.48	3.22	2.92	0.48	26.76	95.03	29.64	9.30	35.02	4.25	11.54	1.90	32.75	124.40
	C80TD001	30.06	11.98	12.86	1.57	4.28	0.71	35.46	96.92	33.82	12.06	16.51	2.01	17.27	2.85	42.36	126.88
	C80TD002	37.64	14.93	15.85	1.92	4.15	0.68	44.37	119.54	42.35	15.03	20.43	2.48	16.25	2.68	53.02	152.24
	C80TD005	40.64	17.83	44.55	5.41	5.25	0.87	53.90	168.45	45.15	17.92	58.20	7.07	20.82	3.44	63.19	215.79
	C80TE001	21.07	7.45	18.14	2.20	1.72	0.28	21.71	72.57	24.08	7.51	23.99	2.91	6.89	1.14	26.58	93.10
	C80TE002	17.05	6.06	18.14	2.20	1.82	0.30	17.58	63.15	19.48	6.11	23.99	2.91	7.29	1.20	21.52	82.50
	C80TE003	22.25	7.93	26.84	3.26	2.76	0.46	22.96	86.46	25.43	8.00	35.50	4.31	10.94	1.81	28.10	114.09
	C80TE005	16.06	5.07	17.55	2.95	2.02	0.33	14.21	58.19	18.74	5.13	23.22	3.90	8.13	1.34	17.98	78.44
	C80TE006	16.06	5.07	17.55	2.95	2.02	0.33	14.21	58.19	18.74	5.13	23.22	3.90	8.13	1.34	17.98	78.44
	C80TE007	22.08	7.86	22.92	2.78	2.52	0.42	22.78	81.36	25.24	7.92	30.32	3.68	9.96	1.64	27.88	106.64
C85																	
	C85AM017	46.78	22.02	14.00	1.56	0.00	0.00	65.27	149.63	57.18	22.24	18.43	2.06	0.00	0.00	84.02	183.93
	C85KC003	38.80	16.69	11.78	1.21	0.00	0.00	48.44	116.92	48.50	16.88	15.50	1.59	0.00	0.00	64.14	146.61
	C85KC004	24.48	10.53	7.91	0.81	0.00	0.00	30.56	74.29	30.60	10.65	10.41	1.07	0.00	0.00	40.47	93.20
	C85KC005	28.29	12.17	9.47	0.97	0.00	0.00	35.32	86.22	35.37	12.31	12.46	1.28	0.00	0.00	46.77	108.19
	C85KC006	66.06	31.10	12.40	1.39	0.00	0.00	92.18	203.13	80.74	31.41	16.32	1.82	0.00	0.00	118.65	248.94
	C85KC007	23.69	10.16	7.91	0.74	0.00	0.00	27.72	70.22	28.43	10.26	10.41	0.97	0.00	0.00	35.50	85.57
	C85KC008	46.90	22.08	14.05	1.57	0.00	0.00	65.43	150.03	57.32	22.30	18.49	2.07	0.00	0.00	84.22	184.40
	C85LB013	31.25	13.44	11.69	1.20	0.00	0.00	39.01	96.59	39.06	13.60	15.39	1.58	0.00	0.00	51.66	121.29
	C85LB014	40.33	17.35	11.69	1.20	0.00	0.00	50.34	120.91	50.41	17.55	15.39	1.58	0.00	0.00	66.66	151.59
	C85LB015	42.60	18.32	9.20	0.94	0.00	0.00	53.17	124.23	53.25	18.54	12.11	1.24	0.00	0.00	70.42	155.56
	C85LB016	51.87	24.42	10.54	1.18	0.00	0.00	72.37	160.38	63.39	24.66	13.86	1.55	0.00	0.00	93.15	196.61
	C85LB017	63.97	30.12	19.56	2.19	0.00	0.00	89.26	205.10	78.19	30.42	25.74	2.88	0.00	0.00	114.89	252.12
	C85LB018	21.21	9.10	6.98	0.65	0.00	0.00	24.81	62.75	25.45	9.19	9.18	0.86	0.00	0.00	31.78	76.46

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C85	***cont.***																
	C85LB019	35.75	13.72	16.00	2.53	0.00	0.00	47.41	115.41	44.00	13.89	20.92	3.31	0.00	0.00	65.22	147.34
	C85LB020	45.95	17.63	16.00	2.53	0.00	0.00	60.94	143.05	56.55	17.85	20.92	3.31	0.00	0.00	83.84	182.47
	C85LB021	44.55	19.11	12.59	1.29	0.00	0.00	66.04	143.58	53.46	19.29	16.47	1.69	0.00	0.00	87.61	178.52
	C85LB022	59.66	25.60	14.42	1.48	0.00	0.00	88.45	189.61	71.60	25.84	18.86	1.93	0.00	0.00	117.33	235.56
	C85LB023	63.29	30.02	26.77	2.99	0.00	0.00	103.71	226.78	79.11	30.36	35.01	3.91	0.00	0.00	142.00	290.39
	C85LI001	25.60	11.01	9.20	0.94	0.00	0.00	31.95	78.70	32.00	11.14	12.11	1.24	0.00	0.00	42.31	98.80
	C85MA001	40.88	17.54	21.29	2.18	0.00	0.00	60.60	142.49	49.05	17.70	27.85	2.86	0.00	0.00	80.39	177.85
	C85MA002	50.23	21.55	20.69	2.12	0.00	0.00	74.46	169.05	60.27	21.75	27.05	2.77	0.00	0.00	98.77	210.61
	C85MA003	67.28	31.92	22.82	2.55	0.00	0.00	110.25	234.82	84.10	32.27	29.84	3.33	0.00	0.00	150.95	300.49
	C85MA004	38.69	16.64	15.56	1.60	0.00	0.00	48.29	120.78	48.36	16.83	20.48	2.10	0.00	0.00	63.95	151.72
	C85MA005	36.30	15.61	14.89	1.53	0.00	0.00	45.31	113.64	45.37	15.79	19.60	2.01	0.00	0.00	60.00	142.77
	C85MA006	45.88	21.60	15.12	1.69	0.00	0.00	64.01	148.30	56.07	21.81	19.89	2.22	0.00	0.00	82.39	182.38
	C85MA007	64.67	30.45	16.67	1.86	0.00	0.00	90.24	203.89	79.04	30.75	21.94	2.45	0.00	0.00	116.15	250.33
	C85MA008	38.45	16.54	14.89	1.53	0.00	0.00	48.00	119.41	48.06	16.73	19.60	2.01	0.00	0.00	63.56	149.96
	C85MA009	59.03	28.00	20.69	2.31	0.00	0.00	96.73	206.76	73.78	28.31	27.05	3.02	0.00	0.00	132.44	264.60
	C85MA010	58.45	27.52	15.12	1.69	0.00	0.00	81.56	184.34	71.44	27.79	19.89	2.22	0.00	0.00	104.97	226.31
	C85TE001	28.98	11.12	9.13	1.45	0.00	0.00	38.44	89.12	35.67	11.26	11.93	1.89	0.00	0.00	52.88	113.63
	C85TE002	40.33	15.48	15.21	2.41	0.00	0.00	53.49	126.92	49.64	15.67	19.89	3.15	0.00	0.00	73.59	161.94
	C85TE003	45.26	19.42	20.38	2.09	0.00	0.00	67.10	154.25	54.31	19.60	26.65	2.73	0.00	0.00	89.00	192.29
	C85TE008	25.93	11.15	8.18	0.84	0.00	0.00	32.37	78.47	32.41	11.28	10.76	1.10	0.00	0.00	42.86	98.41
	C85TE009	31.98	13.75	10.23	1.05	0.00	0.00	39.91	96.92	39.97	13.91	13.46	1.38	0.00	0.00	52.86	121.58
	C85TE010	42.40	18.24	10.67	1.09	0.00	0.00	52.92	125.32	53.00	18.45	14.04	1.44	0.00	0.00	70.08	157.01
	C85TE011	56.95	26.81	14.00	1.56	0.00	0.00	79.46	178.78	69.60	27.08	18.43	2.06	0.00	0.00	102.28	219.45
C90																	
	C90LB001	51.23	24.63	16.66	2.02	8.78	1.45	72.17	176.94	56.92	24.74	21.06	2.55	35.11	5.79	84.62	230.79
	C90LB002	59.20	28.41	18.96	2.30	8.78	1.45	83.37	202.47	65.78	28.54	24.03	2.91	35.11	5.79	97.74	259.90
	C90LB003	93.94	45.05	25.25	3.07	13.17	2.17	132.28	314.93	104.38	45.27	32.15	3.90	52.65	8.69	155.08	402.12
C95																	
	C95AP004	20.74	8.90	16.81	13.80	0.00	0.00	27.51	87.76								
	C95AP005	0.67	0.29	0.00	0.00	0.00	0.00	0.88	1.84								
	C95AP006	1.29	0.56	0.00	0.00	0.00	0.00	1.72	3.57								
	C95AP007	32.79	14.07	27.97	21.31	0.00	0.00	43.49	139.63								
	C95AP008	5.18	2.22	0.00	0.50	0.00	0.00	6.88	14.78								
	C95AP009	1.73	0.74	0.00	0.00	0.00	0.00	2.30	4.77								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
C95	***cont.***																
	C95AP010	43.71	18.75	28.49	21.61	0.00	0.00	57.97	170.53								
	C95AP011	1.62	0.70	0.00	0.00	0.00	0.00	2.15	4.47								
	C95AP012	6.43	2.76	0.00	0.50	0.00	0.00	8.53	18.22								
	C95AP013	41.89	17.97	46.48	32.10	0.00	0.00	55.56	194.00								
	C95AP014	1.48	0.63	0.00	0.00	0.00	0.00	1.96	4.07								
	C95AP015	5.62	2.41	0.00	0.50	0.00	0.00	7.46	15.99								
	C95AP016	1.97	0.84	0.00	0.00	0.00	0.00	2.61	5.42								
	C95AP017	17.73	7.61	16.41	12.57	0.00	0.00	23.52	77.84								
	C95AP018	0.63	0.27	0.00	0.00	0.00	0.00	0.83	1.73								
	C95AP019	3.50	1.50	0.00	0.50	0.00	0.00	4.64	10.14								
	C95AP020	19.52	8.37	29.28	20.07	0.00	0.00	25.89	103.13								
	C95AP021	30.50	13.08	33.88	23.75	0.00	0.00	40.45	141.66								
	C95AP022	4.68	2.01	3.15	2.84	0.00	0.00	6.21	18.89								
	C95AP023	0.11	0.05	0.00	0.00	0.00	0.00	0.15	0.31								
	C95LH003	18.13	7.78	14.31	11.34	0.00	0.00	24.04	75.60								
	C95LH005	23.57	10.11	19.43	15.33	0.00	0.00	31.26	99.70								
	C95LH011	44.05	18.89	29.28	22.07	0.00	0.00	58.42	172.71								
	C95LH013	56.27	24.14	29.28	22.07	0.00	0.00	74.63	206.39								
	C95LH015	75.00	32.18	41.62	31.26	0.00	0.00	99.48	279.54								
	C95LH022	15.97	6.93	4.60	4.68	0.69	0.11	21.23	54.21								
	C95LH023	22.28	9.66	8.53	7.97	0.87	0.14	29.62	79.07								
D10																	
	D10IR003	10.68	3.99	0.00	0.79	0.00	0.00	18.88	34.34								
	D10IR005	40.18	10.96	19.12	2.50	0.00	0.00	71.04	143.80								
	D10SU002	13.15	4.91	0.00	0.80	0.00	0.00	23.25	42.11								
	D10SU003	13.49	5.04	0.00	0.80	0.00	0.00	23.85	43.18								
	D10SU005	20.58	5.61	23.12	3.02	0.00	0.00	36.38	88.71								
	D10SU006	20.82	5.68	23.12	3.02	0.00	0.00	36.81	89.45								
D15																	
	D15BI001	1.45	0.40	2.45	0.37	0.00	0.00	2.30	6.97								
	D15BI002	2.58	0.70	1.78	0.23	0.00	0.00	4.11	9.40								
	D15BI003	3.90	1.06	2.67	0.35	0.00	0.00	6.21	14.19								
	D15BI004	6.10	1.66	4.00	0.52	0.00	0.00	9.70	21.98								
	D15BI005	8.46	2.31	6.05	0.79	0.00	0.00	13.45	31.06								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
D15	***cont.***																
	D15BI006	13.42	3.66	10.58	1.38	0.00	0.00	21.35	50.39								
	D15BI007	19.69	5.37	15.21	1.99	0.00	0.00	31.32	73.58								
	D15BI008	16.58	4.52	15.21	1.99	0.00	0.00	26.37	64.67								
	D15XX001	0.76	0.21	0.00	0.00	0.00	0.00	1.22	2.19								
	D15XX002	1.15	0.31	0.00	0.00	0.00	0.00	1.83	3.29								
D20																	
	D20AD002	0.67	0.15	0.32	0.42	0.00	0.00	1.00	2.56								
	D20AD005	0.65	0.15	0.32	0.42	0.00	0.00	0.98	2.52								
	D20AD006	1.08	0.24	0.65	0.74	0.00	0.00	1.62	4.33								
	D20AD007	1.79	0.40	1.29	1.48	0.00	0.00	2.68	7.64								
	D20CQ001	2.59	0.58	8.59	2.14	0.00	0.00	3.89	17.79								
	D20LY001	0.96	0.21	0.48	0.75	0.00	0.00	1.45	3.85								
	D20LY002	1.00	0.22	0.00	0.60	0.00	0.00	1.50	3.32								
D25																	
	D25AD003	9.35	2.55	6.14	0.69	0.00	0.00	16.53	35.26								
	D25AD004	7.46	2.03	2.49	0.28	0.00	0.00	13.18	25.44								
	D25EZ001	0.63	0.17	0.00	0.50	0.00	0.00	1.12	2.42								
	D25EZ002	0.50	0.15	0.00	0.50	0.09	0.01	0.91	2.16								
	D25EZ003	0.55	0.16	0.00	0.50	0.06	0.01	0.99	2.27								
	D25EZ005	2.11	0.59	0.00	1.25	0.12	0.02	3.76	7.85								
D30																	
	D30HD001	7.15	1.95	18.67	4.44	0.00	0.00	12.64	44.85								
	D30HD002	10.71	2.92	24.01	6.14	0.00	0.00	18.93	62.71								
	D30HD003	13.97	3.81	29.79	7.89	0.00	0.00	24.69	80.15								
	D30MR001	1.02	0.28	1.64	0.24	0.00	0.00	1.80	4.98								
	D30MR003	10.10	2.78	5.16	0.67	0.15	0.02	17.88	36.76								
	D30MR005	18.50	5.11	34.69	4.53	0.53	0.09	32.82	96.27								
	D30MR006	21.33	5.88	12.63	1.65	0.53	0.09	37.81	79.92								
	D30MR007	30.45	8.37	12.63	1.65	0.53	0.09	53.95	107.67								
D35																	
	D35DT001	30.72	10.40	40.01	7.09	0.00	0.00	50.92	139.14								
	D35DT002	32.36	10.95	40.01	7.09	0.00	0.00	53.64	144.05								
	D35DT003	35.54	12.03	40.01	7.09	0.00	0.00	58.91	153.58								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
D35	***cont.***																
	D35DT004	37.47	12.68	46.68	8.28	0.00	0.00	62.10	167.21								
	D35DT005	56.34	19.07	67.58	11.98	0.00	0.00	93.39	248.36								
	D35DT006	37.84	16.23	67.58	10.08	0.00	0.00	62.72	194.45								
	D35IB003	35.89	15.50	46.69	6.96	0.92	0.15	59.56	165.67								
	D35IB004	34.15	14.78	45.80	6.83	1.21	0.20	56.70	159.67								
	D35IB005	39.62	17.12	55.58	8.29	1.21	0.20	65.77	187.79								
	D35IB006	41.66	18.00	56.92	8.49	1.21	0.20	69.16	195.64								
	D35RD001	31.49	10.66	39.67	7.04	0.00	0.00	52.20	141.06								
F10																	
	F10JC001	5.01	1.29	5.44	0.61	0.73	0.12	5.89	19.09								
	F10JC002	5.47	1.40	5.44	0.61	0.73	0.12	6.43	20.20								
G10																	
	G10CA012	2.80	0.58	22.78	2.55	0.00	0.00	2.75	31.46	3.50	0.59	30.13	3.37	0.00	0.00	3.93	41.52
	G10CA013	3.61	0.74	29.38	3.28	0.00	0.00	3.55	40.56	4.52	0.76	38.86	4.34	0.00	0.00	5.07	53.55
	G10CA014	4.72	0.97	38.88	4.35	0.00	0.00	4.64	53.56	5.90	1.00	51.42	5.75	0.00	0.00	6.62	70.69
	G10CA015	6.53	1.34	49.83	5.57	0.00	0.00	6.42	69.69	8.17	1.38	65.91	7.37	0.00	0.00	9.16	91.99
	G10CA016	7.97	1.64	59.27	6.62	0.00	0.00	7.83	83.33	9.96	1.68	78.38	8.76	0.00	0.00	11.18	109.96
	G10CA017	12.55	2.58	79.00	8.83	0.00	0.00	12.32	115.28	15.68	2.65	104.48	11.68	0.00	0.00	17.60	152.09
	G10CA018	15.94	3.28	104.68	11.70	0.00	0.00	15.66	151.26	19.93	3.36	138.44	15.47	0.00	0.00	22.36	199.56
	G10CA019	26.63	5.48	167.13	18.68	0.00	0.00	26.16	244.08	33.29	5.61	221.05	24.70	0.00	0.00	37.36	322.01
	G10CA020	2.23	0.46	12.62	1.41	0.00	0.00	2.19	18.91	2.79	0.47	16.69	1.87	0.00	0.00	3.13	24.95
	G10WC001	0.23	0.04	1.34	0.15	0.00	0.00	0.20	1.96	0.27	0.04	1.75	0.20	0.00	0.00	0.26	2.52
	G10WC002	0.29	0.05	1.84	0.21	0.00	0.00	0.25	2.64	0.34	0.05	2.41	0.27	0.00	0.00	0.33	3.40
	G10WC003	0.47	0.08	2.68	0.30	0.00	0.00	0.40	3.93	0.54	0.08	3.50	0.39	0.00	0.00	0.53	5.04
	G10WC004	0.53	0.09	3.02	0.34	0.00	0.00	0.45	4.43	0.61	0.09	3.94	0.44	0.00	0.00	0.60	5.68
	G10XX001	0.10	0.02	0.17	0.02	0.00	0.00	0.09	0.40	0.12	0.02	0.22	0.02	0.00	0.00	0.11	0.49
	G10XX002	0.50	0.08	3.18	0.36	0.00	0.00	0.42	4.54	0.57	0.09	4.15	0.46	0.00	0.00	0.56	5.83
	G10XX003	1.12	0.19	1.67	0.19	0.00	0.00	0.95	4.12	1.28	0.19	2.21	0.25	0.00	0.00	1.26	5.19
	G10XX004	0.58	0.10	0.65	0.07	0.00	0.00	0.49	1.89	0.66	0.10	0.86	0.10	0.00	0.00	0.65	2.37
	G10XX005	1.42	0.29	6.03	0.67	0.00	0.00	1.39	9.80	1.78	0.30	7.87	0.88	0.00	0.00	1.99	12.82
	G10XX006	1.25	0.26	8.38	0.94	0.00	0.00	1.23	12.06	1.57	0.26	10.93	1.22	0.00	0.00	1.76	15.74
	G10XX007	1.89	0.39	11.73	1.31	0.00	0.00	1.86	17.18	2.36	0.40	15.31	1.71	0.00	0.00	2.65	22.43
	G10XX008	2.32	0.48	7.76	0.87	0.00	0.00	2.28	13.71	2.90	0.49	10.27	1.15	0.00	0.00	3.26	18.07
	G10XX009	2.00	0.41	10.37	1.16	0.00	0.00	1.97	15.91	2.50	0.42	13.72	1.53	0.00	0.00	2.81	20.98

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
G10	*cont.*																
	G10XX010	2.96	0.61	14.51	1.62	0.00	0.00	2.91	22.61	3.70	0.62	19.19	2.14	0.00	0.00	4.15	29.80
	G10XX011	3.27	0.67	27.20	3.04	0.00	0.00	3.21	37.39	4.08	0.69	35.98	4.02	0.00	0.00	4.58	49.35
	G10XX012	3.91	0.81	31.05	3.47	0.00	0.00	3.84	43.08	4.89	0.83	41.06	4.59	0.00	0.00	5.49	56.86
	G10XX013	4.92	1.01	41.35	4.62	0.00	0.00	4.83	56.73	6.15	1.04	54.69	6.11	0.00	0.00	6.90	74.89
	G10XX014	7.01	1.44	51.72	5.78	0.00	0.00	6.89	72.84	8.77	1.48	68.41	7.65	0.00	0.00	9.84	96.15
	G10XX015	11.49	2.36	76.17	8.51	0.00	0.00	11.29	109.82	14.36	2.42	100.74	11.26	0.00	0.00	16.12	144.90
	G10XX016	16.20	3.33	103.37	11.55	0.00	0.00	15.92	150.37	20.26	3.42	136.71	15.28	0.00	0.00	22.73	198.40
G15																	
	G15CA001	10.61	4.15	8.48	1.34	1.03	0.17	12.92	38.70	11.40	4.17	10.82	1.71	3.40	0.56	15.72	47.78
	G15CA003	12.43	4.85	9.50	1.50	1.03	0.17	15.12	44.60	13.35	4.88	12.12	1.92	3.40	0.56	18.41	54.64
	G15CA004	13.28	5.19	11.20	1.77	1.13	0.19	16.16	48.92	14.26	5.21	14.29	2.26	3.72	0.61	19.66	60.01
	G15CA005	17.95	7.10	14.59	2.31	3.21	0.53	21.92	67.61	19.28	7.14	18.61	2.95	10.58	1.75	26.67	86.98
	G15CA006	25.77	10.19	18.66	2.96	5.08	0.84	31.45	94.95	27.67	10.23	23.81	3.77	16.77	2.77	38.27	123.29
	G15CA007	11.22	4.39	9.16	1.45	1.03	0.17	13.65	41.07	12.05	4.41	11.69	1.85	3.40	0.56	16.61	50.57
	G15CA008	15.39	6.00	12.55	1.99	1.28	0.21	18.72	56.14	16.53	6.03	16.02	2.54	4.31	0.71	22.77	68.91
	G15CA009	14.39	5.62	12.55	1.99	1.13	0.19	17.51	53.38	15.46	5.64	16.02	2.54	3.72	0.61	21.31	65.30
	G15CA010	16.65	6.49	13.57	2.15	1.28	0.21	20.25	60.60	17.89	6.52	17.32	2.74	4.31	0.71	24.64	74.13
	G15JD008	11.22	4.52	10.25	1.62	3.42	0.56	13.76	45.35	12.05	4.54	13.07	2.07	11.30	1.86	16.74	61.63
	G15JD009	12.97	5.19	10.59	1.68	3.88	0.64	15.88	50.83	13.93	5.22	13.51	2.14	13.09	2.16	19.33	69.38
	G15JD010	13.02	5.21	12.55	1.99	3.42	0.56	15.94	52.69	13.98	5.23	16.02	2.54	11.30	1.86	19.40	70.33
	G15JD011	14.75	5.88	13.91	2.20	3.88	0.64	18.04	59.30	15.84	5.90	17.75	2.81	13.09	2.16	21.95	79.50
H10																	
	H10NP001	0.87	0.14	0.00	0.50	0.00	0.00	1.36	2.87								
	H10NP002	0.97	0.15	0.00	0.50	0.00	0.00	1.50	3.12								
	H10NP003	1.45	0.23	0.00	0.75	0.00	0.00	2.25	4.68								
	H10NP004	1.86	0.29	0.00	0.75	0.00	0.00	2.90	5.80								
	H10NP005	2.47	0.39	0.00	1.00	0.00	0.00	3.84	7.70								
	H10NP006	3.32	0.52	0.00	1.00	0.00	0.00	5.17	10.01								
	H10NP008	5.05	0.79	0.00	1.25	0.00	0.00	7.86	14.95								
	H10NP009	6.45	1.01	0.00	1.25	0.00	0.00	10.04	18.75								
	H10NP015	7.86	1.23	0.00	1.25	0.00	0.00	12.23	22.57								
	H10NP016	10.84	1.70	0.00	1.25	0.00	0.00	16.87	30.66								
	H10NP017	14.15	2.22	0.00	1.25	0.00	0.00	22.02	39.64								
	H10NP018	32.87	5.16	0.00	1.25	0.00	0.00	51.15	90.43								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H13																	
	H13AY007	12.94	3.21	0.00	0.00	0.00	0.00	18.13	34.28								
	H13AY008	6.46	1.60	0.00	0.00	0.00	0.00	9.05	17.11								
	H13AY009	11.51	2.85	0.00	0.00	0.00	0.00	16.14	30.50								
	H13AY010	5.96	1.48	0.00	0.00	0.00	0.00	8.35	15.79								
	H13AY011	9.66	2.39	0.00	0.00	0.00	0.00	13.53	25.58								
	H13AY012	5.03	1.25	0.00	0.00	0.00	0.00	7.05	13.33								
	H13AY013	7.77	1.92	0.00	0.00	0.00	0.00	10.88	20.57								
	H13AY014	4.25	1.05	0.00	0.00	0.00	0.00	5.95	11.25								
	H13AY015	4.59	1.14	0.00	0.00	0.00	0.00	6.43	12.16								
	H13AY016	3.01	0.75	0.00	0.00	0.00	0.00	4.22	7.98								
	H13AY017	14.36	3.56	0.00	0.00	0.00	0.00	20.13	38.05								
	H13AY018	7.42	1.84	0.00	0.00	0.00	0.00	10.40	19.66								
	H13AY019	0.93	0.23	0.13	0.33	0.00	0.00	1.30	2.92								
	H13AY020	1.20	0.30	0.13	0.33	0.00	0.00	1.68	3.64								
	H13AY021	16.25	3.71	0.00	0.00	0.57	0.09	19.07	39.69								
	H13AY022	8.87	2.05	0.00	0.00	0.57	0.09	10.43	22.01								
	H13AY023	14.73	3.37	0.00	0.00	0.57	0.09	17.30	36.06								
	H13AY024	7.85	1.82	0.00	0.00	0.57	0.09	9.24	19.57								
	H13AY025	13.13	3.01	0.00	0.00	0.57	0.09	15.42	32.22								
	H13AY026	7.23	1.68	0.00	0.00	0.57	0.09	8.51	18.08								
	H13AY027	11.06	2.54	0.00	0.00	0.57	0.09	13.00	27.26								
	H13AY028	6.14	1.43	0.00	0.00	0.57	0.09	7.24	15.47								
	H13AY029	8.95	2.07	0.00	0.00	0.57	0.09	10.53	22.21								
	H13AY030	5.22	1.22	0.00	0.00	0.57	0.09	6.15	13.25								
	H13AY031	5.82	1.36	0.00	0.00	0.57	0.09	6.86	14.70								
	H13AY032	3.85	0.92	0.00	0.00	0.57	0.09	4.55	9.98								
	H13BB001	3.93	0.40	1.31	1.44	0.00	0.00	5.76	12.84								
	H13BB002	3.53	0.36	1.97	2.03	0.00	0.00	5.17	13.06								
	H13BC003	4.05	0.45	0.66	0.38	0.00	0.00	4.42	9.96								
	H13BC006	3.78	0.42	0.39	0.23	0.00	0.00	4.12	8.94								
	H13BC007	5.85	0.65	0.39	0.23	0.00	0.00	6.37	13.49								
	H13BC008	7.15	0.80	0.66	0.38	0.00	0.00	7.80	16.79								
	H13BC009	4.90	0.55	0.39	0.23	0.00	0.00	5.34	11.41								
	H13BC010	2.89	0.32	0.39	0.23	0.00	0.00	3.15	6.98								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H13	***cont.***																
	H13BC011	3.69	0.41	0.66	0.38	0.00	0.00	4.02	9.16								
	H13BC012	3.02	0.34	0.39	0.23	0.00	0.00	3.29	7.27								
	H13BC013	2.73	0.31	0.39	0.23	0.00	0.00	2.98	6.64								
	H13CB001	1.84	0.41	0.66	0.63	0.00	0.00	2.15	5.69								
	H13CB002	1.99	0.45	1.31	1.01	0.00	0.00	2.33	7.09								
	H13CO002	1.02	0.23	0.66	0.63	0.00	0.00	1.20	3.74								
	H13CO003	1.57	0.46	0.39	0.48	0.00	0.00	2.20	5.10								
	H13CO004	2.73	0.80	0.39	0.73	0.00	0.00	3.83	8.48								
	H13CO005	4.13	1.21	0.39	0.73	0.00	0.00	5.79	12.25								
	H13CO006	3.18	0.93	0.39	0.58	0.00	0.00	4.45	9.53								
	H13EP001	1.82	0.41	0.66	0.63	0.00	0.00	2.14	5.66								
	H13EP002	2.38	0.70	0.98	0.87	0.00	0.00	3.34	8.27								
	H13KP001	6.20	1.41	1.64	0.96	0.14	0.02	7.27	17.64								
	H13KP002	7.04	1.60	2.04	1.19	0.14	0.02	8.26	20.29								
	H13KP003	8.29	1.88	2.89	1.68	0.14	0.02	9.72	24.62								
	H13KP004	9.54	2.16	3.68	2.15	0.14	0.02	11.19	28.88								
	H13MN001	21.86	5.02	19.70	13.34	0.64	0.11	28.91	89.58								
	H13MN002	26.55	6.10	26.26	17.78	0.83	0.14	35.11	112.77								
	H13MN003	31.25	7.16	26.26	18.78	0.83	0.14	41.32	125.74								
	H13MN004	35.87	8.20	39.39	26.67	0.83	0.14	47.40	158.50								
	H13PR001	8.74	2.16	0.39	0.23	0.00	0.00	12.24	23.76								
	H13PR002	25.73	5.85	0.39	1.73	0.57	0.09	30.19	64.55								
	H13PR003	15.57	3.86	0.66	0.38	0.00	0.00	21.82	42.29								
	H13PR005	20.47	5.07	0.66	0.38	0.00	0.00	28.68	55.26								
	H13PR006	22.84	5.19	0.66	1.88	0.57	0.09	26.80	58.03								
	H13PR007	24.70	6.12	1.31	0.76	0.00	0.00	34.61	67.50								
	H13PR011	35.65	8.08	0.26	1.65	0.57	0.09	41.81	88.11								
	H13PR012	38.36	8.69	0.39	1.73	0.57	0.09	44.98	94.81								
	H13PR013	40.72	9.22	0.66	1.88	0.57	0.09	47.75	100.89								
	H13PR014	45.68	10.34	1.05	2.11	0.57	0.09	53.56	113.40								
	H13PR015	52.08	11.78	1.05	2.11	0.57	0.09	61.06	128.74								
	H13PR022	18.02	4.46	0.26	0.15	0.00	0.00	25.25	48.14								
	H13PR023	20.67	5.12	0.39	0.23	0.00	0.00	28.96	55.37								
	H13PR024	22.88	5.67	0.39	0.23	0.00	0.00	32.07	61.24								
	H13PR025	27.56	6.83	0.39	0.23	0.00	0.00	38.61	73.62								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H13	***cont.***																
	H13PR026	14.70	3.64	0.53	0.31	0.00	0.00	20.60	39.78								
	H13S5001	5.21	1.17	0.39	0.23	0.00	0.00	6.11	13.11								
	H13S5002	10.70	2.41	0.66	0.38	0.00	0.00	12.54	26.69								
	H13S5003	12.77	2.88	0.66	0.38	0.00	0.00	14.97	31.66								
	H13S5004	17.73	3.99	0.66	0.38	0.00	0.00	20.77	43.53								
	H13SH001	4.11	0.93	2.63	1.38	0.00	0.00	5.43	14.48								
	H13SH002	3.86	0.87	2.63	1.38	0.00	0.00	5.10	13.84								
	H13SH003	6.66	1.50	5.25	2.75	0.00	0.00	8.78	24.94								
	H13SH004	6.95	1.57	5.25	2.75	0.00	0.00	9.17	25.69								
	H13SH005	11.26	2.54	13.13	6.89	0.00	0.00	14.85	48.67								
	H13SH006	35.82	8.07	39.39	20.67	0.00	0.00	47.24	151.19								
	H13SH007	46.56	10.49	78.78	41.34	0.00	0.00	61.40	238.57								
	H13TH001	0.97	0.22	0.66	0.38	0.00	0.00	1.14	3.37								
	H13TH002	1.75	0.40	0.65	0.07	0.07	0.01	2.06	5.01								
	H13TH003	2.22	0.51	1.16	0.13	0.07	0.01	2.61	6.71								
	H13YB001	28.10	6.33	6.57	3.83	0.00	0.00	32.93	77.76								
	H13YB002	28.10	6.33	6.57	3.83	0.00	0.00	32.93	77.76								
	H13YB003	28.10	6.33	6.57	3.83	0.00	0.00	32.93	77.76								
H20																	
	H20BE002	1.93	0.43	0.00	0.20	0.00	0.00	2.40	4.96								
	H20BE003	2.56	0.58	0.00	0.30	0.00	0.00	3.18	6.62								
	H20BE004	4.19	0.94	0.00	0.40	0.00	0.00	5.22	10.75								
H25																	
	H25AU001	0.94	0.14	0.00	0.00	0.00	0.00	1.38	2.46								
	H25AU002	1.09	0.16	0.00	0.00	0.00	0.00	1.60	2.85								
	H25AU003	1.53	0.22	0.00	0.00	0.00	0.00	2.24	3.99								
	H25AU004	2.39	0.34	0.00	0.00	0.00	0.00	3.49	6.22								
	H25AU005	2.39	0.34	0.00	0.00	0.00	0.00	3.50	6.23								
	H25AX001	1.00	0.14	0.00	0.00	0.00	0.00	1.46	2.60								
	H25AX002	1.18	0.17	0.00	0.00	0.00	0.00	1.72	3.07								
	H25AX003	1.20	0.17	0.00	0.00	0.00	0.00	1.76	3.13								
	H25AX004	1.46	0.21	0.00	0.00	0.00	0.00	2.14	3.81								
	H25AX005	1.36	0.20	0.00	0.00	0.00	0.00	2.00	3.56								
	H25AX006	1.69	0.24	0.00	0.00	0.00	0.00	2.48	4.41								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H25	***cont.***																
	H25BS001	0.63	0.10	0.00	0.00	0.00	0.00	0.78	1.51								
	H25BS002	0.74	0.12	0.00	0.00	0.00	0.00	0.92	1.78								
	H25BS003	0.82	0.13	0.00	0.00	0.00	0.00	1.02	1.97								
	H25BS004	0.99	0.16	0.00	0.00	0.00	0.00	1.23	2.38								
	H25BS005	1.56	0.25	0.00	0.00	0.00	0.00	1.95	3.76								
	H25CA020	11.70	2.75	5.73	0.94	0.00	0.00	13.63	34.75	14.21	2.80	7.58	1.24	0.00	0.00	20.10	45.93
	H25CA021	12.83	3.01	6.09	1.00	0.00	0.00	14.95	37.88	15.58	3.07	8.06	1.32	0.00	0.00	22.04	50.07
	H25CA022	13.66	4.41	9.29	1.52	0.00	0.00	18.19	47.07	16.39	4.47	12.28	2.01	0.00	0.00	25.91	61.06
	H25CA023	17.09	5.52	9.29	1.52	0.00	0.00	22.77	56.19	20.51	5.59	12.28	2.01	0.00	0.00	32.44	72.83
	H25CA034	3.35	0.74	1.23	0.20	0.00	0.00	3.90	9.42	3.82	0.75	1.63	0.27	0.00	0.00	5.09	11.56
	H25CA035	4.06	0.90	1.81	0.30	0.00	0.00	4.73	11.80	4.64	0.91	2.40	0.39	0.00	0.00	6.18	14.52
	H25CA036	6.70	1.49	3.05	0.50	0.00	0.00	7.81	19.55	7.66	1.51	4.03	0.66	0.00	0.00	10.20	24.06
	H25CA038	8.80	2.07	3.92	0.64	0.00	0.00	10.25	25.68	10.68	2.11	5.18	0.85	0.00	0.00	15.11	33.93
	H25CA040	9.48	3.06	9.07	1.49	0.00	0.00	12.63	35.73	11.38	3.10	11.99	1.97	0.00	0.00	18.00	46.44
	H25CA052	13.06	1.88	0.00	1.50	0.00	0.00	17.23	33.67								
	H25CA053	17.81	2.56	0.00	1.60	0.00	0.00	23.49	45.46								
	H25CA054	22.88	3.28	0.00	3.00	0.00	0.00	30.17	59.33								
	H25CA055	3.38	0.48	0.00	0.40	0.00	0.00	4.45	8.71								
	H25CA056	37.23	5.34	0.00	3.00	0.00	0.00	49.10	94.67								
	H25CA057	11.49	1.65	0.00	0.80	0.00	0.00	15.15	29.09								
	H25CA058	2.74	0.39	0.00	0.50	0.00	0.00	4.02	7.65								
	H25CA059	10.08	1.45	0.00	0.60	0.00	0.00	14.76	26.89								
	H25CA060	14.86	2.13	0.00	0.75	0.00	0.00	21.76	39.50								
	H25CA061	12.98	1.86	0.00	0.75	0.00	0.00	19.01	34.60								
	H25CA062	23.86	3.43	0.00	0.90	0.00	0.00	34.95	63.14								
	H25CA063	17.00	2.44	0.00	0.90	0.00	0.00	24.90	45.24								
	H25CA064	20.72	2.97	0.00	1.00	0.00	0.00	30.35	55.04								
	H25KC016	12.43	2.92	6.82	1.12	0.00	0.00	14.49	37.78	15.10	2.98	9.02	1.48	0.00	0.00	21.36	49.94
	H25KC017	8.72	2.05	3.92	0.64	0.00	0.00	10.17	25.50	10.59	2.09	5.18	0.85	0.00	0.00	14.99	33.70
	H25KC019	13.65	4.41	10.37	1.70	0.00	0.00	18.18	48.31	16.38	4.47	13.72	2.25	0.00	0.00	25.91	62.73
	H25KC020	14.88	4.81	10.37	1.70	0.00	0.00	19.83	51.59	17.86	4.87	13.72	2.25	0.00	0.00	28.24	66.94
	H25KC021	15.74	5.08	12.77	2.09	0.00	0.00	20.96	56.64	18.89	5.15	16.89	2.77	0.00	0.00	29.87	73.57
	H25KC022	17.81	5.75	12.77	2.09	0.00	0.00	23.73	62.15	21.38	5.83	16.89	2.77	0.00	0.00	33.80	80.67
	H25KC023	22.13	7.15	17.26	2.83	0.00	0.00	29.48	78.85	26.56	7.24	22.83	3.74	0.00	0.00	42.00	102.37
	H25KC024	20.90	8.86	22.20	1.15	0.00	0.00	34.80	87.91	24.77	8.95	29.36	1.52	0.00	0.00	45.35	109.95

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H25	***cont.***																
	H25KC026	21.90	9.29	22.85	1.18	0.00	0.00	36.47	91.69	25.95	9.37	30.22	1.56	0.00	0.00	47.51	114.61
	H25KM001	11.01	2.59	6.46	1.06	0.00	0.00	12.83	33.95	13.37	2.64	8.54	1.40	0.00	0.00	18.92	44.87
	H25KM003	16.92	3.97	7.98	1.31	0.00	0.00	19.72	49.90	20.54	4.05	10.55	1.73	0.00	0.00	29.06	65.93
	H25KM009	37.87	18.90	32.93	1.85	0.00	0.00	69.33	160.88	47.97	19.13	43.56	2.44	0.00	0.00	99.84	212.94
	H25KM013	34.22	11.05	22.20	3.64	0.00	0.00	45.59	116.70	41.07	11.20	29.36	4.81	0.00	0.00	64.94	151.38
	H25KM015	37.52	15.91	27.86	1.44	0.00	0.00	62.49	145.22	44.47	16.06	36.84	1.90	0.00	0.00	81.41	180.68
	H25KM018	3.96	0.88	1.45	0.24	0.00	0.00	4.61	11.14	4.52	0.89	1.92	0.31	0.00	0.00	6.03	13.67
	H25KM021	5.37	1.19	2.83	0.46	0.00	0.00	6.26	16.11	6.14	1.21	3.74	0.61	0.00	0.00	8.18	19.88
	H25KM022	6.84	1.52	2.90	0.48	0.00	0.00	7.97	19.71	7.82	1.54	3.84	0.63	0.00	0.00	10.41	24.24
	H25KM023	8.46	1.88	3.92	0.64	0.00	0.00	9.85	24.75	9.66	1.90	5.18	0.85	0.00	0.00	12.87	30.46
	H25KM027	15.47	3.63	6.24	1.02	0.00	0.00	18.03	44.39	18.78	3.70	8.25	1.35	0.00	0.00	26.57	58.65
	H25KM033	75.88	37.87	65.87	3.70	0.00	0.00	138.90	322.22	96.11	38.33	87.11	4.89	0.00	0.00	200.04	426.48
	H25KN001	4.03	0.58	0.00	0.50	0.00	0.00	5.90	11.01								
	H25KN002	5.59	0.80	0.00	0.50	0.00	0.00	8.19	15.08								
	H25KN003	6.82	0.98	0.00	0.50	0.00	0.00	9.99	18.29								
	H25KN004	7.83	1.12	0.00	0.50	0.00	0.00	11.47	20.92								
	H25KN005	11.31	1.62	0.00	1.00	0.00	0.00	16.56	30.49								
	H25KN006	15.84	2.27	0.00	1.00	0.00	0.00	23.20	42.31								
	H25KN007	0.80	0.12	0.00	0.15	0.00	0.00	1.18	2.25								
	H25KN009	1.67	0.24	0.00	0.15	0.00	0.00	2.45	4.51								
	H25KN010	2.32	0.33	0.00	0.15	0.00	0.00	3.40	6.20								
	H25LI003	11.41	2.68	6.46	1.06	0.00	0.00	13.30	34.91	13.86	2.73	8.54	1.40	0.00	0.00	19.60	46.13
	H25LI005	13.32	3.13	7.33	1.20	0.00	0.00	15.53	40.51	16.18	3.19	9.69	1.59	0.00	0.00	22.89	53.54
	H25LU001	2.72	0.39	0.00	0.40	0.00	0.00	3.59	7.10								
	H25LU002	3.00	0.43	0.00	0.50	0.00	0.00	3.95	7.88								
	H25LU003	5.77	0.83	0.00	0.80	0.00	0.00	7.61	15.01								
	H25LU004	6.71	0.96	0.00	0.90	0.00	0.00	8.85	17.42								
	H25LU005	8.42	1.21	0.00	1.10	0.00	0.00	11.11	21.84								
	H25LU006	11.80	1.69	0.00	1.50	0.00	0.00	15.56	30.55								
	H25LU007	10.09	1.45	0.00	1.40	0.00	0.00	13.30	26.24								
	H25LU008	13.19	1.89	0.00	1.60	0.00	0.00	17.39	34.07								
	H25LU009	14.49	2.08	0.00	1.70	0.00	0.00	19.11	37.38								
	H25LU010	17.43	2.50	0.00	2.00	0.00	0.00	22.99	44.92								
	H25LU011	17.25	2.48	0.00	2.00	0.00	0.00	22.75	44.48								
	H25LU012	21.13	3.03	0.00	2.50	0.00	0.00	27.86	54.52								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H25	***cont.***																
	H25LU013	21.79	3.13	0.00	2.60	0.00	0.00	28.74	56.26								
	H25LU014	25.37	3.64	0.00	3.00	0.00	0.00	33.47	65.48								
	H25LU023	1.52	0.24	0.00	0.25	0.00	0.00	1.90	3.91								
	H25LU024	2.17	0.34	0.00	0.30	0.00	0.00	2.70	5.51								
	H25LU025	2.66	0.42	0.00	0.40	0.00	0.00	3.32	6.80								
	H25LU026	3.05	0.48	0.00	0.50	0.00	0.00	3.79	7.82								
	H25LU027	3.41	0.54	0.00	0.60	0.00	0.00	4.25	8.80								
	H25LU028	4.37	0.69	0.00	0.70	0.00	0.00	5.45	11.21								
	H25LU034	6.18	0.97	0.00	0.80	0.00	0.00	7.70	15.65								
	H25LU035	6.64	1.04	0.00	0.90	0.00	0.00	8.27	16.85								
	H25LU036	7.09	1.11	0.00	1.00	0.00	0.00	8.83	18.03								
	H25LU040	14.27	2.05	0.00	0.75	0.00	0.00	20.90	37.97								
	H25LU041	17.46	2.51	0.00	0.75	0.00	0.00	25.58	46.30								
	H25LU042	20.75	2.98	0.00	1.50	0.00	0.00	30.39	55.62								
	H25LU046	3.37	0.48	0.00	0.50	0.00	0.00	4.93	9.28								
	H25LU047	3.86	0.55	0.00	0.60	0.00	0.00	5.66	10.67								
	H25LU048	4.40	0.63	0.00	0.70	0.00	0.00	6.45	12.18								
	H25LU049	5.36	0.77	0.00	0.80	0.00	0.00	7.85	14.78								
	H25LU050	6.61	0.95	0.00	0.90	0.00	0.00	9.68	18.14								
	H25LU053	14.97	2.15	0.00	0.75	0.00	0.00	21.93	39.80								
	H25LU054	18.45	2.65	0.00	0.75	0.00	0.00	27.02	48.87								
	H25ME001	2.67	0.59	0.96	0.16	0.00	0.00	3.11	7.49	3.05	0.60	1.28	0.21	0.00	0.00	4.06	9.20
	H25ME002	3.91	0.87	2.90	0.48	0.00	0.00	4.56	12.72	4.47	0.88	3.84	0.63	0.00	0.00	5.95	15.77
	H25ME003	5.58	1.24	3.48	0.57	0.00	0.00	6.50	17.37	6.37	1.26	4.61	0.76	0.00	0.00	8.49	21.49
	H25WN001	0.90	0.14	0.00	0.00	0.00	0.00	1.12	2.16								
	H25WN002	1.03	0.15	0.00	0.00	0.00	0.00	1.50	2.68								
	H25WN003	1.13	0.16	0.00	0.00	0.00	0.00	1.66	2.95								
	H25WN004	1.24	0.18	0.00	0.00	0.00	0.00	1.82	3.24								
	H25WN005	1.42	0.20	0.00	0.00	0.00	0.00	2.07	3.69								
H30																	
	H30CA005	18.46	4.24	10.25	1.59	1.78	0.29	15.49	52.10	22.72	4.33	13.07	2.03	6.40	1.06	20.99	70.60
	H30CA007	15.19	3.55	8.21	1.27	2.25	0.37	12.80	43.64	18.70	3.63	10.48	1.63	8.12	1.34	17.35	61.25
	H30GA006	24.29	5.55	15.81	2.45	1.67	0.28	20.34	70.39	29.90	5.67	20.17	3.13	5.93	0.98	27.57	93.35
	H30GA007	18.60	4.23	9.36	1.45	1.02	0.17	15.56	50.39	22.89	4.32	11.95	1.85	3.60	0.59	21.08	66.28

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
H30	***cont.***																
	H30GA008	22.29	6.33	13.75	2.14	5.27	0.87	22.49	73.14	27.87	6.45	17.34	2.69	18.63	3.07	30.48	106.53
	H30KM001	15.94	4.43	8.35	1.30	1.09	0.18	15.99	47.28	19.92	4.52	10.65	1.65	3.93	0.65	21.67	62.99
H35																	
	H35HI006	59.04	22.66	46.50	2.61	0.00	0.00	110.55	241.36	67.48	22.83	61.50	3.45	0.00	0.00	136.89	292.15
	H35OK001	37.52	14.40	44.03	2.47	0.00	0.00	70.25	168.67	42.87	14.51	58.24	3.27	0.00	0.00	86.98	205.87
	H35OK003	76.05	29.19	73.85	4.14	0.00	0.00	142.41	325.64	86.92	29.41	97.67	5.48	0.00	0.00	176.34	395.82
	H35OK004	121.35	46.57	92.85	5.21	0.00	0.00	227.23	493.21	138.69	46.93	122.80	6.89	0.00	0.00	281.36	596.67
	H35OK005	228.73	87.77	163.22	9.16	0.00	0.00	428.30	917.18	261.41	88.46	215.87	12.11	0.00	0.00	530.33	1,108.18
L10																	
	L10BS002	2.17	0.54	0.00	0.30	0.00	0.00	2.98	5.99	3.10	0.56	0.00	0.30	0.00	0.00	4.73	8.69
	L10BS004	0.75	0.19	0.00	0.25	0.00	0.00	1.03	2.22	1.07	0.19	0.00	0.25	0.00	0.00	1.63	3.14
	L10BS005	2.00	0.49	0.00	0.30	0.00	0.00	2.74	5.53	2.85	0.51	0.00	0.30	0.00	0.00	4.34	8.00
	L10BS007	2.80	0.69	0.00	0.50	0.00	0.00	3.83	7.82	3.99	0.72	0.00	0.50	0.00	0.00	6.09	11.30
	L10BU005	0.70	0.17	0.00	1.10	0.00	0.00	0.96	2.93	1.00	0.18	0.00	1.10	0.00	0.00	1.53	3.81
	L10BU009	0.37	0.09	0.00	0.90	0.00	0.00	0.51	1.87	0.53	0.10	0.00	0.90	0.00	0.00	0.81	2.34
	L10BU010	0.36	0.09	0.00	0.80	0.00	0.00	0.49	1.74	0.51	0.09	0.00	0.80	0.00	0.00	0.78	2.18
	L10BU011	0.77	0.19	0.00	1.50	0.00	0.00	1.06	3.52	1.11	0.20	0.00	1.50	0.00	0.00	1.69	4.50
	L10BU012	1.59	0.39	0.00	2.00	0.00	0.00	2.18	6.16	2.27	0.41	0.00	2.00	0.00	0.00	3.46	8.14
	L10BU013	1.65	0.41	0.00	2.50	0.00	0.00	2.26	6.82	2.36	0.42	0.00	2.50	0.00	0.00	3.59	8.87
	L10RM001	3.78	0.94	0.00	0.40	0.00	0.00	5.18	10.30	5.40	0.97	0.00	0.40	0.00	0.00	8.22	14.99
	L10RM002	3.29	0.82	0.00	0.00	0.00	0.00	4.52	8.63	4.71	0.84	0.00	0.00	0.00	0.00	7.17	12.72
	L10VE002	1.27	0.32	5.21	0.73	0.07	0.01	1.75	9.36	1.81	0.33	6.76	0.95	0.23	0.04	2.78	12.90
	L10VE005	0.94	0.24	1.99	0.28	0.06	0.01	1.30	4.82	1.35	0.25	2.58	0.36	0.19	0.03	2.06	6.82
	L10VE006	2.06	0.52	3.07	0.43	0.06	0.01	2.84	8.99	2.95	0.54	3.98	0.56	0.19	0.03	4.51	12.76
	L10VE007	1.91	0.47	0.00	1.50	0.00	0.00	2.62	6.50	2.73	0.49	0.00	1.50	0.00	0.00	4.15	8.87
	L10VE009	2.52	0.63	11.50	1.61	0.06	0.01	3.47	19.80	3.61	0.65	14.91	2.09	0.19	0.03	5.51	26.99
	L10VE010	0.99	0.25	3.83	0.54	0.03	0.00	1.37	7.01	1.42	0.26	4.97	0.70	0.11	0.02	2.17	9.65
L15																	
	L15BW001	3.11	0.33	5.11	0.57	0.08	0.01	3.21	12.42								
	L15BW002	5.61	0.59	7.16	0.80	0.16	0.03	5.78	20.13								
	L15BW003	6.48	0.68	10.22	1.14	0.16	0.03	6.67	25.38								
	L15BW004	9.42	0.97	8.00	0.89	0.00	0.00	9.66	28.94								
	L15FG001	35.37	3.64	14.58	1.63	0.00	0.00	36.29	91.51								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
L15	***cont.***																
	L15FG002	8.06	0.84	10.23	1.14	0.14	0.02	8.29	28.72								
	L15HZ001	0.22	0.02	0.61	0.07	0.00	0.00	0.23	1.15								
	L15JD001	1.27	0.22	4.09	0.46	1.77	0.29	1.43	9.53								
	L15JD005	0.42	0.04	0.00	0.00	0.00	0.00	0.43	0.89								
	L15JD006	0.78	0.08	0.00	0.00	0.00	0.00	0.80	1.66								
	L15TO001	0.27	0.03	1.23	0.14	0.00	0.00	0.27	1.94								
	L15TO002	0.64	0.07	2.66	0.30	0.11	0.02	0.66	4.46								
	L15TO003	1.62	0.17	3.48	0.39	0.11	0.02	1.67	7.46								
	L15TO004	1.79	0.19	3.89	0.43	0.10	0.02	1.85	8.27								
	L15TO006	3.05	0.33	5.52	0.62	0.27	0.04	3.14	12.97								
	L15TO007	3.43	0.36	5.52	0.62	0.27	0.04	3.53	13.77								
	L15WI001	1.35	0.15	0.00	0.05	0.08	0.01	1.39	3.03								
L20																	
	L20AB017	1.26	0.26	1.06	0.12	0.06	0.01	2.96	5.73								
	L20AB018	1.32	0.27	1.34	0.15	0.06	0.01	3.09	6.24								
	L20AB019	1.41	0.29	1.34	0.15	0.06	0.01	3.30	6.56								
	L20AB020	1.13	0.23	1.06	0.12	0.06	0.01	2.65	5.26								
	L20AB021	1.18	0.25	1.34	0.15	0.06	0.01	2.78	5.77								
	L20AB022	1.37	0.28	1.34	0.15	0.06	0.01	3.21	6.42								
	L20AB023	0.54	0.11	0.00	0.00	0.04	0.01	1.26	1.96								
	L20AB024	0.59	0.12	0.00	0.00	0.04	0.01	1.40	2.16								
L25																	
	L25JE001	1.05	0.21	2.84	0.32	0.00	0.00	1.96	6.38								
	L25JE002	8.79	1.81	22.07	2.47	0.32	0.05	16.47	51.98								
	L25MB002	0.45	0.11	1.09	1.12	0.27	0.04	0.88	3.96								
	L25MB004	13.64	2.79	41.55	6.14	0.32	0.05	25.51	90.00								
	L25MB005	0.90	0.20	2.19	1.24	0.27	0.04	1.72	6.56								
	L25MB006	8.32	1.68	13.12	2.72	0.00	0.00	15.53	41.37								
	L25MB007	4.67	0.95	5.03	1.56	0.00	0.00	8.73	20.94								
	L25MB008	14.49	3.03	18.23	3.54	1.18	0.19	27.24	67.90								
L30																	
	L30HW015	9.92	2.53	3.28	1.72	0.82	0.14	15.53	33.94	12.40	2.59	4.29	2.25	2.63	0.43	21.36	45.95
	L30KB001	2.41	0.63	1.97	1.03	0.30	0.05	3.79	10.18	3.02	0.64	2.58	1.35	0.96	0.16	5.21	13.92

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
L30	***cont.***																
	L30KB002	2.58	0.67	1.97	1.03	0.30	0.05	4.05	10.65	3.22	0.68	2.58	1.35	0.96	0.16	5.57	14.52
	L30RA001	4.44	1.13	1.81	0.24	0.33	0.05	6.94	14.94	5.55	1.15	2.40	0.31	1.04	0.17	9.55	20.17
	L30S4001	1.35	0.33	1.97	1.03	0.00	0.00	2.10	6.78	1.69	0.34	2.58	1.35	0.00	0.00	2.89	8.85
	L30S4002	1.53	0.38	0.00	0.00	0.00	0.00	2.38	4.29	1.91	0.39	0.00	0.00	0.00	0.00	3.28	5.58
	L30S4003	0.12	0.03	0.00	0.00	0.00	0.00	0.19	0.34	0.15	0.03	0.00	0.00	0.00	0.00	0.26	0.44
	L30S4004	0.20	0.05	0.00	0.00	0.00	0.00	0.31	0.56	0.25	0.05	0.00	0.00	0.00	0.00	0.42	0.72
	L30TS001	2.09	0.57	1.58	0.83	0.56	0.09	3.31	9.03	2.61	0.58	2.06	1.08	1.76	0.29	4.56	12.94
L35																	
	L35CA005	14.90	3.69	9.63	1.07	0.00	0.00	24.98	54.27	18.63	3.77	12.46	1.38	0.00	0.00	35.48	71.72
	L35CA007	29.30	7.26	19.25	2.14	0.00	0.00	49.11	107.06	36.62	7.41	24.92	2.77	0.00	0.00	69.77	141.49
	L35CA013	9.22	2.28	7.16	0.80	0.00	0.00	15.45	34.91	11.52	2.33	9.27	1.03	0.00	0.00	21.95	46.10
	L35CA014	19.36	4.80	12.73	1.41	0.00	0.00	32.45	70.75	24.20	4.90	16.47	1.83	0.00	0.00	46.10	93.50
	L35KM006	33.18	8.22	15.91	1.77	0.00	0.00	55.62	114.70	41.47	8.40	20.59	2.29	0.00	0.00	79.01	151.76
L40																	
	L40CA007	24.20	8.34	21.76	1.91	10.11	1.67	26.09	94.08	27.22	8.41	28.78	2.53	36.40	6.01	31.45	140.80
	L40CA008	36.08	12.51	31.19	2.74	10.65	1.76	38.94	133.87	40.60	12.61	41.25	3.63	38.35	6.33	46.94	189.71
	L40CA009	82.36	28.64	58.03	5.11	16.05	2.65	88.95	281.79	92.66	28.87	76.75	6.75	57.79	9.54	107.22	379.58
	L40CA012	11.64	3.23	10.52	1.28	1.24	0.20	16.15	44.26	12.58	3.25	13.91	1.70	4.47	0.74	18.48	55.13
	L40CA013	8.43	2.36	6.53	0.80	1.19	0.20	11.71	31.22	9.11	2.37	8.63	1.05	4.28	0.71	13.41	39.56
	L40CA014	18.63	5.16	14.51	1.77	1.61	0.27	25.84	67.79	20.14	5.19	19.19	2.34	5.78	0.95	29.58	83.17
	L40CA015	11.05	2.87	9.79	1.20	1.24	0.20	12.64	38.99	11.69	2.88	12.95	1.58	4.47	0.74	15.27	49.58
	L40CA018	59.75	20.72	44.83	3.95	11.08	1.83	64.48	206.64	67.22	20.88	59.29	5.22	39.88	6.58	77.73	276.80
	L40CA019	7.59	1.98	6.46	0.79	1.19	0.20	8.69	26.90	8.02	1.99	8.54	1.04	4.28	0.71	10.50	35.08
	L40CA022	9.97	2.59	8.12	0.99	1.24	0.20	11.41	34.52	10.54	2.61	10.75	1.31	4.47	0.74	13.78	44.20
	L40CA023	13.03	3.45	11.61	1.42	2.95	0.49	14.98	47.93	13.78	3.47	15.35	1.87	10.63	1.75	18.10	64.95
	L40CA024	17.15	4.56	13.06	1.59	4.27	0.70	19.74	61.07	18.13	4.59	17.27	2.11	15.38	2.54	23.85	83.87
	L40CA025	17.92	4.76	14.51	1.77	4.27	0.70	20.61	64.54	18.94	4.78	19.19	2.34	15.38	2.54	24.91	88.08
	L40CA026	17.66	6.04	17.84	1.57	6.18	1.02	19.00	69.31	19.87	6.08	23.60	2.08	22.24	3.67	22.91	100.45
	L40CA027	19.38	6.60	19.22	1.69	6.18	1.02	20.84	74.93	21.80	6.65	25.42	2.24	22.24	3.67	25.12	107.14
	L40CA028	2.51	0.53	3.90	0.48	0.69	0.11	3.09	11.31								
	L40CA029	2.89	0.61	4.30	0.53	0.69	0.11	3.55	12.68								
	L40CA030	3.13	0.67	4.69	0.57	0.96	0.16	3.86	14.04								
	L40CA031	3.41	0.73	5.89	0.72	0.96	0.16	4.19	16.06								
	L40CA032	5.32	1.40	3.26	0.40	0.70	0.12	6.11	17.31	5.63	1.41	4.32	0.53	2.52	0.42	7.39	22.22

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
L40	***cont.***																
	L40CA033	5.54	1.46	4.35	0.53	0.70	0.12	6.37	19.07	5.86	1.47	5.76	0.70	2.52	0.42	7.69	24.42
	L40CA034	5.87	1.61	5.95	0.73	3.28	0.54	6.81	24.79	6.20	1.62	7.87	0.96	11.80	1.95	8.23	38.63
	L40CS009	11.32	2.99	9.87	1.21	2.34	0.39	13.00	41.12	11.96	3.00	13.05	1.59	8.44	1.39	15.71	55.14
	L40CS010	13.51	3.54	13.13	1.60	2.34	0.39	15.50	50.01	14.28	3.56	17.37	2.12	8.44	1.39	18.72	65.88
	L40CS011	16.81	4.47	13.56	1.66	4.27	0.70	19.35	60.82	17.77	4.50	17.94	2.19	15.38	2.54	23.38	83.70
	L40KM001	8.17	2.14	7.62	0.93	1.45	0.24	9.37	29.92	8.63	2.16	10.07	1.23	5.24	0.86	11.32	39.51
	L40KM002	9.85	2.57	9.29	1.13	1.45	0.24	11.28	35.81	10.41	2.59	12.28	1.50	5.24	0.86	13.63	46.51
	L40KM003	10.96	2.85	10.08	1.23	1.45	0.24	12.54	39.35	11.58	2.87	13.34	1.63	5.24	0.86	15.15	50.67
	L40KM004	12.61	3.34	12.55	1.53	2.95	0.49	14.51	47.98	13.33	3.36	16.60	2.03	10.63	1.75	17.53	65.23
	L40KM008	24.19	8.34	24.30	2.14	6.47	1.07	26.07	92.58	27.21	8.40	32.14	2.83	23.30	3.84	31.43	129.15
	L40KM009	34.14	11.90	35.54	3.13	6.92	1.14	36.88	129.65	38.40	11.99	47.01	4.14	24.93	4.11	44.46	175.04
	L40KM010	55.56	19.35	49.62	4.37	11.08	1.83	60.02	201.83	62.50	19.50	65.62	5.77	39.88	6.58	72.35	272.20
	L40KM011	70.76	24.85	61.88	5.45	16.05	2.65	76.57	258.21	79.61	25.04	81.84	7.20	57.79	9.54	92.31	353.33
	L40KM012	9.73	2.72	9.29	1.13	1.45	0.24	13.53	38.09	10.52	2.74	12.28	1.50	5.24	0.86	15.49	48.63
	L40KM014	6.59	1.75	3.63	0.44	0.99	0.16	7.58	21.14	6.97	1.76	4.80	0.59	3.56	0.59	9.16	27.43
	L40KM015	6.21	1.67	5.44	0.66	1.22	0.20	7.17	22.57	6.57	1.68	7.20	0.88	4.40	0.73	8.66	30.12
	L40ME012	2.37	0.49	3.66	0.45	0.37	0.06	2.90	10.30								
	L40ME016	1.48	0.31	1.79	0.22	0.25	0.04	1.81	5.90								
	L40ME017	1.65	0.35	1.99	0.24	0.51	0.08	2.03	6.85								
L50																	
	L50CA001	4.94	1.40	4.38	2.12	0.66	0.11	6.49	20.10	8.24	1.47	6.21	3.01	2.35	0.39	11.49	33.16
	L50CA004	9.89	2.80	6.18	3.00	1.19	0.20	12.98	36.24	16.49	2.95	8.75	4.24	4.22	0.70	22.99	60.34
	L50CS005	6.28	1.78	5.05	2.45	0.79	0.13	8.24	24.72	10.46	1.87	7.16	3.47	2.78	0.46	14.59	40.79
	L50CS006	7.48	2.13	5.50	2.67	1.10	0.18	9.83	28.89	12.46	2.24	7.80	3.78	3.90	0.64	17.41	48.23
	L50JC001	4.77	1.35	3.76	1.82	0.57	0.09	6.26	18.62	7.96	1.41	5.33	2.59	2.06	0.34	11.08	30.77
	L50JC002	5.39	1.54	5.17	2.51	0.85	0.14	7.09	22.69	8.98	1.62	7.32	3.55	2.98	0.49	12.56	37.50
	L50JC003	6.52	1.86	5.62	2.73	1.13	0.19	8.57	26.62	10.86	1.96	7.96	3.86	4.07	0.67	15.18	44.56
	L50JC005	7.59	2.15	5.62	2.73	1.13	0.19	9.96	29.37	12.64	2.27	7.96	3.86	4.07	0.67	17.64	49.11
	L50JC007	9.75	2.74	5.62	2.73	1.11	0.18	12.77	34.90	16.25	2.88	7.96	3.86	4.01	0.66	22.62	58.24
L55																	
	L55KN001	0.90	0.14	0.00	0.52	0.00	0.00	1.40	2.96								
	L55KN002	1.85	0.29	0.00	1.06	0.00	0.00	2.88	6.08								
	L55KN004	1.64	0.26	0.00	0.00	0.00	0.00	2.55	4.45								
	L55KN005	2.43	0.38	0.00	0.00	0.00	0.00	3.78	6.59								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
L55	*cont.*																
	L55KN006	3.62	0.57	0.00	0.00	0.00	0.00	5.63	9.82								
L60																	
	L60CA010	25.59	5.77	10.88	1.42	0.00	0.00	25.89	69.55	31.99	5.90	14.39	1.88	0.00	0.00	36.99	91.15
	L60CA011	30.60	6.90	10.88	1.42	0.00	0.00	30.96	80.76	38.25	7.06	14.39	1.88	0.00	0.00	44.23	105.81
	L60CA013	17.30	4.05	11.61	1.52	1.96	0.32	17.60	54.36	21.62	4.14	15.35	2.01	6.83	1.13	25.14	76.22
	L60CA014	22.34	5.03	8.70	1.14	0.00	0.00	22.60	59.81	27.92	5.15	11.51	1.50	0.00	0.00	32.29	78.37
	L60JD001	11.37	2.73	8.63	1.13	2.65	0.44	11.61	38.56	14.21	2.79	11.42	1.49	9.53	1.57	16.59	57.60
	L60JD002	13.59	3.23	10.95	1.43	2.65	0.44	13.86	46.15	16.98	3.30	14.49	1.89	9.53	1.57	19.80	67.56
	L60JD003	11.08	2.66	8.63	1.13	2.65	0.44	11.32	37.91	13.85	2.72	11.42	1.49	9.53	1.57	16.17	56.75
	L60JD004	14.43	3.53	11.61	1.52	4.44	0.73	14.78	51.04	18.03	3.61	15.35	2.01	15.99	2.64	21.12	78.75
	L60JD006	17.87	4.25	12.33	1.61	3.53	0.58	18.23	58.40	22.34	4.35	16.31	2.13	12.72	2.10	26.04	85.99
	L60JD007	19.61	4.64	14.51	1.90	3.53	0.58	19.99	64.76	24.51	4.75	19.19	2.51	12.72	2.10	28.56	94.34
	L60JD008	26.98	6.08	12.33	1.61	0.00	0.00	27.30	74.30	33.72	6.22	16.31	2.13	0.00	0.00	39.00	97.38
M10																	
	M10MZ001	2.79	0.37	0.00	0.00	0.00	0.00	1.91	5.07								
	M10MZ003	3.43	0.45	0.00	0.00	0.00	0.00	2.35	6.23								
	M10MZ005	0.79	0.45	0.00	0.00	0.00	0.00	0.65	1.89								
	M10MZ007	0.82	0.47	0.00	0.00	0.00	0.00	0.68	1.97								
	M10MZ010	2.42	0.84	10.16	1.80	0.00	0.00	2.45	17.67	2.97	0.85	13.43	2.38	0.00	0.00	3.24	22.87
	M10MZ011	3.49	1.21	15.23	2.70	0.00	0.00	3.54	26.17	4.29	1.23	20.15	3.57	0.00	0.00	4.67	33.91
	M10SM001	2.80	0.98	25.13	3.75	0.00	0.00	2.85	35.51	3.45	0.99	32.80	4.89	0.00	0.00	3.76	45.89
	M10SM003	3.48	1.21	33.51	5.00	0.00	0.00	3.54	46.74	4.28	1.23	43.74	6.52	0.00	0.00	4.66	60.43
	M10SM004	3.74	1.30	41.89	6.25	0.00	0.00	3.80	56.98	4.60	1.32	54.67	8.15	0.00	0.00	5.01	73.75
	M10SM005	1.30	0.45	19.27	2.87	0.00	0.00	1.32	25.21	1.60	0.46	25.15	3.75	0.00	0.00	1.74	32.70
	M10SM008	2.35	0.82	33.51	5.00	0.00	0.00	2.39	44.07	2.89	0.83	43.74	6.52	0.00	0.00	3.15	57.13
	M10XX001	0.17	0.10	0.00	0.00	0.00	0.00	0.14	0.41								
	M10XX002	0.53	0.30	0.00	0.00	0.00	0.00	0.43	1.26								
	M10XX003	0.64	0.37	0.00	0.00	0.00	0.00	0.52	1.53								
	M10XX004	1.03	0.59	0.00	0.00	0.00	0.00	0.85	2.47								
	M10XX005	1.56	2.38	0.00	0.00	0.00	0.00	1.22	5.16								
	M10XX006	2.20	3.35	0.00	0.00	0.00	0.00	1.71	7.26								
	M10XX007	2.80	4.26	0.00	0.00	0.00	0.00	2.18	9.24								
	M10XX008	3.88	5.91	0.00	0.00	0.00	0.00	3.03	12.82								
	M10XX009	0.71	0.25	8.38	1.25	0.00	0.00	0.73	11.32	0.88	0.25	10.93	1.63	0.00	0.00	0.96	14.65

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
M10	***cont.***																
	M10XX010	2.35	0.82	5.44	0.96	0.00	0.00	2.39	11.96	2.90	0.83	7.20	1.28	0.00	0.00	3.15	15.36
	M10XX011	2.71	0.94	7.25	1.29	0.00	0.00	2.76	14.95	3.34	0.96	9.59	1.70	0.00	0.00	3.64	19.23
	M10XX012	2.76	0.96	7.25	1.29	0.00	0.00	2.81	15.07	3.40	0.97	9.59	1.70	0.00	0.00	3.70	19.36
	M10XX013	3.58	1.25	8.34	1.48	0.00	0.00	3.64	18.29	4.41	1.26	11.03	1.96	0.00	0.00	4.80	23.46
	M10XX014	4.95	1.72	12.69	2.25	0.00	0.00	5.03	26.64	6.09	1.74	16.79	2.98	0.00	0.00	6.63	34.23
	M10XX015	6.21	2.16	18.14	3.22	0.00	0.00	6.31	36.04	7.65	2.19	23.99	4.25	0.00	0.00	8.33	46.41
	M10XX016	7.00	3.65	0.00	0.00	0.00	0.00	6.37	17.02								
	M10XX017	7.40	3.86	0.00	0.00	0.00	0.00	6.73	17.99								
	M10XX018	9.22	4.81	0.00	0.00	0.00	0.00	8.38	22.41								
	M10XX019	9.42	4.92	0.00	0.00	0.00	0.00	8.57	22.91								
	M10XX021	15.43	5.45	27.57	4.89	0.00	0.00	16.92	70.26	18.51	5.52	36.46	6.47	0.00	0.00	21.58	88.54
	M10XX022	17.55	6.20	31.55	5.59	0.00	0.00	19.24	80.13	21.06	6.28	41.73	7.40	0.00	0.00	24.54	101.01
	M10XX023	23.48	8.30	29.02	5.15	0.00	0.00	25.75	91.70	28.17	8.40	38.38	6.81	0.00	0.00	32.84	114.60
	M10XX024	33.47	11.83	31.55	5.59	0.00	0.00	36.71	119.15	40.17	11.97	41.73	7.40	0.00	0.00	46.82	148.09
P10																	
	P10IC001	10.69	2.24	12.69	1.89	0.00	0.00	16.38	43.89								
	P10IC002	16.83	3.52	21.76	3.25	0.00	0.00	25.79	71.15								
	P10IC005	44.57	9.32	58.03	8.66	0.00	0.00	68.30	188.88								
	P10IC010	1.69	0.35	0.00	0.00	0.00	0.00	2.60	4.64								
	P10IC011	3.25	0.68	0.94	0.14	0.00	0.00	4.97	9.98								
	P10IC012	2.41	0.50	0.00	0.00	0.00	0.00	3.69	6.60								
	P10IC013	4.07	0.85	2.18	0.33	0.00	0.00	6.23	13.66								
P20																	
	P20IC002	11.20	1.93	0.00	1.90	0.00	0.00	20.47	35.50								
	P20IC003	11.44	1.97	0.00	2.50	0.00	0.00	20.90	36.81								
	P20IC004	12.24	2.11	0.00	3.15	0.00	0.00	22.37	39.87								
	P20MK001	6.80	1.17	0.00	1.25	0.00	0.00	12.42	21.64								
	P20MK002	2.16	0.34	0.00	0.50	0.00	0.00	3.70	6.70								
	P20MK003	2.74	0.43	0.00	1.00	0.00	0.00	4.69	8.86								
	P20MK004	3.42	0.54	0.00	1.25	0.00	0.00	5.85	11.06								
	P20MK005	5.73	0.90	0.00	1.25	0.00	0.00	9.82	17.70								
	P20MK006	6.40	1.01	0.00	2.50	0.00	0.00	10.97	20.88								
	P20MK007	7.05	1.11	0.00	2.50	0.00	0.00	12.07	22.73								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
P25																	
	P25DL001	6.51	1.02	0.00	0.95	0.00	0.00	10.14	18.62								
	P25DL003	7.84	1.23	0.00	1.20	0.00	0.00	12.19	22.46								
	P25DL004	8.99	1.41	0.00	1.80	0.00	0.00	13.98	26.18								
	P25DL005	12.38	1.94	0.00	2.65	0.00	0.00	19.27	36.24								
	P25DL006	12.84	2.02	0.00	3.30	0.00	0.00	19.98	38.14								
	P25DL008	15.86	2.49	0.00	5.30	0.00	0.00	24.68	48.33								
	P25DL009	23.88	3.75	0.00	6.60	0.00	0.00	37.16	71.39								
	P25DL010	34.63	5.44	0.00	8.25	0.00	0.00	53.89	102.21								
	P25DL011	36.97	5.81	0.00	9.90	0.00	0.00	57.53	110.21								
	P25IC001	8.16	1.28	0.00	2.20	0.00	0.00	12.70	24.34								
	P25IC002	9.10	1.43	0.00	3.45	0.00	0.00	14.16	28.14								
	P25IC003	13.15	2.07	0.00	4.40	0.00	0.00	20.46	40.08								
	P25IC004	14.68	2.31	0.00	5.30	0.00	0.00	22.85	45.14								
	P25IC005	18.17	2.85	0.00	6.25	0.00	0.00	28.28	55.55								
	P25IC006	22.49	3.53	0.00	7.20	0.00	0.00	35.00	68.22								
	P25MK001	8.03	1.26	0.00	2.50	0.00	0.00	12.50	24.29								
	P25MK003	13.35	2.10	0.00	4.15	0.00	0.00	20.77	40.37								
	P25VU002	9.13	1.31	0.00	2.50	0.00	0.00	13.37	26.31								
	P25VU003	11.18	1.60	0.00	2.50	0.00	0.00	16.37	31.65								
	P25VU004	11.45	1.64	0.00	2.50	0.00	0.00	16.76	32.35								
	P25VU005	15.42	2.21	0.00	2.50	0.00	0.00	22.58	42.71								
	P25VU010	15.87	2.28	0.00	0.95	0.00	0.00	23.25	42.35								
	P25VU011	16.14	2.32	0.00	1.17	0.00	0.00	23.65	43.28								
P30																	
	P30MK001	12.21	1.92	13.42	2.00	0.00	0.00	19.00	48.55								
	P30MK003	20.94	3.29	23.58	3.52	0.00	0.00	32.59	83.92								
	P30MK004	37.19	5.84	43.52	6.49	0.00	0.00	57.88	150.92								
P35																	
	P35CA001	11.70	3.96	4.38	0.82	0.00	0.00	16.94	37.80	14.24	4.01	5.66	1.06	0.00	0.00	23.88	48.85
	P35CA006	35.84	12.13	16.71	3.12	0.00	0.00	51.88	119.68	43.63	12.28	21.62	4.04	0.00	0.00	73.14	154.71
	P35CA008	21.49	7.27	9.15	1.71	0.00	0.00	31.10	70.72	26.16	7.36	11.84	2.21	0.00	0.00	43.85	91.42
	P35CA009	27.60	9.34	12.13	2.27	0.00	0.00	39.94	91.28	33.59	9.46	15.70	2.94	0.00	0.00	56.31	118.00

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
P40																	
	P40BX001	1.34	0.23	0.00	0.05	0.00	0.00	1.49	3.11								
	P40GW016	13.58	2.31	3.37	0.44	0.63	0.10	15.09	35.52								
	P40GW017	21.70	3.72	5.62	0.73	1.78	0.29	24.13	57.97								
	P40GW019	32.00	5.50	5.62	0.73	4.90	0.81	35.58	85.14								
	P40GW023	14.68	2.51	3.37	0.44	0.93	0.15	16.32	38.40								
	P40GW024	18.77	3.18	4.77	0.62	0.48	0.08	20.85	48.75								
	P40GW025	19.71	3.34	4.77	0.62	0.48	0.08	21.89	50.89								
	P40TE001	3.91	0.67	3.07	0.46	0.37	0.06	4.35	12.89								
	P40TE002	4.99	0.85	4.98	0.74	0.37	0.06	5.54	17.53								
	P40TE003	8.91	1.54	1.80	0.24	0.95	0.16	9.91	23.51								
	P40TE004	10.32	1.79	2.47	0.32	1.34	0.22	11.49	27.95								
	P40TE005	7.81	1.35	3.71	0.48	0.95	0.16	8.70	23.16								
	P40TE006	10.62	1.83	3.71	0.48	1.19	0.20	11.82	29.85								
	P40TE007	17.74	3.03	3.71	0.48	1.19	0.20	19.72	46.07								
	P40TE008	19.74	3.37	4.27	0.56	1.19	0.20	21.93	51.26								
	P40TE009	21.93	3.74	4.27	0.56	1.19	0.20	24.37	56.26								
	P40TE010	7.43	1.28	11.79	1.54	0.71	0.12	8.27	31.14								
	P40TE011	8.13	1.41	11.79	1.54	1.01	0.17	9.05	33.10								
	P40TE012	12.45	2.14	11.79	1.54	1.01	0.17	13.85	42.95								
	P40TE013	11.30	1.95	11.79	1.54	1.01	0.17	12.57	40.33								
	P40TE014	11.60	2.00	11.79	1.54	1.01	0.17	12.90	41.01								
	P40TE015	13.15	2.26	11.79	1.54	1.01	0.17	14.62	44.54								
P45																	
	P45AF002	0.09	0.02	0.00	0.00	0.00	0.00	0.13	0.24								
	P45AF003	0.14	0.03	0.00	0.00	0.00	0.00	0.20	0.37								
	P45AF005	1.09	0.21	2.69	0.40	0.07	0.01	1.60	6.07								
	P45AF006	1.42	0.27	2.69	0.40	0.07	0.01	2.09	6.95								
	P45AF007	3.15	0.59	3.16	0.41	0.07	0.01	4.61	12.00								
	P45AF008	0.79	0.15	0.00	0.10	0.00	0.00	1.16	2.20								
	P45AF009	2.43	0.45	0.00	0.10	0.00	0.00	3.56	6.54								
	P45AF010	2.85	0.53	4.40	0.66	0.07	0.01	4.18	12.70								
	P45AF011	5.11	0.95	8.55	1.28	0.07	0.01	7.49	23.46								
	P45AL015	4.61	0.86	4.32	0.56	0.07	0.01	6.76	17.19								
	P45CG001	0.35	0.06	0.00	0.05	0.00	0.00	0.51	0.97								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
P45	***cont.***																
	P45CG002	0.58	0.11	0.00	0.10	0.00	0.00	0.85	1.64								
	P45CG003	1.42	0.26	0.00	0.15	0.00	0.00	2.09	3.92								
	P45CG006	2.47	0.46	3.91	0.58	0.07	0.01	3.62	11.12								
	P45CG007	2.04	0.38	3.91	0.58	0.00	0.00	2.98	9.89								
	P45OE001	2.61	0.49	4.42	0.58	0.11	0.02	3.83	12.06								
	P45OE002	3.27	0.61	5.79	0.76	0.11	0.02	4.81	15.37								
	P45OE003	4.26	0.80	8.85	1.16	0.11	0.02	6.24	21.44								
	P45OE004	5.10	0.95	12.64	1.65	0.11	0.02	7.48	27.95								
	P45OE005	6.87	1.29	19.06	2.49	0.22	0.04	10.08	40.05								
P50																	
	P50GR001	0.09	0.01	0.00	0.00	0.00	0.00	0.18	0.28								
	P50GR002	0.13	0.01	0.00	0.00	0.00	0.00	0.26	0.40								
	P50GR003	0.18	0.02	0.00	0.00	0.00	0.00	0.37	0.57								
	P50GR004	0.36	0.03	0.00	0.00	0.00	0.00	0.74	1.13								
	P50GR005	0.12	0.01	0.00	0.00	0.00	0.00	0.24	0.37								
	P50GR006	0.17	0.02	0.00	0.00	0.00	0.00	0.35	0.54								
	P50GR007	0.23	0.02	0.00	0.00	0.00	0.00	0.48	0.73								
	P50GR008	0.50	0.05	0.00	0.00	0.00	0.00	1.03	1.58								
	P50WC001	0.14	0.03	2.30	0.34	0.00	0.00	0.20	3.01								
	P50WC002	0.17	0.03	1.51	0.27	0.00	0.00	0.24	2.22								
	P50WC003	0.37	0.08	1.61	0.29	0.00	0.00	0.52	2.87								
	P50WC004	1.66	0.34	3.32	0.59	0.04	0.01	2.33	8.29								
	P50XX001	2.17	0.44	6.04	1.07	0.00	0.00	3.04	12.76								
	P50XX002	4.00	0.81	7.04	1.25	0.00	0.00	5.61	18.71								
	P50XX003	4.30	0.87	8.55	1.52	0.00	0.00	6.02	21.26								
P55																	
	P55GF001	1.89	0.38	2.11	0.37	0.00	0.00	2.93	7.68								
	P55GF002	2.11	0.43	7.24	1.28	0.00	0.00	3.28	14.34								
	P55GR001	0.32	0.06	0.36	0.19	0.00	0.00	0.28	1.21								
	P55GR002	0.42	0.08	0.91	0.48	0.00	0.00	0.37	2.26								
	P55GR003	1.47	0.27	4.55	2.39	0.00	0.00	1.29	9.97								
	P55GR004	1.99	0.37	10.91	5.72	0.00	0.00	1.75	20.74								
	P55WC001	0.05	0.01	0.18	0.09	0.00	0.00	0.04	0.37								
	P55WC002	0.08	0.01	0.18	0.09	0.00	0.00	0.07	0.43								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
P60																	
	P60GF003	2.10	0.43	2.11	0.37	0.07	0.01	2.95	8.04								
	P60GF004	2.32	0.48	7.24	1.28	0.07	0.01	3.26	14.66								
	P60GF005	2.68	0.55	11.37	2.02	0.07	0.01	3.76	20.46								
	P60GF006	4.15	0.85	14.09	2.50	0.09	0.01	5.82	27.51								
	P60GF008	2.32	0.48	7.24	1.28	0.07	0.01	3.26	14.66								
	P60GR001	2.12	0.44	4.73	0.84	0.07	0.01	2.99	11.20								
	P60GR002	2.33	0.48	23.23	3.47	0.07	0.01	3.28	32.87								
	P60HO002	0.08	0.02	0.81	0.12	0.00	0.00	0.11	1.14								
	P60HO003	0.15	0.03	1.84	0.27	0.00	0.00	0.21	2.50								
	P60WC001	0.06	0.01	0.92	0.14	0.00	0.00	0.08	1.21								
	P60WC002	0.07	0.01	1.38	0.21	0.00	0.00	0.10	1.77								
P65																	
	P65GR001	0.19	0.05	1.15	0.17	0.13	0.02	0.25	1.96								
	P65GR002	0.26	0.06	0.35	0.05	0.13	0.02	0.34	1.21								
	P65GR003	0.74	0.16	0.69	0.10	0.16	0.03	0.94	2.82								
	P65HO001	0.15	0.03	0.81	0.12	0.00	0.00	0.21	1.32								
	P65HO002	0.16	0.03	0.81	0.12	0.00	0.00	0.23	1.35								
	P65WC001	0.18	0.04	0.92	0.14	0.00	0.00	0.22	1.50								
	P65WC002	0.19	0.04	0.92	0.14	0.00	0.00	0.24	1.53								
P70																	
	P70XX001	0.28	0.06	0.46	0.07	0.00	0.00	0.38	1.25								
	P70XX002	0.74	0.16	1.38	0.21	0.00	0.00	0.98	3.47								
R10																	
	R10CA001	0.98	0.20	0.00	0.08	0.00	0.00	1.34	2.60	1.21	0.20	0.00	0.08	0.00	0.00	1.84	3.33
	R10CA003	0.98	0.20	0.00	0.08	0.00	0.00	1.34	2.60	1.21	0.20	0.00	0.08	0.00	0.00	1.84	3.33
	R10CA005	0.98	0.20	0.00	0.08	0.00	0.00	1.34	2.60	1.21	0.20	0.00	0.08	0.00	0.00	1.84	3.33
	R10CA006	0.03	0.01	0.00	0.00	0.00	0.00	0.04	0.08	0.03	0.01	0.00	0.00	0.00	0.00	0.05	0.09
	R10CA007	2.25	0.45	0.00	0.08	0.00	0.00	3.08	5.86	2.76	0.47	0.00	0.08	0.00	0.00	4.21	7.52
	R10CA009	4.19	0.85	0.00	0.08	0.00	0.00	5.74	10.86	5.15	0.87	0.00	0.08	0.00	0.00	7.85	13.95
	R10CA010	0.17	0.03	0.00	0.00	0.00	0.00	0.23	0.43	0.21	0.03	0.00	0.00	0.00	0.00	0.31	0.55
	R10CA011	4.56	0.92	0.00	0.10	0.00	0.00	6.25	11.83	5.61	0.94	0.00	0.10	0.00	0.00	8.55	15.20
	R10CA012	5.37	1.09	0.00	0.10	0.00	0.00	7.37	13.93	6.61	1.11	0.00	0.10	0.00	0.00	10.08	17.90
	R10CA013	0.37	0.08	0.00	0.00	0.00	0.00	0.51	0.96	0.46	0.08	0.00	0.00	0.00	0.00	0.70	1.24

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
R10	***cont.***																
	R10CA014	5.85	1.18	0.00	0.16	0.00	0.00	8.02	15.21	7.19	1.21	0.00	0.16	0.00	0.00	10.96	19.52
	R10CA015	6.63	1.34	0.00	0.16	0.00	0.00	9.09	17.22	8.15	1.37	0.00	0.16	0.00	0.00	12.43	22.11
	R10CA016	0.38	0.08	0.00	0.00	0.00	0.00	0.52	0.98	0.46	0.08	0.00	0.00	0.00	0.00	0.71	1.25
	R10CA017	8.91	1.80	0.00	0.21	0.00	0.00	12.22	23.14	10.97	1.85	0.00	0.21	0.00	0.00	16.71	29.74
	R10CA018	10.62	2.15	0.00	0.22	0.00	0.00	14.56	27.55	13.07	2.20	0.00	0.22	0.00	0.00	19.91	35.40
	R10CA019	0.61	0.12	0.00	0.24	0.00	0.00	0.84	1.81	0.75	0.13	0.00	0.24	0.00	0.00	1.15	2.27
	R10CA020	10.62	2.15	0.00	0.23	0.00	0.00	14.57	27.57	13.08	2.20	0.00	0.23	0.00	0.00	19.92	35.43
	R10CA021	11.00	2.23	0.00	0.25	0.00	0.00	15.09	28.57	13.54	2.28	0.00	0.25	0.00	0.00	20.63	36.70
	R10CA022	0.10	0.02	0.00	0.00	0.00	0.00	0.14	0.26	0.13	0.02	0.00	0.00	0.00	0.00	0.19	0.34
	R10CA023	0.10	0.02	0.00	0.00	0.00	0.00	0.14	0.26	0.13	0.02	0.00	0.00	0.00	0.00	0.20	0.35
R15																	
	R15SO001	8.94	2.47	0.00	0.40	1.38	0.23	9.84	23.26								
	R15SO002	8.90	2.73	0.00	0.45	2.80	0.46	10.02	25.36								
	R15SO003	13.08	3.76	0.00	0.67	2.80	0.46	14.52	35.29								
R20																	
	R20RI002	2.61	0.65	0.00	0.25	0.00	0.00	3.21	6.72								
	R20SO001	5.59	1.38	0.00	0.25	0.00	0.00	6.86	14.08								
R30																	
	R30BO003	13.40	2.62	9.78	1.09	1.86	0.31	13.68	42.74								
	R30BO004	8.26	1.57	7.56	0.84	0.56	0.09	8.40	27.28								
	R30BO005	6.11	1.38	4.18	0.47	0.00	0.00	7.06	19.20								
	R30BO006	7.26	1.64	7.38	0.82	0.00	0.00	8.40	25.50								
	R30BO007	8.59	1.94	6.94	0.78	0.00	0.00	9.93	28.18								
	R30BO008	38.16	11.17	39.30	4.39	0.00	0.00	46.89	139.91								
	R30BO009	36.13	10.58	39.30	4.39	0.00	0.00	44.39	134.79								
	R30CA003	22.18	6.49	21.34	2.39	0.00	0.00	27.26	79.66								
	R30CA006	33.43	9.79	28.01	3.13	0.00	0.00	41.07	115.43								
	R30CA009	45.94	13.45	42.06	4.70	0.00	0.00	56.45	162.60								
	R30CA010	7.88	1.49	6.22	0.70	0.51	0.08	8.00	24.88								
	R30CA011	8.98	1.71	9.34	1.04	0.79	0.13	9.13	31.12								
	R30CA012	22.53	6.60	19.56	2.19	0.00	0.00	27.68	78.56								
	R30CA013	34.79	10.19	28.01	3.13	0.00	0.00	42.75	118.87								
	R30CA014	15.62	2.90	9.34	1.04	0.32	0.05	15.82	45.09								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
R30	***cont.***																
	R30RS001	1.15	0.26	3.27	0.37	0.00	0.00	1.33	6.38								
	R30RS002	2.28	0.51	3.56	0.40	0.00	0.00	2.64	9.39								
	R30RS003	6.17	1.18	7.11	0.79	0.50	0.08	6.28	22.11								
	R30SI002	9.97	1.97	8.09	0.90	1.67	0.28	10.19	33.07								
	R30SI003	12.48	2.43	8.45	0.94	1.67	0.28	12.73	38.98								
	R30SI004	16.96	3.24	9.60	1.07	1.40	0.23	17.25	49.75								
	R30SI005	10.07	2.27	6.67	0.75	0.00	0.00	11.65	31.41								
R40																	
	R40BO001	7.43	1.50	5.03	0.75	0.00	0.00	9.13	23.84								
	R40BO002	8.32	1.68	5.03	0.75	0.00	0.00	10.22	26.00								
R45																	
	R45BO004	4.96	1.01	3.32	0.50	0.00	0.00	8.39	18.18								
	R45BO005	6.10	1.24	4.63	0.69	0.00	0.00	10.31	22.97								
	R45BO006	12.62	2.55	10.87	1.62	0.00	0.00	21.32	48.98								
	R45BO007	14.62	2.96	13.18	1.97	0.00	0.00	24.70	57.43								
	R45BO008	15.32	3.10	20.63	3.08	0.00	0.00	25.88	68.01								
	R45CA001	4.33	0.88	3.22	0.48	0.00	0.00	7.32	16.23								
	R45CA002	4.91	0.99	3.22	0.48	0.00	0.00	8.30	17.90								
	R45CA005	11.88	2.41	7.04	1.05	0.00	0.00	20.08	42.46								
	R45CA007	14.58	2.95	10.57	1.58	0.00	0.00	24.65	54.33								
	R45CA010	18.15	3.68	14.59	2.18	0.00	0.00	30.68	69.28								
	R45RS001	1.73	0.35	2.01	0.30	0.00	0.00	2.92	7.31								
	R45SI008	4.20	0.85	3.42	0.51	0.00	0.00	7.10	16.08								
	R45SI009	9.80	1.98	3.72	0.55	0.00	0.00	16.55	32.60								
	R45SI010	13.50	2.73	12.18	1.82	0.00	0.00	22.82	53.05								
R50																	
	R50BO005	5.30	1.27	3.63	0.54	1.22	0.20	8.86	21.02								
	R50BO006	7.74	1.73	5.44	0.81	0.13	0.02	12.70	28.57								
	R50BO007	10.59	2.39	5.44	0.81	0.44	0.07	17.42	37.16								
	R50BO008	13.86	3.18	11.24	1.68	1.22	0.20	22.88	54.26								
	R50BO009	19.67	4.47	14.15	2.11	1.22	0.20	32.40	74.22								
	R50BO010	5.79	1.31	3.63	0.54	0.31	0.05	9.53	21.16								
	R50BO011	8.33	1.86	5.44	0.81	0.13	0.02	13.66	30.25								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
R50	***cont.***																
	R50BO012	11.96	2.69	7.33	1.09	0.44	0.07	19.65	43.23								
	R50BO013	14.88	3.40	9.50	1.42	1.22	0.20	24.56	55.18								
	R50CA001	7.28	1.64	5.08	0.76	0.30	0.05	11.98	27.09								
	R50CA002	8.49	1.91	5.08	0.76	0.30	0.05	13.96	30.55								
	R50CA003	9.83	2.22	7.04	1.05	0.41	0.07	16.17	36.79								
	R50CA004	11.77	2.65	7.25	1.08	0.41	0.07	19.35	42.58								
	R50CA005	10.68	2.41	7.25	1.08	0.41	0.07	17.55	39.45								
	R50CA009	13.39	3.07	10.88	1.62	1.19	0.20	22.12	52.47								
	R50CA010	16.06	3.66	10.88	1.62	1.19	0.20	26.48	60.09								
	R50CA011	16.52	3.76	10.88	1.62	1.19	0.20	27.23	61.40								
	R50CA012	16.09	3.67	10.88	1.62	1.19	0.20	26.54	60.19								
	R50IP001	7.86	1.79	5.51	0.82	0.52	0.09	12.95	29.54								
	R50SI006	6.56	1.49	4.35	0.65	0.41	0.07	10.80	24.33								
	R50SI007	7.17	1.63	4.35	0.65	0.41	0.07	11.81	26.09								
	R50SI013	10.85	2.51	10.01	1.49	1.22	0.20	17.95	44.23								
	R50SI016	11.55	2.66	8.56	1.28	1.22	0.20	19.09	44.56								
	R50SI017	13.26	3.04	8.56	1.28	1.22	0.20	21.91	49.47								
	R50SI022	9.28	2.10	10.01	1.49	0.51	0.08	15.27	38.74								
	R50SI023	10.28	2.33	5.95	0.89	0.51	0.08	16.92	36.96								
	R50SI024	4.76	1.08	2.03	0.30	0.28	0.05	7.83	16.33								
	R50SI025	5.90	1.33	2.18	0.33	0.28	0.05	9.71	19.78								
	R50SI026	11.87	2.66	7.54	1.12	0.28	0.05	19.49	43.01								
R55																	
	R55AE001	0.97	0.15	1.23	3.44	0.05	0.01	1.15	7.00								
	R55AE002	1.19	0.18	1.23	5.14	0.05	0.01	1.41	9.21								
	R55AE003	1.59	0.24	1.23	6.74	0.10	0.02	1.88	11.80								
	R55AE004	2.02	0.32	1.23	7.14	0.24	0.04	2.40	13.39								
	R55AE008	0.67	0.10	1.23	0.14	0.06	0.01	0.79	3.00								
	R55AE009	0.26	0.04	1.38	0.15	0.00	0.00	0.30	2.13								
	R55AE010	0.47	0.07	2.45	0.27	0.00	0.00	0.55	3.81								
	R55AE011	0.40	0.07	0.77	0.09	0.11	0.02	0.48	1.94								
	R55GL001	0.46	0.07	0.00	0.50	0.03	0.00	0.55	1.61								
	R55GL002	0.91	0.14	0.77	0.59	0.05	0.01	1.07	3.54								
	R55GL003	1.85	0.27	1.38	0.90	0.07	0.01	2.18	6.66								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
R55	***cont.***																
	R55GL004	2.24	0.33	1.38	1.15	0.06	0.01	2.64	7.81								
	R55GL007	1.64	0.24	2.76	0.31	0.00	0.00	1.92	6.87								
	R55GL008	0.59	0.10	1.69	0.19	0.13	0.02	0.71	3.43								
	R55GL009	0.33	0.05	1.61	0.18	0.00	0.00	0.38	2.55								
	R55GL011	0.80	0.11	2.45	0.27	0.00	0.00	0.93	4.56								
	R55GL012	1.46	0.22	1.38	0.90	0.05	0.01	1.71	5.73								
	R55GL013	0.09	0.03	0.00	0.25	0.11	0.02	0.12	0.62								
	R55GL014	0.42	0.06	0.00	0.35	0.00	0.00	0.50	1.33								
	R55GL015	1.34	0.19	1.38	0.15	0.00	0.00	1.57	4.63								
	R55GL016	0.75	0.11	1.38	0.15	0.00	0.00	0.87	3.26								
	R55GL017	0.27	0.04	0.77	0.09	0.00	0.00	0.31	1.48								
	R55GL018	0.27	0.04	0.77	0.09	0.00	0.00	0.32	1.49								
	R55GL019	0.53	0.08	1.23	0.14	0.00	0.00	0.62	2.60								
S10																	
	S10CA001	20.11	5.15	12.69	2.37	2.93	0.48	27.63	71.36	25.13	5.26	16.79	3.13	11.82	1.95	38.36	102.44
	S10CA002	21.31	8.02	19.22	2.87	11.22	1.85	33.42	97.91	24.09	8.08	25.42	3.79	45.32	7.48	39.74	153.92
	S10CA003	32.69	11.87	26.48	3.95	9.09	1.50	50.79	136.37	36.96	11.96	35.02	5.22	36.74	6.06	60.41	192.37
S15																	
	S15CA001	26.47	9.99	24.77	3.69	9.09	1.50	32.42	107.93	31.77	10.10	31.60	4.71	36.74	6.06	41.31	162.29
	S15CA002	39.83	15.06	30.54	4.56	14.34	2.37	48.80	155.50	47.79	15.22	38.96	5.81	57.91	9.56	62.18	237.43
	S15CA003	49.62	18.67	37.32	5.57	16.01	2.64	60.74	190.57	59.55	18.88	47.62	7.10	64.71	10.68	77.40	285.94
	S15JU001	27.15	10.01	28.64	4.27	2.83	0.47	33.10	106.47	32.59	10.12	36.54	5.45	10.54	1.74	42.17	139.15
	S15JU002	28.12	10.36	28.64	4.27	2.83	0.47	34.27	108.96	33.74	10.47	36.54	5.45	10.54	1.74	43.67	142.15
S20																	
	S20CA001	30.22	11.34	38.97	4.73	11.42	1.88	39.26	137.82	33.58	11.41	50.65	6.15	48.33	7.97	46.20	204.29
	S20CA002	31.75	11.89	38.97	4.73	11.42	1.88	41.23	141.87	35.28	11.97	50.65	6.15	48.33	7.97	48.52	208.87
	S20CA003	50.88	19.05	49.14	5.97	18.01	2.97	66.07	212.09	56.54	19.17	63.89	7.76	76.21	12.57	77.75	313.89
	S20CA004	53.05	19.83	49.14	5.97	18.01	2.97	68.86	217.83	58.94	19.95	63.89	7.76	76.21	12.57	81.03	320.35
	S20CA005	59.43	22.56	66.69	8.10	29.27	4.83	77.39	268.27	66.04	22.70	86.69	10.53	123.84	20.43	91.08	421.31
	S20CA006	66.65	24.82	66.69	8.10	20.12	3.32	86.44	276.14	74.05	24.97	86.69	10.53	85.14	14.05	101.72	397.15
S25																	
	S25JD001	2.60	0.87	0.00	1.50	1.38	0.23	2.84	9.42	3.12	0.88	0.00	1.50	5.14	0.85	3.65	15.14
	S25JD002	3.23	1.10	0.00	1.50	2.07	0.34	3.54	11.78	3.88	1.12	0.00	1.50	7.71	1.27	4.56	20.04

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
S25	***cont.***																
	S25RI001	2.70	0.82	0.00	1.50	0.45	0.07	2.89	8.43	3.24	0.84	0.00	1.50	1.68	0.28	3.71	11.25
	S25RI002	3.05	0.94	0.00	1.50	0.68	0.11	3.28	9.56	3.66	0.96	0.00	1.50	2.52	0.42	4.22	13.28
	S25RM001	7.02	2.29	0.00	1.50	3.90	0.64	7.62	22.97	8.42	2.33	0.00	1.50	14.35	2.37	9.80	38.77
	S25RM002	9.54	3.12	0.00	1.50	5.22	0.86	10.36	30.60	11.45	3.17	0.00	1.50	19.26	3.18	13.33	51.89
	S25RM003	5.37	1.81	0.00	1.50	3.90	0.64	5.87	19.09	6.44	1.84	0.00	1.50	14.35	2.37	7.55	34.05
S30																	
	S30HW001	10.24	5.10	32.83	17.23	1.35	0.22	14.21	81.18	17.07	5.25	39.39	25.00	1.52	0.25	29.62	118.10
	S30HW002	13.89	6.89	45.96	24.12	1.58	0.26	19.27	111.97	23.16	7.09	55.15	35.00	1.78	0.29	40.17	162.64
	S30HW005	5.52	2.76	5.25	2.75	0.83	0.14	4.98	22.23	9.20	2.84	6.30	4.00	0.92	0.15	10.85	34.26
	S30HW006	9.30	4.59	13.13	6.89	0.88	0.15	8.38	43.32	15.50	4.73	15.76	10.00	0.97	0.16	18.27	65.39
	S30HW007	10.12	4.99	16.41	8.61	0.88	0.15	9.12	50.28	16.87	5.13	19.70	12.50	0.97	0.16	19.87	75.20
	S30HW008	10.58	5.21	16.41	8.61	0.88	0.15	9.53	51.37	17.64	5.36	19.70	12.50	0.97	0.16	20.77	77.10
	S30HW009	10.89	5.41	19.70	10.34	1.29	0.21	9.82	57.66	18.15	5.57	23.63	15.00	1.46	0.24	21.40	85.45
	S30HW010	13.30	6.58	26.26	13.78	1.40	0.23	11.98	73.53	22.16	6.78	31.51	20.00	1.58	0.26	26.12	108.41
	S30HW011	13.03	6.46	26.26	13.78	1.45	0.24	11.74	72.96	21.72	6.65	31.51	20.00	1.63	0.27	25.60	107.38
	S30HW012	15.42	7.62	26.26	13.78	1.58	0.26	13.89	78.81	25.70	7.85	31.51	20.00	1.78	0.29	30.28	117.41
	S30HW013	12.46	6.17	59.09	31.00	1.32	0.22	17.28	127.54	20.77	6.35	70.90	45.00	1.49	0.25	36.03	180.79
	S30HW014	10.13	2.15	1.97	1.03	0.51	0.08	11.25	27.12	12.67	2.20	2.36	1.50	0.56	0.09	17.58	36.96
	S30HW015	11.20	2.37	3.28	1.72	0.51	0.08	12.42	31.58	14.00	2.42	3.94	2.50	0.56	0.09	19.41	42.92
	S30HW016	10.56	2.24	2.63	1.38	0.51	0.08	11.72	29.12	13.21	2.29	3.15	2.00	0.56	0.09	18.32	39.62
	S30HW017	11.43	2.42	3.28	1.72	0.51	0.08	12.69	32.13	14.29	2.47	3.94	2.50	0.56	0.09	19.82	43.67
	S30HW018	13.48	2.89	5.25	2.75	0.96	0.16	14.98	40.47	16.85	2.96	6.30	4.00	1.07	0.18	23.41	54.77
	S30KB001	2.52	0.58	1.31	0.69	0.46	0.08	2.47	8.11	3.15	0.59	1.58	1.00	0.51	0.08	3.75	10.66
	S30KB002	3.00	0.68	1.97	1.03	0.55	0.09	2.94	10.26	3.75	0.70	2.36	1.50	0.62	0.10	4.45	13.48
	S30KB003	2.80	0.61	2.63	1.38	0.29	0.05	2.73	10.49	3.50	0.63	3.15	2.00	0.34	0.06	4.14	13.82
	S30KB004	3.56	0.85	3.28	1.72	0.97	0.16	3.51	14.05	4.46	0.87	3.94	2.50	1.08	0.18	5.32	18.35
	S30KB005	3.12	0.72	3.28	1.72	0.62	0.10	3.06	12.62	3.90	0.73	3.94	2.50	0.69	0.11	4.64	16.51
	S30KB006	3.92	0.93	3.94	2.07	1.01	0.17	3.86	15.90	4.90	0.95	4.73	3.00	1.13	0.19	5.85	20.75
	S30KB007	2.73	0.62	1.31	0.69	0.46	0.08	2.67	8.56	3.41	0.63	1.58	1.00	0.51	0.08	4.05	11.26
	S30KB008	3.42	0.77	1.97	1.03	0.50	0.08	3.34	11.11	4.28	0.78	2.36	1.50	0.55	0.09	5.07	14.63
	S30KB009	4.57	1.06	1.97	1.03	0.98	0.16	4.48	14.25	5.71	1.09	2.36	1.50	1.09	0.18	6.80	18.73
	S30KB010	2.85	0.66	2.63	1.38	0.58	0.10	2.79	10.99	3.56	0.67	3.15	2.00	0.64	0.11	4.23	14.36
	S30KB011	4.18	0.94	3.28	1.72	0.62	0.10	4.09	14.93	5.23	0.96	3.94	2.50	0.69	0.11	6.20	19.63
	S30KB012	4.88	1.13	3.28	1.72	1.04	0.17	4.79	17.01	6.10	1.16	3.94	2.50	1.15	0.19	7.26	22.30

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
S30	***cont.***																
	S30KB013	3.33	0.76	3.28	1.72	0.62	0.10	3.27	13.08	4.17	0.78	3.94	2.50	0.69	0.11	4.95	17.14
	S30KB014	4.56	1.02	3.94	2.07	0.67	0.11	4.45	16.82	5.69	1.04	4.73	3.00	0.75	0.12	6.75	22.08
	S30KB015	6.03	1.37	5.25	2.75	1.10	0.18	5.90	22.58	7.54	1.41	6.30	4.00	1.22	0.20	8.95	29.62
	S30KB018	7.65	1.65	3.28	1.72	0.64	0.11	7.45	22.50	9.56	1.69	3.94	2.50	0.72	0.12	11.29	29.82
	S30KB021	9.03	1.94	5.25	2.75	0.71	0.12	8.79	28.59	11.29	1.99	6.30	4.00	0.80	0.13	13.34	37.85
	S30KB024	10.66	2.29	7.88	4.13	0.78	0.13	10.37	36.24	13.33	2.34	9.45	6.00	0.87	0.14	15.73	47.86
	S30KB025	5.41	1.18	2.63	1.38	0.55	0.09	5.27	16.51	6.76	1.21	3.15	2.00	0.62	0.10	8.00	21.84
	S30KB026	6.47	1.40	2.63	1.38	0.59	0.10	6.30	18.87	8.09	1.44	3.15	2.00	0.66	0.11	9.56	25.01
	S30KB027	8.23	1.77	3.28	1.72	0.64	0.11	8.01	23.76	10.29	1.82	3.94	2.50	0.72	0.12	12.15	31.54
	S30KB028	6.18	1.35	3.94	2.07	0.60	0.10	6.03	20.27	7.73	1.38	4.73	3.00	0.67	0.11	9.14	26.76
	S30KB029	7.65	1.65	3.94	2.07	0.64	0.11	7.45	23.51	9.56	1.69	4.73	3.00	0.72	0.12	11.29	31.11
	S30KB030	9.74	2.09	5.25	2.75	0.71	0.12	9.48	30.14	12.18	2.14	6.30	4.00	0.80	0.13	14.38	39.93
	S30KB031	8.12	1.75	6.57	3.45	0.64	0.11	7.90	28.54	10.14	1.79	7.88	5.00	0.72	0.12	11.98	37.63
	S30KB032	9.79	2.10	6.57	3.45	0.73	0.12	9.53	32.29	12.24	2.15	7.88	5.00	0.82	0.14	14.45	42.68
	S30KB033	11.49	2.46	7.88	4.13	0.78	0.13	11.17	38.04	14.36	2.52	9.45	6.00	0.87	0.14	16.94	50.28
	S30KB034	3.50	0.79	1.97	1.03	0.60	0.10	3.43	11.42	4.37	0.81	2.36	1.50	0.67	0.11	5.19	15.01
	S30KB035	4.02	0.91	2.63	1.38	0.69	0.11	3.94	13.68	5.03	0.93	3.15	2.00	0.77	0.13	5.97	17.98
	S30KB036	3.76	0.85	2.63	1.38	0.64	0.11	3.68	13.05	4.70	0.87	3.15	2.00	0.72	0.12	5.58	17.14
	S30KB041	4.33	0.98	2.63	1.38	0.75	0.12	4.24	14.43	5.41	1.01	3.15	2.00	0.84	0.14	6.43	18.98
	S30KB042	5.42	1.18	3.28	1.72	0.55	0.09	5.28	17.52	6.77	1.21	3.94	2.50	0.62	0.10	8.01	23.15
	S30KB043	9.55	2.04	1.97	1.03	0.59	0.10	9.29	24.57	11.94	2.09	2.36	1.50	0.66	0.11	14.08	32.74
	S30KB044	11.80	2.50	1.97	1.03	0.59	0.10	11.46	29.45	14.75	2.56	2.36	1.50	0.66	0.11	17.39	39.33
	S30KB045	15.86	7.78	26.11	3.41	1.10	0.18	21.97	76.41	26.43	8.01	31.17	4.88	1.24	0.20	45.80	117.73
	S30KB046	15.62	7.69	35.71	18.74	1.26	0.21	25.97	105.20	26.03	7.91	42.86	27.20	1.43	0.24	57.72	163.39
	S30KB047	13.84	6.79	41.36	21.70	0.93	0.15	23.01	107.78	23.07	6.99	49.63	31.50	1.04	0.17	51.14	163.54
	S30KB048	11.59	2.47	11.16	5.86	0.67	0.11	12.87	44.73	14.49	2.53	13.39	8.50	0.76	0.13	20.11	59.91
	S30KB049	12.83	2.88	11.82	6.20	2.10	0.35	14.33	50.51	16.04	2.96	14.18	9.00	2.36	0.39	22.39	67.32
	S30KB050	17.89	3.78	32.83	17.23	0.74	0.12	19.85	92.44	22.37	3.87	39.39	25.00	0.82	0.14	31.02	122.61
	S30KB051	22.52	4.78	32.83	17.23	1.10	0.18	25.00	103.64	28.15	4.89	39.39	25.00	1.24	0.20	39.06	137.93
	S30KB052	21.79	4.53	32.83	17.23	0.37	0.06	24.14	100.95	27.24	4.64	39.39	25.00	0.41	0.07	37.72	134.47
	S30KB053	5.97	1.30	4.60	2.41	0.59	0.10	5.82	20.79	7.46	1.33	5.51	3.50	0.66	0.11	8.82	27.39
	S30KB054	6.53	1.41	1.97	1.03	0.55	0.09	6.36	17.94	8.16	1.45	2.36	1.50	0.62	0.10	9.64	23.83
	S30KB055	10.28	5.06	17.77	2.32	0.88	0.15	9.26	45.72	17.14	5.21	21.21	3.32	0.97	0.16	20.19	68.20
	S30KB056	10.55	5.19	17.77	2.32	0.88	0.15	9.50	46.36	17.59	5.35	21.21	3.32	0.97	0.16	20.72	69.32
	S30KB057	11.78	5.79	17.77	2.32	0.88	0.15	10.61	49.30	19.63	5.96	21.21	3.32	0.97	0.16	23.12	74.37

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
S30	***cont.***																
	S30KB058	11.17	5.47	17.07	8.96	0.74	0.12	10.05	53.58	18.61	5.63	20.48	13.00	0.82	0.14	21.91	80.59
	S30KB059	17.39	8.52	39.39	20.67	1.11	0.18	15.66	102.92	28.99	8.77	47.27	30.00	1.23	0.20	34.13	150.59
	S30PU001	19.79	4.14	15.60	2.04	0.71	0.12	19.21	61.61	24.74	4.24	18.61	2.92	0.84	0.14	29.13	80.62
	S30PU002	37.27	7.79	25.39	3.32	1.23	0.20	36.17	111.37	46.59	7.98	30.30	4.75	1.46	0.24	54.86	146.18
	S30PU003	51.84	10.80	25.39	3.32	1.33	0.22	50.29	143.19	64.80	11.06	30.30	4.75	1.57	0.26	76.27	189.01
	S30RA002	5.01	1.06	1.81	0.24	0.20	0.03	5.56	13.91	6.26	1.08	2.16	0.34	0.22	0.04	8.68	18.78
	S30RA003	9.25	1.95	3.55	0.46	0.40	0.07	10.26	25.94	11.56	2.00	4.24	0.66	0.45	0.07	16.04	35.02
	S30TS001	2.37	0.53	1.58	0.83	0.34	0.06	2.32	8.03	2.97	0.54	1.89	1.20	0.39	0.06	3.52	10.57
	S30TS002	4.24	0.92	2.23	1.17	0.42	0.07	4.13	13.18	5.30	0.94	2.68	1.70	0.47	0.08	6.26	17.43
	S30TS003	2.48	0.56	2.23	1.17	0.39	0.06	2.42	9.31	3.10	0.57	2.68	1.70	0.44	0.07	3.67	12.23
	S30TS004	4.38	0.96	2.89	1.52	0.48	0.08	4.27	14.58	5.47	0.98	3.47	2.20	0.54	0.09	6.47	19.22
	S30TS005	2.63	0.59	2.89	1.52	0.43	0.07	2.58	10.71	3.29	0.61	3.47	2.20	0.49	0.08	3.91	14.05
	S30TS006	4.55	1.00	3.55	1.86	0.54	0.09	4.44	16.03	5.69	1.03	4.25	2.70	0.61	0.10	6.74	21.12
	S30TS007	3.06	0.69	4.20	2.20	0.48	0.08	2.99	13.70	3.82	0.70	5.04	3.20	0.54	0.09	4.53	17.92
	S30TS008	6.26	1.36	5.51	2.89	0.61	0.10	6.10	22.83	7.82	1.39	6.62	4.20	0.68	0.11	9.25	30.07
	S30TS009	9.07	4.38	39.39	23.67	0.00	0.00	12.55	89.06	15.12	4.51	47.27	33.00	0.00	0.00	26.16	126.06
	S30TS010	13.08	6.31	52.52	31.56	0.00	0.00	18.09	121.56	21.80	6.50	63.02	44.00	0.00	0.00	37.71	173.03
	S30TS011	21.70	10.47	105.04	63.11	0.00	0.00	30.02	230.34	36.17	10.78	126.05	88.00	0.00	0.00	62.57	323.57
S35																	
	S35AR001	0.32	0.06	0.00	0.00	0.00	0.00	0.39	0.77								
	S35AR002	0.47	0.10	0.00	0.00	0.00	0.00	0.59	1.16								
S40																	
	S40BO002	29.33	7.38	28.64	3.74	1.48	0.24	37.92	108.73	36.67	7.54	37.07	4.84	6.11	1.01	53.01	146.25
	S40BO003	28.72	7.23	28.64	3.74	1.48	0.24	37.14	107.19	35.90	7.39	37.07	4.84	6.11	1.01	51.91	144.23
	S40BO004	28.19	7.10	28.64	3.74	1.48	0.24	36.44	105.83	35.23	7.25	37.07	4.84	6.11	1.01	50.94	142.45
	S40CA001	26.70	6.72	24.58	3.21	1.78	0.29	34.52	97.80	33.37	6.87	31.81	4.16	6.87	1.13	48.26	132.47
	S40CA002	25.44	6.44	24.58	3.21	1.43	0.24	32.92	94.26	31.80	6.58	31.81	4.16	5.46	0.90	46.02	126.73
	S40CA003	20.31	5.45	27.85	3.64	8.48	1.40	26.61	93.74	25.39	5.56	36.04	4.71	33.58	5.54	37.20	148.02
	S40CA004	35.11	9.02	42.96	5.61	6.36	1.05	45.58	145.69	43.88	9.21	55.60	7.27	24.98	4.12	63.71	208.77
S45																	
	S45DA004	1.53	0.24	0.00	0.25	0.00	0.00	2.39	4.41								
	S45DA005	1.83	0.29	0.00	0.25	0.00	0.00	2.85	5.22								
	S45DA007	1.93	0.30	0.00	0.25	0.00	0.00	3.01	5.49								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T10																	
	T10CA001	1.00	0.25	0.00	0.08	0.00	0.00	1.22	2.55	1.25	0.25	0.00	0.08	0.00	0.00	1.72	3.30
	T10CA002	1.49	0.37	0.00	0.08	0.00	0.00	1.82	3.76	1.86	0.38	0.00	0.08	0.00	0.00	2.56	4.88
	T10CA004	1.11	0.27	0.00	0.08	0.00	0.00	1.35	2.81	1.39	0.28	0.00	0.08	0.00	0.00	1.90	3.65
	T10CA005	1.49	0.37	0.00	0.08	0.00	0.00	1.82	3.76	1.86	0.38	0.00	0.08	0.00	0.00	2.56	4.88
	T10CA007	1.67	0.41	0.00	0.08	0.00	0.00	2.03	4.19	2.09	0.42	0.00	0.08	0.00	0.00	2.86	5.45
	T10CA008	2.22	0.55	0.00	0.08	0.00	0.00	2.71	5.56	2.78	0.56	0.00	0.08	0.00	0.00	3.81	7.23
	T10CA009	2.06	0.51	0.00	0.08	0.00	0.00	2.51	5.16	2.58	0.52	0.00	0.08	0.00	0.00	3.54	6.72
	T10CA010	2.26	0.56	0.00	0.08	0.00	0.00	2.76	5.66	2.83	0.57	0.00	0.08	0.00	0.00	3.88	7.36
	T10CA011	3.08	0.76	0.00	0.08	0.00	0.00	3.76	7.68	3.86	0.78	0.00	0.08	0.00	0.00	5.29	10.01
	T10CA012	3.03	0.75	0.00	0.08	0.00	0.00	3.69	7.55	3.79	0.77	0.00	0.08	0.00	0.00	5.20	9.84
	T10CA013	3.33	0.83	0.00	0.08	0.00	0.00	4.06	8.30	4.16	0.84	0.00	0.08	0.00	0.00	5.71	10.79
	T10CA014	2.78	0.69	0.00	0.08	0.00	0.00	3.38	6.93	3.47	0.70	0.00	0.08	0.00	0.00	4.76	9.01
	T10CA015	4.06	1.01	0.00	0.10	0.00	0.00	4.95	10.12	5.08	1.03	0.00	0.10	0.00	0.00	6.97	13.18
	T10CA016	4.04	1.00	0.00	0.12	0.00	0.00	4.93	10.09	5.05	1.02	0.00	0.12	0.00	0.00	6.93	13.12
	T10CA017	4.39	1.09	0.00	0.13	0.00	0.00	5.36	10.97	5.49	1.11	0.00	0.13	0.00	0.00	7.53	14.26
	T10CA018	3.90	0.97	0.00	0.13	0.00	0.00	4.75	9.75	4.88	0.99	0.00	0.13	0.00	0.00	6.69	12.69
	T10CA019	0.11	0.03	0.00	0.05	0.00	0.00	0.14	0.33	0.14	0.03	0.00	0.05	0.00	0.00	0.19	0.41
	T10CA020	4.06	1.01	0.00	0.15	0.00	0.00	4.94	10.16	5.07	1.03	0.00	0.15	0.00	0.00	6.95	13.20
	T10CA021	5.49	1.36	0.00	0.19	0.00	0.00	6.69	13.73	6.86	1.39	0.00	0.19	0.00	0.00	9.41	17.85
	T10CA022	5.93	1.47	0.00	0.19	0.00	0.00	7.23	14.82	7.42	1.50	0.00	0.19	0.00	0.00	10.17	19.28
	T10CA023	5.47	1.36	0.00	0.20	0.00	0.00	6.67	13.70	6.84	1.39	0.00	0.20	0.00	0.00	9.38	17.81
	T10CA024	8.29	2.05	0.00	0.28	0.00	0.00	10.10	20.72	10.36	2.10	0.00	0.28	0.00	0.00	14.20	26.94
	T10CA025	8.75	2.17	0.00	0.29	0.00	0.00	10.67	21.88	10.94	2.22	0.00	0.29	0.00	0.00	15.00	28.45
	T10CA026	11.89	2.95	0.00	0.40	0.00	0.00	14.50	29.74	14.87	3.01	0.00	0.40	0.00	0.00	20.39	38.67
	T10CA027	12.79	3.17	0.00	0.42	0.00	0.00	15.59	31.97	15.99	3.24	0.00	0.42	0.00	0.00	21.93	41.58
	T10JD001	0.95	0.24	0.00	0.25	0.07	0.01	1.17	2.69	1.19	0.25	0.00	0.25	0.08	0.01	1.65	3.43
T15																	
	T15CA002	6.13	1.85	5.57	0.94	0.00	0.00	11.74	26.23	7.66	1.88	7.21	1.21	0.00	0.00	16.68	34.64
	T15CA005	7.54	2.28	6.36	1.07	0.00	0.00	14.45	31.70	9.43	2.32	8.24	1.39	0.00	0.00	20.53	41.91
	T15CA008	14.98	4.52	11.54	1.94	0.00	0.00	28.70	61.68	18.72	4.60	14.93	2.51	0.00	0.00	40.77	81.53
	T15CA009	21.32	6.43	13.13	2.21	0.00	0.00	40.85	83.94	26.66	6.54	16.99	2.86	0.00	0.00	58.03	111.08
	T15CA011	20.84	6.29	14.72	2.48	0.00	0.00	39.91	84.24	26.04	6.39	19.05	3.21	0.00	0.00	56.70	111.39
	T15CA012	21.18	7.12	19.09	2.50	0.00	0.00	41.32	91.21	25.22	7.20	24.71	3.23	0.00	0.00	51.24	111.60
	T15CA014	25.07	8.42	19.09	2.50	0.00	0.00	48.90	103.98	29.84	8.52	24.71	3.23	0.00	0.00	60.64	126.94

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T15	***cont.***																
	T15CA016	27.65	9.29	24.66	3.23	0.00	0.00	53.93	118.76	32.91	9.40	31.92	4.18	0.00	0.00	66.88	145.29
	T15CA017	36.75	12.34	32.62	4.27	0.00	0.00	71.68	157.66	43.75	12.49	42.21	5.53	0.00	0.00	88.89	192.87
	T15CA018	46.39	16.74	39.36	2.86	0.00	0.00	84.84	190.19	55.67	16.93	50.22	3.65	0.00	0.00	114.47	240.94
	T15CA019	72.01	25.99	57.68	4.19	0.00	0.00	131.69	291.56	86.41	26.27	73.59	5.34	0.00	0.00	177.69	369.30
	T15CA020	7.69	2.32	6.36	1.07	0.00	0.00	14.74	32.18	9.62	2.36	8.24	1.39	0.00	0.00	20.94	42.55
	T15CA021	7.97	2.41	7.16	1.21	0.00	0.00	15.27	34.02	9.97	2.45	9.27	1.56	0.00	0.00	21.70	44.95
	T15CA022	8.44	2.55	7.16	1.21	0.00	0.00	16.16	35.52	10.55	2.59	9.27	1.56	0.00	0.00	22.96	46.93
	T15CA023	21.32	6.43	13.13	2.21	0.00	0.00	40.85	83.94	26.66	6.54	16.99	2.86	0.00	0.00	58.03	111.08
	T15CA024	10.82	3.26	8.75	1.47	0.00	0.00	20.72	45.02	13.52	3.32	11.33	1.91	0.00	0.00	29.44	59.52
	T15CS004	6.85	2.07	5.33	0.90	0.00	0.00	13.13	28.28	8.57	2.10	6.90	1.16	0.00	0.00	18.65	37.38
	T15CS007	11.99	3.62	9.47	1.59	0.00	0.00	22.97	49.64	14.98	3.68	12.25	2.06	0.00	0.00	32.62	65.59
	T15JD005	5.51	1.66	5.57	0.94	0.00	0.00	10.56	24.24	6.89	1.69	7.21	1.21	0.00	0.00	15.01	32.01
	T15JD006	6.54	1.97	5.89	0.99	0.00	0.00	12.53	27.92	8.18	2.01	7.62	1.28	0.00	0.00	17.80	36.89
	T15JD007	7.51	2.27	7.16	1.21	0.00	0.00	14.39	32.54	9.39	2.31	9.27	1.56	0.00	0.00	20.44	42.97
	T15JD008	13.23	3.99	11.14	1.87	0.00	0.00	25.35	55.58	16.54	4.06	14.41	2.43	0.00	0.00	36.01	73.45
	T15JD009	13.95	4.21	11.14	1.87	0.00	0.00	26.72	57.89	17.43	4.28	14.41	2.43	0.00	0.00	37.95	76.50
	T15JD010	17.20	5.19	14.72	2.48	0.00	0.00	32.95	72.54	21.50	5.28	19.05	3.21	0.00	0.00	46.81	95.85
	T15JD011	18.61	5.61	14.72	2.48	0.00	0.00	35.65	77.07	23.26	5.71	19.05	3.21	0.00	0.00	50.64	101.87
	T15KM008	31.60	10.61	24.66	3.23	0.00	0.00	61.63	131.73	37.62	10.74	31.92	4.18	0.00	0.00	76.43	160.89
T20																	
	T20CA001	18.93	5.98	16.29	2.13	3.66	0.60	16.48	64.07	20.38	6.01	20.78	2.72	15.38	2.54	19.24	87.05
	T20CA002	26.90	8.65	23.00	3.01	8.67	1.43	23.49	95.15	28.97	8.70	29.35	3.84	36.40	6.01	27.43	140.70
	T20CA003	39.97	12.92	32.64	4.27	9.13	1.51	34.93	135.37	43.04	12.98	41.64	5.45	38.35	6.33	40.78	188.57
T25																	
	T25CA006	15.86	3.58	19.37	2.54	0.00	0.00	19.48	60.83								
	T25CA007	17.38	3.92	21.18	2.77	0.00	0.00	21.35	66.60								
	T25CA008	18.81	4.24	25.61	3.35	0.00	0.00	23.11	75.12								
	T25JD008	7.55	1.44	7.62	1.00	0.54	0.09	7.68	25.92								
	T25JD009	10.03	1.90	10.16	1.33	0.54	0.09	10.19	34.24								
	T25JD010	11.22	2.19	12.33	1.61	1.23	0.20	11.45	40.23								
	T25JD012	15.32	3.21	23.58	3.09	3.88	0.64	15.82	65.54								
	T25JD013	20.67	4.20	30.83	4.04	3.88	0.64	21.23	85.49								
	T25JD014	14.96	2.88	15.60	2.04	1.23	0.20	15.23	52.14								
	T25JD015	1.68	0.35	3.63	0.48	0.39	0.06	1.73	8.32								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T25	***cont.***																
	T25JD016	2.01	0.41	4.06	0.53	0.39	0.06	2.06	9.52								
	T25JD017	2.40	0.48	4.06	0.53	0.39	0.06	2.46	10.38								
	T25JD018	3.19	0.62	4.86	0.64	0.39	0.06	3.26	13.02								
	T25JD019	3.46	0.68	5.88	0.77	0.49	0.08	3.54	14.90								
	T25JD020	3.50	0.75	6.60	0.86	1.17	0.19	3.62	16.69								
T30																	
	T30DW005	3.12	0.67	3.19	0.42	0.32	0.05	4.36	12.13	4.16	0.69	4.22	0.55	1.18	0.19	6.46	17.45
	T30DW011	18.60	3.77	13.42	1.75	0.00	0.00	25.71	63.25	24.80	3.89	17.75	2.32	0.00	0.00	38.10	86.86
	T30DW012	0.82	0.17	2.18	0.28	0.03	0.00	1.13	4.61	1.09	0.17	2.84	0.37	0.12	0.02	1.68	6.29
	T30DW013	1.12	0.24	3.02	0.39	0.11	0.02	1.56	6.46	1.49	0.25	3.94	0.52	0.40	0.07	2.32	8.99
	T30DW014	2.87	0.63	2.54	0.33	0.42	0.07	4.04	10.90	3.83	0.65	3.36	0.44	1.56	0.26	5.98	16.08
	T30DW016	5.21	1.09	4.13	0.54	0.32	0.05	7.25	18.59	6.95	1.13	5.47	0.72	1.18	0.19	10.75	26.39
	T30DW017	6.47	1.35	5.08	0.66	0.42	0.07	9.01	23.06	8.63	1.40	6.72	0.88	1.56	0.26	13.35	32.80
	T30DW018	7.27	1.52	5.66	0.74	0.42	0.07	10.11	25.79	9.69	1.57	7.48	0.98	1.56	0.26	14.98	36.52
	T30TM001	28.18	5.71	13.42	1.75	0.00	0.00	38.96	88.02	37.58	5.90	17.75	2.32	0.00	0.00	57.73	121.28
	T30TM004	30.43	6.16	13.42	1.75	0.00	0.00	42.07	93.83	40.57	6.37	17.75	2.32	0.00	0.00	62.33	129.34
	T30TM007	38.25	7.74	17.41	2.28	0.00	0.00	52.88	118.56	51.00	8.01	23.03	3.01	0.00	0.00	78.35	163.40
	T30TM008	39.74	8.04	17.41	2.28	0.00	0.00	54.93	122.40	52.98	8.32	23.03	3.01	0.00	0.00	81.39	168.73
	T30TM009	39.34	7.96	19.59	2.56	0.00	0.00	54.38	123.83	52.45	8.24	25.90	3.39	0.00	0.00	80.57	170.55
	T30TM012	51.63	10.45	25.39	3.32	0.00	0.00	71.37	162.16	68.83	10.81	33.58	4.40	0.00	0.00	105.75	223.37
	T30TM013	80.60	16.32	29.16	3.81	0.00	0.00	111.43	241.32	107.47	16.88	38.57	5.05	0.00	0.00	165.10	333.07
	T30TM014	78.94	15.98	36.49	4.77	0.00	0.00	109.13	245.31	105.25	16.53	48.26	6.32	0.00	0.00	161.69	338.05
	T30TM015	83.49	16.90	36.49	4.77	0.00	0.00	115.42	257.07	111.32	17.48	48.26	6.32	0.00	0.00	171.01	354.39
	T30VE007	14.52	2.94	9.07	1.19	0.00	0.00	20.07	47.79	19.36	3.04	11.99	1.57	0.00	0.00	29.74	65.70
	T30VE008	29.23	5.92	13.42	1.75	0.00	0.00	40.40	90.72	38.97	6.12	17.75	2.32	0.00	0.00	59.86	125.02
	T30VE009	31.63	6.40	18.14	2.37	0.00	0.00	43.72	102.26	42.17	6.62	23.99	3.14	0.00	0.00	64.78	140.70
	T30VE010	40.45	8.19	18.14	2.37	0.00	0.00	55.93	125.08	53.94	8.47	23.99	3.14	0.00	0.00	82.86	172.40
T35																	
	T35CT001	21.07	4.27	10.16	1.33	0.00	0.00	29.13	65.96	28.10	4.41	13.43	1.76	0.00	0.00	43.16	90.86
	T35CT002	25.98	5.26	10.16	1.33	0.00	0.00	35.91	78.64	34.64	5.44	13.43	1.76	0.00	0.00	53.21	108.48
	T35CT003	29.22	5.92	13.42	1.75	0.00	0.00	40.40	90.71	38.96	6.12	17.75	2.32	0.00	0.00	59.86	125.01
	T35CT004	27.57	5.58	7.40	0.97	0.00	0.00	38.12	79.64	36.76	5.77	9.79	1.28	0.00	0.00	56.48	110.08
	T35CT005	26.07	5.28	7.40	0.97	0.00	0.00	36.04	75.76	34.76	5.46	9.79	1.28	0.00	0.00	53.40	104.69
	T35CT006	26.07	5.28	7.40	0.97	0.00	0.00	36.04	75.76	34.76	5.46	9.79	1.28	0.00	0.00	53.40	104.69

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T35	***cont.***																
	T35CT007	28.84	5.84	7.40	0.97	0.00	0.00	39.87	82.92	38.45	6.04	9.79	1.28	0.00	0.00	59.07	114.63
	T35CT008	36.86	7.46	10.88	1.42	0.00	0.00	50.96	107.58	49.15	7.72	14.39	1.88	0.00	0.00	75.50	148.64
	T35CT009	42.85	8.68	10.88	1.42	0.00	0.00	59.24	123.07	57.14	8.97	14.39	1.88	0.00	0.00	87.78	170.16
	T35CT010	41.99	8.50	10.88	1.42	0.00	0.00	58.05	120.84	55.98	8.79	14.39	1.88	0.00	0.00	86.00	167.04
	T35CT011	50.35	10.19	12.69	1.66	0.00	0.00	69.61	144.50	67.13	10.54	16.79	2.19	0.00	0.00	103.13	199.78
T40																	
	T40AG001	7.19	1.50	5.80	0.87	0.37	0.06	7.89	23.68								
	T40AH001	2.25	0.45	0.00	0.25	0.00	0.00	2.80	5.75								
	T40AH002	2.69	0.55	0.00	0.25	0.00	0.00	3.35	6.84								
	T40AH003	3.51	0.71	0.00	0.25	0.00	0.00	4.37	8.84								
	T40AH004	3.92	0.79	0.00	0.25	0.00	0.00	4.88	9.84								
	T40GN001	1.61	0.27	0.00	0.00	0.00	0.00	1.56	3.44	1.98	0.28	0.00	0.00	0.00	0.00	2.19	4.45
	T40KF011	0.25	0.05	0.00	0.00	0.00	0.00	0.24	0.54								
	T40KF013	0.37	0.08	0.00	0.00	0.00	0.00	0.35	0.80								
	T40KF014	0.34	0.07	0.00	0.00	0.00	0.00	0.31	0.72								
	T40KF016	0.48	0.10	0.00	0.00	0.00	0.00	0.44	1.02								
	T40KF018	0.57	0.12	0.00	0.00	0.00	0.00	0.53	1.22								
	T40KF020	0.66	0.13	0.00	0.00	0.00	0.00	0.62	1.41								
	T40KF021	0.27	0.05	0.00	0.10	0.00	0.00	0.29	0.71								
	T40KF022	0.54	0.11	0.00	0.10	0.00	0.00	0.59	1.34								
	T40KF023	0.36	0.07	0.00	0.05	0.00	0.00	0.39	0.87								
	T40KF024	0.42	0.09	0.00	0.05	0.00	0.00	0.46	1.02								
	T40MY002	0.54	0.09	0.00	0.00	0.00	0.00	0.53	1.16	0.67	0.09	0.00	0.00	0.00	0.00	0.74	1.50
	T40MY003	0.68	0.11	0.00	0.00	0.00	0.00	0.66	1.45	0.83	0.12	0.00	0.00	0.00	0.00	0.92	1.87
	T40MY004	0.78	0.13	0.00	0.00	0.00	0.00	0.76	1.67	0.97	0.14	0.00	0.00	0.00	0.00	1.07	2.18
	T40MY005	1.09	0.18	0.00	0.00	0.00	0.00	1.06	2.33	1.34	0.19	0.00	0.00	0.00	0.00	1.48	3.01
	T40MY006	1.24	0.21	0.00	0.00	0.00	0.00	1.21	2.66	1.53	0.22	0.00	0.00	0.00	0.00	1.70	3.45
	T40PA001	0.71	0.14	0.00	0.24	0.00	0.00	0.88	1.97								
	T40PA002	3.89	0.79	0.00	0.24	0.00	0.00	4.84	9.76								
	T40PA003	4.84	0.98	0.00	0.26	0.00	0.00	6.03	12.11								
	T40PA004	5.66	1.14	0.00	0.26	0.00	0.00	7.04	14.10								
	T40PA005	10.67	2.16	0.00	0.27	0.00	0.00	13.28	26.38								
	T40PA006	11.10	2.25	0.00	0.27	0.00	0.00	13.82	27.44								
	T40RS001	2.45	0.55	0.00	0.00	0.00	0.00	2.44	5.44								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T40	***cont.***																
	T40RS002	2.54	0.56	0.00	0.00	0.00	0.00	2.53	5.63								
	T40RS003	2.74	0.61	0.00	0.00	0.00	0.00	2.73	6.08								
	T40XX034	14.22	2.62	17.05	2.54	0.00	0.00	14.58	51.01								
	T40XX035	14.44	2.67	18.14	2.71	0.00	0.00	14.82	52.78								
	T40XX036	17.25	3.18	20.67	3.08	0.00	0.00	17.70	61.88								
	T40XX037	16.96	3.13	20.67	3.08	0.00	0.00	17.40	61.24								
	T40XX038	17.74	3.27	20.67	3.08	0.00	0.00	18.20	62.96								
T45																	
	T45EA006	2.62	0.68	0.00	0.50	1.81	0.30	1.86	7.77								
	T45EA007	3.60	0.95	0.00	0.50	2.71	0.45	2.56	10.77								
	T45MY004	2.17	0.55	0.00	0.30	1.31	0.22	2.15	6.70	2.71	0.56	0.00	0.30	4.77	0.79	3.06	12.19
	T45MY005	2.77	0.72	0.00	0.30	1.96	0.32	2.75	8.82	3.46	0.74	0.00	0.30	7.15	1.18	3.93	16.76
	T45MY006	2.87	0.74	0.00	0.30	1.96	0.32	2.85	9.04	3.59	0.76	0.00	0.30	7.15	1.18	4.07	17.05
	T45MY007	2.77	0.72	0.00	0.30	1.96	0.32	2.76	8.83	3.47	0.74	0.00	0.30	7.15	1.18	3.94	16.78
	T45MY015	2.29	0.57	0.00	0.40	1.31	0.22	2.10	6.89	2.87	0.59	0.00	0.40	4.77	0.79	3.04	12.46
	T45MY016	2.36	0.59	0.00	0.40	1.31	0.22	2.17	7.05	2.95	0.60	0.00	0.40	4.77	0.79	3.13	12.64
	T45MY017	2.46	0.66	0.00	0.40	1.96	0.32	2.28	8.08	3.07	0.67	0.00	0.40	7.15	1.18	3.28	15.75
	T45MY018	1.73	0.40	0.00	0.40	1.31	0.22	1.49	5.55								
	T45MY019	1.71	0.39	0.00	0.40	1.31	0.22	1.47	5.50								
	T45XX001	2.83	0.66	0.00	0.40	0.98	0.16	2.78	7.81	3.54	0.67	0.00	0.40	3.57	0.59	3.97	12.74
	T45XX003	3.91	0.88	0.00	0.40	0.98	0.16	3.82	10.15	4.89	0.90	0.00	0.40	3.57	0.59	5.46	15.81
	T45XX008	2.33	0.56	0.00	0.40	0.98	0.16	2.13	6.56	2.91	0.57	0.00	0.40	3.57	0.59	3.07	11.11
	T45XX009	2.93	0.57	0.00	0.40	0.98	0.16	2.47	7.51								
	T45XX010	2.94	0.57	0.00	0.40	0.98	0.16	2.48	7.53								
	T45XX011	2.37	0.55	0.00	0.40	0.87	0.14	1.66	5.99								
	T45XX012	2.56	0.59	0.00	0.40	0.87	0.14	1.79	6.35								
	T45XX013	2.64	0.62	0.00	0.40	0.98	0.16	1.85	6.65								
	T45XX014	3.18	0.75	0.00	0.50	1.30	0.21	2.23	8.17								
	T45XX015	3.27	0.77	0.00	0.50	1.30	0.21	2.30	8.35								
	T45XX016	3.65	0.86	0.00	0.50	1.47	0.24	2.56	9.28								
	T45XX017	3.85	0.92	0.00	0.50	1.71	0.28	2.71	9.97								
	T45XX018	3.94	0.94	0.00	0.50	1.71	0.28	2.77	10.14								
	T45XX019	4.56	1.07	0.00	0.50	1.71	0.28	3.20	11.32								
	T45XX020	4.42	1.06	0.00	0.60	1.95	0.32	3.11	11.46								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T45	***cont.***																
	T45XX021	4.87	1.15	0.00	0.60	1.95	0.32	3.42	12.31								
	T45XX022	5.36	1.28	0.00	0.60	2.28	0.38	3.77	13.67								
	T45XX023	6.37	1.52	0.00	0.60	2.78	0.46	4.48	16.21								
	T45XX024	1.97	0.48	0.00	0.09	0.98	0.16	1.39	5.07								
	T45XX025	2.21	0.53	0.00	0.10	0.98	0.16	1.56	5.54								
	T45XX026	1.27	0.30	0.00	0.40	0.52	0.09	0.89	3.47								
	T45XX027	1.38	0.34	0.00	0.40	0.70	0.12	0.98	3.92								
	T45XX028	1.54	0.39	0.00	0.40	0.91	0.15	1.09	4.48								
	T45XX029	5.31	1.50	4.57	0.51	0.49	0.08	5.34	17.80								
	T45XX030	5.19	1.52	4.57	0.51	0.98	0.16	5.26	18.19								
	T45XX031	6.35	1.83	4.57	0.51	0.98	0.16	6.42	20.82								
	T45XX032	3.89	0.71	0.00	0.50	0.73	0.12	3.26	9.21								
	T45XX033	4.52	0.84	0.00	0.60	0.98	0.16	3.79	10.89								
	T45XX034	2.16	0.52	0.00	0.40	0.98	0.16	1.52	5.74								
	T45XX035	2.32	0.55	0.00	0.40	0.98	0.16	1.63	6.04								
T50																	
	T50GM001	1.39	0.29	4.77	0.62	0.18	0.03	1.50	8.78	1.71	0.30	6.13	0.80	0.60	0.10	1.98	11.62
	T50GM004	3.51	0.73	11.33	1.48	0.18	0.03	3.78	21.04	4.33	0.74	14.57	1.90	0.60	0.10	4.98	27.22
	T50GM005	3.78	0.78	11.33	1.48	0.19	0.03	4.06	21.65	4.65	0.80	14.57	1.90	0.66	0.11	5.35	28.04
	T50XX001	1.37	0.30	5.17	0.68	0.33	0.05	1.49	9.39	1.68	0.31	6.65	0.87	1.06	0.17	1.96	12.70
	T50XX002	1.68	0.36	5.17	0.68	0.21	0.03	1.81	9.94	2.07	0.36	6.65	0.87	0.70	0.12	2.39	13.16
	T50XX003	1.92	0.40	7.16	0.94	0.21	0.03	2.07	12.73	2.36	0.41	9.20	1.20	0.68	0.11	2.73	16.69
	T50XX004	1.65	0.36	5.17	0.68	0.34	0.06	1.79	10.05	2.03	0.37	6.65	0.87	1.18	0.19	2.36	13.65
	T50XX005	1.99	0.42	5.17	0.68	0.22	0.04	2.15	10.67	2.45	0.43	6.65	0.87	0.78	0.13	2.83	14.14
	T50XX006	2.05	0.43	7.16	0.94	0.22	0.04	2.22	13.06	2.53	0.44	9.20	1.20	0.76	0.13	2.92	17.18
	T50XX007	1.45	0.32	5.17	0.68	0.33	0.05	1.57	9.57	1.78	0.33	6.65	0.87	1.06	0.17	2.08	12.94
	T50XX008	1.80	0.38	5.17	0.68	0.21	0.03	1.94	10.21	2.21	0.39	6.65	0.87	0.70	0.12	2.56	13.50
	T50XX009	2.20	0.46	7.16	0.94	0.21	0.03	2.37	13.37	2.71	0.47	9.20	1.20	0.68	0.11	3.13	17.50
	T50XX010	1.98	0.43	5.17	0.68	0.34	0.06	2.14	10.80	2.43	0.44	6.65	0.87	1.18	0.19	2.82	14.58
	T50XX011	2.18	0.46	7.16	0.94	0.22	0.04	2.35	13.35	2.68	0.47	9.20	1.20	0.78	0.13	3.10	17.56
	T50XX012	2.27	0.47	7.16	0.94	0.22	0.04	2.44	13.54	2.79	0.49	9.20	1.20	0.76	0.13	3.22	17.79
	T50XX013	1.78	0.38	1.23	0.14	0.33	0.05	1.93	5.84	2.19	0.39	1.76	0.20	1.06	0.17	2.54	8.31
	T50XX014	2.02	0.42	1.23	0.14	0.21	0.03	2.18	6.23	2.48	0.43	1.76	0.20	0.70	0.12	2.87	8.56
	T50XX015	2.34	0.49	2.13	0.24	0.21	0.03	2.52	7.96	2.87	0.50	3.04	0.34	0.68	0.11	3.32	10.86

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T50	***cont.***																
	T50XX016	2.13	0.46	2.13	0.24	0.34	0.06	2.31	7.67	2.63	0.47	3.04	0.34	1.18	0.19	3.04	10.89
	T50XX017	2.20	0.46	2.13	0.24	0.22	0.04	2.37	7.66	2.71	0.47	3.04	0.34	0.78	0.13	3.12	10.59
	T50XX018	2.64	0.55	2.13	0.24	0.22	0.04	2.84	8.66	3.25	0.56	3.04	0.34	0.76	0.13	3.75	11.83
	T50XX019	2.11	0.44	2.13	0.24	0.21	0.03	2.27	7.43	2.59	0.45	3.04	0.34	0.70	0.12	2.99	10.23
	T50XX020	2.56	0.53	2.13	0.24	0.22	0.04	2.76	8.48	3.15	0.55	3.04	0.34	0.78	0.13	3.63	11.62
	T50XX021	2.32	0.48	2.13	0.24	0.21	0.03	2.49	7.90	2.85	0.50	3.04	0.34	0.68	0.11	3.29	10.81
	T50XX022	3.65	0.94	7.16	0.87	0.46	0.08	3.65	16.81	4.56	0.96	9.27	1.13	1.78	0.29	4.92	22.91
	T50XX023	2.84	0.74	19.08	2.67	0.46	0.08	2.85	28.72	3.55	0.76	24.45	3.42	1.78	0.29	3.84	38.09
	T50XX024	2.46	0.65	19.08	2.67	0.46	0.08	2.48	27.88	3.08	0.66	24.45	3.42	1.78	0.29	3.34	37.02
	T50XX025	4.74	1.24	6.76	0.82	0.75	0.12	4.76	19.19	5.92	1.26	8.75	1.06	3.11	0.51	6.40	27.01
	T50XX026	4.83	1.26	8.35	1.01	0.73	0.12	4.85	21.15	6.03	1.29	10.81	1.31	2.81	0.46	6.52	29.23
	T50XX027	6.47	1.96	14.88	1.94	0.67	0.11	6.47	32.50	7.76	1.99	19.22	2.51	2.57	0.42	8.96	43.43
	T50XX028	6.39	1.96	12.92	1.69	1.02	0.17	6.41	30.56	7.66	1.99	16.68	2.18	3.96	0.65	8.87	41.99
	T50XX029	5.88	1.82	17.41	2.28	1.02	0.17	5.91	34.49	7.06	1.84	22.49	2.94	3.96	0.65	8.18	47.12
	T50XX030	7.58	2.31	19.66	2.57	1.02	0.17	7.59	40.90	9.09	2.35	25.39	3.32	3.96	0.65	10.51	55.27
	T50XX031	7.00	2.14	22.46	2.94	0.98	0.16	7.01	42.69	8.40	2.17	29.02	3.79	3.78	0.62	9.71	57.49
	T50XX032	7.06	2.13	14.88	1.94	0.67	0.11	7.06	33.85	8.48	2.16	19.22	2.51	2.57	0.42	9.77	45.13
	T50XX033	7.68	2.34	22.46	2.94	0.98	0.16	7.69	44.25	9.22	2.37	29.02	3.79	3.78	0.62	10.65	59.45
	T50XX035	6.79	1.74	8.35	1.01	0.73	0.12	6.79	25.53	8.48	1.78	10.81	1.31	2.81	0.46	9.14	34.79
T55																	
	T55CA002	30.42	13.81	25.86	4.10	8.58	1.42	41.49	125.68	33.80	13.87	33.46	5.30	33.72	5.56	48.67	174.38
	T55CA003	41.76	19.09	37.31	5.91	13.31	2.20	57.03	176.61	46.41	19.18	48.29	7.65	52.37	8.64	66.90	249.44
	T55CA007	23.00	10.34	19.37	3.07	9.63	1.59	31.33	98.33	25.55	10.40	25.07	3.97	37.86	6.25	36.74	145.84
	T55CA008	22.16	6.71	14.60	1.28	7.36	1.21	26.90	80.22	23.52	6.75	17.64	1.55	28.47	4.70	30.30	112.93
	T55CA009	26.35	7.95	16.01	1.41	7.98	1.32	31.96	92.98	27.96	7.98	19.34	1.70	30.90	5.10	36.01	128.99
	T55CA010	22.59	6.69	12.02	1.06	4.49	0.74	27.32	74.91	23.97	6.72	14.52	1.28	17.67	2.92	30.78	97.86
	T55CA011	26.56	7.90	14.60	1.28	6.13	1.01	32.15	89.63	28.18	7.94	17.64	1.55	24.10	3.98	36.22	119.61
	T55CA012	31.93	9.70	19.94	1.75	11.30	1.86	38.78	115.26	33.89	9.74	24.09	2.12	44.44	7.33	43.69	165.30
	T55CA013	34.90	10.67	22.74	2.00	14.04	2.32	42.42	129.09	37.03	10.72	27.48	2.42	55.57	9.17	47.79	190.18
	T55JD001	17.30	5.25	14.88	1.31	6.13	1.01	21.01	66.89	18.36	5.28	17.98	1.58	24.10	3.98	23.67	94.95
	T55JD002	20.03	6.04	16.01	1.41	6.13	1.01	24.30	74.93	21.26	6.07	19.34	1.70	24.10	3.98	27.37	103.82
	T55JD003	25.30	7.78	21.34	1.88	10.99	1.81	30.78	99.88	26.85	7.82	25.79	2.27	43.24	7.13	34.68	147.78
	T55JD004	28.22	8.73	23.19	2.04	13.32	2.20	34.37	112.07	29.95	8.77	28.03	2.47	52.40	8.65	38.72	168.99
	T55KM009	23.03	10.36	19.41	3.07	9.63	1.59	31.37	98.46	25.58	10.41	25.12	3.98	37.86	6.25	36.79	145.99

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
T55	***cont.***																
	T55KM012	32.58	15.13	41.45	6.57	13.31	2.20	44.61	155.85	36.20	15.21	53.64	8.50	52.37	8.64	52.32	226.88
	T55KM013	77.24	35.04	59.11	9.36	21.56	3.56	105.36	311.23	85.82	35.21	76.50	12.12	84.79	13.99	123.58	432.01
	T55KM014	87.60	41.41	79.56	12.60	44.36	7.32	120.28	393.13	97.33	41.62	102.96	16.31	174.48	28.79	141.08	602.57
	T55KM015	31.23	9.48	21.85	1.92	10.99	1.81	37.92	115.20	33.14	9.53	26.40	2.32	43.24	7.13	42.72	164.48
	T55KM016	35.53	10.82	24.15	2.13	13.32	2.20	43.17	131.32	37.70	10.88	29.18	2.57	52.40	8.65	48.63	190.01
	T55VO002	17.77	5.44	14.10	1.24	7.29	1.20	21.61	68.65	18.86	5.47	17.03	1.50	28.77	4.75	24.34	100.72
	T55VO003	18.97	5.75	14.10	1.24	6.54	1.08	23.03	70.71	20.13	5.78	17.03	1.50	25.75	4.25	25.94	100.38
	T55VO004	25.75	7.92	18.08	1.59	11.30	1.86	31.34	97.84	27.33	7.96	21.85	1.92	44.44	7.33	35.31	146.14
	T55VO005	22.68	6.72	16.62	1.46	3.97	0.66	27.43	79.54	24.06	6.75	20.09	1.77	15.63	2.58	30.90	101.78
	T55VO006	28.56	8.92	22.18	1.95	15.23	2.51	34.84	114.19	30.31	8.96	26.80	2.36	59.92	9.89	39.25	177.49
T56																	
	T56CA006	46.73	21.22	41.70	6.61	14.62	2.41	63.75	197.04	51.92	21.33	68.04	10.15	57.08	9.42	74.78	292.72
T57																	
	T57CU001	6.85	1.71	5.51	0.72	0.42	0.07	8.54	23.82								
	T57CU002	8.37	2.09	5.51	0.72	0.42	0.07	10.43	27.61								
	T57CU003	12.41	3.09	8.34	1.09	0.42	0.07	15.47	40.89								
	T57CU004	14.23	3.54	12.84	1.68	0.42	0.07	17.74	50.52								
	T57CU005	15.57	3.87	24.30	3.18	0.42	0.07	19.39	66.80								
T60																	
	T60KI001	14.88	4.55	12.69	1.89	3.03	0.50	16.79	54.33	17.85	4.62	16.79	2.50	11.52	1.90	23.03	78.21
	T60KI002	22.34	7.01	23.94	3.57	8.23	1.36	25.35	91.80	26.81	7.12	31.66	4.72	31.77	5.24	34.78	142.10
	T60KI003	36.66	11.28	32.64	4.87	9.48	1.56	41.43	137.92	43.99	11.45	43.17	6.44	36.59	6.04	56.82	204.50
	T60KI004	6.46	2.43	32.64	4.87	9.48	1.56	7.64	65.08	7.75	2.47	43.17	6.44	36.59	6.04	10.48	112.94
	T60KI006	42.83	13.67	39.90	5.95	19.72	3.25	48.78	174.10	51.39	13.88	52.77	7.87	76.10	12.56	66.90	281.47
	T60SO001	26.10	8.11	23.94	3.57	8.23	1.36	29.56	100.87	31.32	8.24	31.66	4.72	31.77	5.24	40.54	153.49
	T60SO002	35.08	11.18	32.64	4.87	15.96	2.63	39.94	142.30	42.09	11.36	43.17	6.44	61.60	10.16	54.78	229.60
	T60SO003	35.68	11.36	32.64	4.87	15.96	2.63	40.61	143.75	42.81	11.53	43.17	6.44	61.60	10.16	55.70	231.41
	T60SO004	45.57	14.12	39.90	5.95	13.55	2.24	51.58	172.91	54.69	14.34	52.77	7.87	52.31	8.63	70.74	261.35
	T60SO005	46.38	14.36	39.90	5.95	13.55	2.24	52.49	174.87	55.66	14.58	52.77	7.87	52.31	8.63	71.99	263.81
T65																	
	T65WG012	85.10	26.27	27.72	15.17	1.95	0.32	119.53	276.06								
	T65WG013	128.10	39.47	27.72	15.17	1.95	0.32	179.88	392.61								
	T65WG014	139.59	43.00	64.55	36.21	1.95	0.32	196.02	481.64								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
W25																	
	W25AO002	0.73	0.08	0.19	0.84	0.00	0.00	1.25	3.09								
	W25AO003	1.06	0.12	0.19	0.84	0.00	0.00	1.81	4.02								
	W25AO004	1.03	0.11	0.38	1.18	0.00	0.00	1.76	4.46								
	W25AO005	2.11	0.24	0.77	1.86	0.00	0.00	3.61	8.59								
	W25AO006	1.61	0.18	0.19	0.84	0.00	0.00	2.75	5.57								
	W25CJ001	8.25	1.30	2.83	1.65	0.00	0.00	12.84	26.87								
	W25CJ002	13.00	2.04	3.39	1.98	0.00	0.00	20.23	40.64								
	W25CJ003	20.38	3.20	3.39	1.98	0.00	0.00	31.72	60.67								
	W25KZ001	1.19	0.40	0.00	0.00	0.00	0.00	0.91	2.50								
	W25KZ002	1.32	0.44	0.00	0.00	0.00	0.00	1.01	2.77								
	W25KZ003	1.35	0.45	0.00	0.00	0.00	0.00	1.03	2.83								
	W25KZ004	1.92	0.64	0.00	0.00	0.00	0.00	1.47	4.03								
	W25KZ005	2.27	0.76	0.00	0.00	0.00	0.00	1.74	4.77								
	W25KZ006	2.31	0.77	0.00	0.00	0.00	0.00	1.77	4.85								
	W25KZ007	2.46	0.82	0.00	0.00	0.00	0.00	1.89	5.17								
	W25NL001	12.95	1.45	38.38	17.90	0.00	0.00	24.18	94.86								
	W25NL002	21.65	2.42	35.28	4.61	0.00	0.00	40.44	104.40								
	W25NL003	13.85	1.55	15.80	2.06	0.00	0.00	25.86	59.12								
	W25NL004	27.58	3.15	3.58	0.47	0.58	0.10	51.73	87.19								
	W25NL005	52.75	5.89	73.71	9.63	0.00	0.00	98.52	240.50								
	W25SD001	1.13	0.13	0.96	0.45	0.00	0.00	1.94	4.61								
	W25SD002	2.17	0.24	0.58	0.27	0.00	0.00	3.71	6.97								
	W25SD003	1.89	0.21	3.42	0.38	0.00	0.00	3.23	9.13								
	W25SD004	1.48	0.17	1.95	0.22	0.04	0.01	2.56	6.43								
	W25SD005	1.59	0.18	2.69	0.30	0.00	0.00	2.73	7.49								
	W25SD006	0.81	0.09	0.19	4.09	0.00	0.00	1.38	6.56								
	W25SD007	0.85	0.10	0.19	5.09	0.00	0.00	1.46	7.69								
	W25SD008	0.91	0.10	0.19	6.09	0.00	0.00	1.56	8.85								
	W25SD009	2.12	0.24	2.11	6.98	0.00	0.00	3.63	15.08								
	W25XX005	0.35	0.04	1.22	0.14	0.00	0.00	0.61	2.36								
	W25XX006	0.49	0.05	1.22	0.14	0.00	0.00	0.84	2.74								
	W25XX007	0.65	0.07	1.95	0.22	0.00	0.00	1.11	4.00								
	W25XX008	0.69	0.08	2.69	0.30	0.00	0.00	1.18	4.94								
	W25XX009	1.36	0.15	1.95	0.22	0.00	0.00	2.33	6.01								

Table 2-2 . HOURLY RATE ELEMENTS

REGION 12		AVERAGE OPERATING CONDITIONS								SEVERE OPERATING CONDITIONS							
CAT	ID. NO.	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE	DEPR	FCCM	FUEL	FOG	TIRE WEAR	TIRE REPAIR	REPAIR	TOTAL RATE
W25	***cont.***																
	W25XX010	2.09	0.23	5.86	0.65	0.00	0.00	3.58	12.41								
W30																	
	W30SO001	3.05	0.93	1.34	0.16	0.43	0.07	2.95	8.93								
	W30SO002	3.68	1.12	1.34	0.16	0.43	0.07	3.55	10.35								
	W30SO003	4.01	1.21	1.34	0.16	0.43	0.07	3.87	11.09								
	W30SO004	2.06	0.60	0.00	0.01	0.00	0.00	1.64	4.31								
	W30SO005	2.30	0.67	0.00	0.01	0.00	0.00	1.84	4.82								
	W30SO006	2.66	0.78	0.00	0.01	0.00	0.00	2.12	5.57								
W35																	
	W35LC010	0.07	0.01	0.91	0.42	0.00	0.00	0.05	1.46								
	W35LC011	0.37	0.06	1.64	0.76	0.00	0.00	0.29	3.12								
	W35LC012	0.43	0.07	2.12	0.99	0.00	0.00	0.33	3.94								
	W35LC013	0.43	0.07	2.48	1.16	0.00	0.00	0.33	4.47								
	W35LC018	0.12	0.02	0.30	0.14	0.00	0.00	0.10	0.68								
	W35LC020	0.47	0.07	1.58	0.74	0.00	0.00	0.37	3.23								
	W35XX020	0.20	0.05	2.25	0.25	0.00	0.00	0.25	3.00								
	W35XX021	0.52	0.12	3.48	0.39	0.03	0.00	0.65	5.19								
	W35XX022	0.53	0.12	3.68	0.41	0.03	0.00	0.67	5.44								
	W35XX023	0.94	0.21	9.20	1.03	0.03	0.00	1.18	12.59								
	W35XX024	1.40	0.32	4.27	0.48	0.03	0.00	1.75	8.25								
	W35XX025	1.34	0.30	3.73	0.42	0.03	0.00	1.67	7.49								

CHAPTER 3.0 - ADJUSTMENTS TO HOURLY RATES

SECTION I. GENERAL

3.1 Contents

This chapter explains the procedures for adjusting the hourly rates shown in tables 2-1 and 2-2.

3.2 Basis for Equipment Rates

The rates shown in tables 2-1 and 2-2 are based on the catalog list price of equipment manufactured in 2004 (3 years old). Area factors used to compute regional ownership and operating expenses are listed in appendix B. All equipment hourly rate elements for average and severe conditions are given in table 2-2. Individual cost elements, which comprise the total hourly rate, are shown in table 2-2. These hourly rate elements are listed by equipment ID No., which corresponds to the equipment shown in tables 2-1 and 2-2.

a. Ownership costs consist of two cost elements: depreciation (DEPR) and facilities capital cost of money (FCCM). These elements are located in tables 2-1 and 2-2.

b. Operating costs consist of five cost elements: fuel (FUEL); filters, oil, and grease (FOG); repairs (REPAIR); tire wear (TIRE WEAR); and tire repair (TIRE REPAIR). These elements are located in table 2-2.

3.3 Equipment Rate Adjustment Tables

Table 3-1 is used to adjust the ownership (DEPR + FCCM) portion of the average hourly rate and table 3-2 is used to adjust the standby hourly rate shown in table 2-1.

3.4 Determination for Use of Equipment Rates in Tables 2-1 and 2-2

The predetermined equipment rates in tables 2-1 and 2-2 may be used when the contractor's actual cost data (cost or pricing data) is insufficient to calculate the rates. If the contractor's actual equipment is listed in tables 2-1 and 2-2, the equipment must be equivalent. However, if the contractor's actual equipment is not listed in tables 2-1 and 2-2, an equivalent piece of equipment may be chosen from the tables. To be considered equivalent, the contractor's equipment must be no more or less than 10 percent of the configuration (size, capacity, and horsepower) and value as compared to the equipment in tables 2-1 and 2-2. In either case, if the equipment is not equivalent, the equipment rate must be calculated using the methodology in chapter 2.

SECTION II. RATE ADJUSTMENTS

3.5 Rate Adjustments

The ownership and/or the operating portion of the hourly rates and standby hourly rates shall be adjusted whenever one or more of the following rate adjustment conditions exist (rate adjustments are explained in detail in the following paragraphs).

- Changes in operating conditions
- Changes in Cost of Money Rate
- Actual work hours (hrs) exceed 40 hr per week (wk)
- Changes in FUEL cost
- Adjustments to FOG cost
- Equipment of different age than table 2-1
- Rate adjustment for overage equipment
- Rate adjustment for overage equipment standby

There are no rate adjustments for appendix B factors except for fuel cost (electric, gas, diesel off-road, and diesel on-road) and the Cost of Money Rate. Also, there are no rate adjustments for repairs, tire wear, or tire repair.

3.6 Changes in Operating Conditions

If difficult or severe conditions are justified by the Contracting Officer, selection or calculation of the appropriate rate is necessary. See chapter 2, section II, for definition of average, difficult, or severe conditions and determination of condition.

3.7 Change in Cost of Money Rate (CMR)

The Department of the Treasury adjusts the CMR (Prompt Payment Interest Rate) on or about 1 January and 1 July each year; these revisions are printed in the Federal Register. The Internet address for Prompt Payment Interest Rate is http://www.treasurydirect.gov/govt/rates/tcir/tcir_opdprmt2.htm.

If the CMR shown in chapter 2, section VII, is <u>not the current rate</u>, the FCCM portion of the total hourly rate shall be adjusted upward or downward to match the CMR for the period of equipment use. See appendix I for a listing of historical CMRs. The total hourly rate adjusted for a differing CMR is computed by the formula:

$$\text{Total Hourly Rate} = \text{DEPR/hr} + [(\text{FCCM/hr}) \text{ x } \frac{(\text{NEW CMR})]}{(\text{Old CMR})} + \text{Operating Costs/hr}$$

<u>Example</u>: Assume that table 2-1 includes a crane [*category (CAT) C80, subcategory (SUB) 0.02]* with hourly costs as shown in the following example. The CMR has increased from 5.00 percent to a current rate of 6.00 percent (increase of 20 percent). The total hourly rate for this piece of equipment is determined as follows:

Assumptions for Total Hourly Rate with CMR of 5.00 percent (per hour):

DEPR	$30.00
FCCM	$10.00
Operating Costs (FUEL, FOG, TIRE WEAR, TIRE REPAIR, and REPAIR)	$40.00
Total Hourly Rate (Based on a 40 hr/wk)	$80.00

Adjustment Calculation of Total Hourly Rate for New CMR of 6.00 percent (per hour):

$$\$30.00/hr + [(\$10.00/hr) \times \underset{(5.00\%)}{(6.00\%)}] + \$40.00/hr = \$82.00/hr$$

3.8 Actual Work Hours Greater than 40 Hours per Week

If the actual number of work hours per week is greater than 40 hours, an adjustment shall be made to the FCCM element of the ownership cost. The FCCM is to be paid up to a maximum of 40 hours per week (7 calendar days). To calculate a multi-shift rate, prorate the 40-hour FCCM over the actual hours per week, as follows:

$$\text{Total Hourly Rate} = \text{DEPR/hr} + [(\text{FCCM/hr}) \times \underset{(\text{Actual Work hr/wk})}{(40\ \text{hr/wk})}] + \text{Operating Costs/hr}$$

Example: Assume that table 2-1 includes a crane *(category C80, subcategory 0.02)* with the below hourly costs. This crane worked 10 hours per day, 6 days per week (60 hours per week). The total hourly rate for this piece of equipment is determined as follows:

Assumptions for Total Hourly Rate for 40 Hours/Week:

DEPR	$30.00
FCCM	$10.00
Operating Costs (FUEL, FOG, TIRE WEAR, TIRE REPAIR, and REPAIR)	$40.00
Total Hourly Rate (Based on a 40 hr/wk)	$80.00

Adjustment Calculation of Total Hourly Rate for 60 Hours/Week:

$$\$30.00/hr + [(\$10.00/hr) \times \underset{(60\ hr/wk)}{(40\ hr/wk)}] + \$40.00/hr = \$76.67/hr$$

3.9 Changes in Fuel Cost

Hourly fuel costs (including electricity) shall be adjusted in the event the average fuel prices at the jobsite vary by more than 10 percent above or below the price in appendix B. The contractor shall be required to furnish copies of all fuel supply contracts and invoices to the government to support fuel cost adjustment. Request for upward adjustment in the rates will be considered only when fuel is supplied by recognized distributors of bulk quantities. Mathematically, this is the ratio of the new fuel cost divided by the fuel cost (appendix B). To calculate the total hourly rate, apply the ratio of fuel cost, as follows:

$$\text{Total Hourly Rate} = (\text{DEPR/hr} + \text{FCCM/hr}) + (\text{FOG/hr} + \text{TIRE WEAR/hr} + \text{TIRE REPAIR/hr} + \text{REPAIR/hr}) + [\frac{(\text{New Fuel Cost})}{(\text{Fuel Cost in Appendix B})} \text{ x FUEL/hr}]$$

Example: Assume that table 2-1 includes a crane *(category C80, subcategory 0.02)* with the below hourly costs. Assume the fuel cost (diesel off-road) in appendix B is $2.50/gal and the current fuel cost has increased to $3.00/gal (increase of 20.00 percent). The total hourly rate for this piece of equipment can be determined as follows:

Assumptions for Fuel Cost (based on $2.50/gal from appendix B) per hour:

DEPR	$30.00
FCCM	$10.00
FOG, TIRE WEAR, TIRE REPAIR, and REPAIR)	$30.00
FUEL	$10.00
Total Hourly Rate	$80.00

Adjustment Calculation for hourly FUEL cost using the new fuel cost of $3.00/gal:

$$(\$30.00/\text{hr} + \$10.00/\text{hr}) + \$30.00/\text{hr} + [\frac{(\$3.00/\text{gal})}{(\$2.50/\text{gal})} \text{ x } \$10.00/\text{hr}] = \$82.00/\text{hr}$$

3.10 Adjustments to Fuel, Oil, and Grease (FOG) Cost

The hourly FOG allowance shall also be adjusted upward or downward by applying the same ratio (new fuel cost divided by fuel cost shown in appendix B) as the fuel costs change using the methodology as shown in paragraph 3-9.

3.11 Equipment of Different Age than Table 2-1

When the age of the equipment is newer or older than the age of the equipment listed in table 2-1, table 3-1 factors may be used to adjust the hourly rate (see paragraph 3-12 for guidance on overage equipment), otherwise the step-by-step calculation method (as shown in figure 2-1) is necessary. To adjust the hourly rate using the tables, the factors given in table 3-1 are multiplied by the hourly ownership costs shown in table 2-1. The result is an ownership rate adjusted for the actual age of the equipment. Note: Age adjustment factors in tables 3-1 and 3-2 vary by region.

a. When the age of a unit of equipment is older than the age of the equipment listed in table 2-1 (purchased new in 2004) and does not exceed the years of economic life, adjust the hourly rate as shown in the next example. The years of economic life is determined by dividing hours of LIFE (from appendix D) by Working Hours Per Year (WHPY) (from appendix B).

Example: Assume that table 2-1 includes a crane *(category C80, subcategory 0.02)* manufactured in 2004 and has a total hourly rate of $65 per hour and

an ownership rate of $30 per hour. If an equivalent crane owned by a contractor was manufactured in 2000, the total hourly rate is determined as follows:

Table 2-1 Rate and Adjustment Calculation:

Total hourly rate	= $65.00/hr
Ownership rate 2004 (DEPR + FCCM)	=-($30.00)/hr
Ownership rate 2000 adjusted for age (Ownership rate = $30) x (0.89 the age adjustment factor from table 3-1, for category C80, subcategory 0.02, and for the year 2000.)	= +$26.70/hr
Total hourly rate for equipment manufactured in 2000	= $61.70/hr

b. When the unit of equipment is older than the age of equipment listed in table 2-1 (purchased new in 2004) and exceeds the years of economic life, adjust the hourly rate as shown in the example for overage equipment in paragraph 3-12.

c. When the unit of equipment is newer than the equipment listed in table 2-1 (purchased new in 2004), use the adjustment factor in table 3-1 for the year of manufacture. If the equipment is newer than the most recent year shown in table 3-1, use the adjustment factor in the column of the most recent year. Once the adjustment factor is determined from table 3-1, complete the adjustment calculation as shown in the example above. The step-by-step calculation method shown in figure 2-1 may also be used.

3.12 Rate Adjustment for Overage Equipment

If the contractor's equipment exceeds the economic life in hours (from appendix D), it is considered overage, and the rates shall be adjusted.

a. The total hourly operating rate for overage equipment (no matter how old) shall be computed on the basis that the equipment is as old as possible "without" exceeding the hours of LIFE as shown in appendix D. Tables 3-1 and 3-2 show factors for the economic life for equipment based on the current pamphlet year (*e.g.*, manufactured in 2004). Select a comparable unit of equipment (horsepower, value, capacity, and size) shown in table 2-1, the total hourly rate can be computed as shown in the following example. If there is no comparable unit of equipment in table 2-1, follow the methodology presented in figure 3-1.

b. The ownership portion of the rate shall be adjusted for equipment that is overage. This adjusted rate is not to exceed the rate for the same unit of equipment that is not overage.

Example: Assume that table 2-1 includes a crane *(category C80, subcategory 0.02)* manufactured in 2004, has a total hourly rate of $65 per hour, and an ownership rate of $30 per hour. If an equivalent crane owned by a contractor was

manufactured in 1990 (maximum life 1996), this crane is overage and the total hourly rate is determined as follows:

Table 2-1 Rate and Adjustment Calculation:

Total hourly rate	=	$65.00/hr
Ownership rate 2004 (DEPR + FCCM)	=	-($30.00)/hr
Ownership rate 1990 adjusted for age (Ownership rate = $30.00) x (0.84) use the oldest age adjustment factor from table 3-1, for category C80, subcategory 0.02, the last year shown.)	=	+$25.20/hr
Total hourly rate for equipment manufactured in 1990	=	$60.20/hr

3.13 Standby Rate Adjustment for Equipment of a Different Age than Table 2-1

If the equipment age is other than listed in table 2-1 (purchased new in 2004), adjustment to the hourly standby rate is required. When the age of the equipment is newer or older than the age of the equipment listed in table 2-1, table 3-2 factors may be used to adjust the hourly rate, otherwise the step-by-step calculation method is necessary. The result is a standby rate adjusted for the actual age of the equipment.

a. Standby rates for overage equipment are based on the actual age of the equipment. The age adjustment factor given in table 3-2 is multiplied by the hourly standby cost shown in table 2-1 for the listed or comparable unit of equipment. This results in a standby rate adjusted for the actual age of the unit of equipment being considered.

Hourly Standby Rate Adjusted for Actual Age =
Hourly Standby Rate x Age Adjustment Factor

Example: Assume that table 2-1 includes a crane (*category C80, subcategory 0.02*) manufactured in 2004 and has a standby rate of $20.00 per hour. If an equivalent crane owned by a contractor was manufactured in 1996, the hourly standby rate is determined as follows:

Hourly Standby Rate (table 2-1)	=	$20.00/hr
Age Adjustment Factor (table 3-2) for category C80, subcategory 0.02, and for 1996 (actual year of manufacture)	=	0.84

Adjustment Calculation:

Hourly Standby Rate Adjusted for Actual Age	=	$20.00/hr
(Hourly Standby Rate) x 0.84 (Age Adjustment Factor)	=	$16.80/hr

b. When the unit of equipment is newer than the equipment listed in table 2-1 (purchased new in 2004), use the adjustment factor in table 3-2 for the year of manufacture. Once the adjustment factor is determined from table 3-2, complete the

adjustment calculation as shown in the example above. The step-by-step calculation method shown in figure 3-2 may also be used.

c. When the equipment age is older than the last year shown in table 3-2 or newer than the first year shown in table 3-2, the standby rate must be calculated using the step-by-step methodology shown in figure 3-2.

3.14 Equipment Purchased Used

A detailed methodology for computing a total hourly rate for equipment purchased used is not included in this pamphlet.

a. When actual cost data in accordance with chapter 1 is not available, an hourly rate and standby rate for equipment purchased used can be computed on the basis that the equipment was purchased new by the contractor in the year it was manufactured. Consideration for the actual age of used equipment may require an adjustment for overage.

b. The condition of the used equipment at the time of purchase should consider the extent of capital improvements, mechanical condition, and previous hours of operation. These conditions are difficult or impossible to determine and evaluate when computing a total hourly rate based on actual acquisition cost.

3.15 Rate Calculation Examples

Figure 3-1 illustrates how total hourly rates are adjusted for overage equipment. Figure 3-2 gives a sample calculation for computing adjusted standby rates.

Table 3-1. Equipment Age Adjustment Factors

for

Ownership Costs

The factors in this table are used when the age of a unit of equipment is other than the age of the equipment listed in table 2-1 (purchased new in 2004).

The factors are multiplied by the hourly ownership costs (shown in table 2-1) and result in an ownership rate adjusted for the actual age of the equipment being considered.

When the actual "life" in hours of the unit of equipment has exceeded the economic life given in appendix D, the age will be determined as discussed in chapter 3.

Refer to chapter 3, as follows:

3-11. Equipment of Different Age than Table 2-1

3-12. Rate Adjustment for Overage Equipment

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
A10	0.00	AGGREGATE / CHIP SPREADERS																		
A10	0.10	SELF-PROPELLED	1.16	1.12	1.06	1.00	1.00	1.00												
A10	0.20	TOWED & TAILGATE	1.16	1.12	1.06	1.00	1.00													
A15	0.00	AIR COMPRESSORS, PORTABLE																		
A15	0.10	ROTARY SCREW	1.12	1.09	1.04	1.00	0.99	0.99	1.00	0.98										
A15	0.20	SHOP TYPE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00									
A20	0.00	AIR HOSE, TOOLS & EQUIPMENT																		
A20	0.10	AIR DRILL HOSE	1.11	1.08	1.04	1.00														
A20	0.20	SANDBLAST HOSE	1.11	1.08	1.04	1.00														
A20	0.30	SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS	1.11	1.08	1.04	1.00	0.99													
A25	0.00	ASPHALT PAVING DISTRIBUTORS	1.14	1.11	1.06	1.00	1.00													
A30	0.00	ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT																		
A30	0.10	SELF PROPELLED	1.15	1.11	1.06	1.00	1.00	1.00												
A30	0.20	TOWED	1.16	1.12	1.06	1.00	1.00	1.00	1.00	0.99										
A30	0.30	SLURRY SEAL PAVERS (Cold mix)	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96									
A30	0.40	MISCELLANEOUS ROAD EQUIPMENT	1.16	1.12	1.06	1.00	1.00	1.00	1.00	0.99										
A35	0.00	ASPHALT PAVING KETTLES	1.16	1.12	1.06	1.00	1.00													
A40	0.00	ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS	1.16	1.12	1.06	1.00	1.00													
A45	0.00	ASPHALT RECYCLERS & SEALERS	1.16	1.12	1.06	1.00														
B10	0.00	BATCH PLANTS, ASPHALT & CONCRETE																		
B10	0.10	ASPHALT	1.16	1.12	1.06	1.00	1.00	1.00												
B10	0.20	CONCRETE	1.16	1.12	1.06	1.00	1.00	1.00												
B10	0.30	PUGMILL	1.16	1.12	1.06	1.00	1.00	1.00	1.00	0.99										
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	1.15	1.12	1.07	1.00	0.96	0.95												
B20	0.00	BRUSH CHIPPERS	1.15	1.12	1.07	1.00	0.96	0.95												
B25	0.00	BUCKETS, CLAMSHELL	1.15	1.13	1.06	1.00	0.97	0.95												
B30	0.00	BUCKETS, CONCRETE																		

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
B30	0.10	GENERAL PURPOSE, MANUAL TRIP	1.14	1.12	1.06	1.00	0.97	0.95												
B30	0.20	LAYDOWN	1.14	1.12	1.06	1.00	0.97	0.95												
B30	0.30	LOWBOY	1.14	1.12	1.06	1.00	0.97	0.95												
B30	0.40	LOW SLUMP	1.14	1.12	1.06	1.00	0.97	0.95												
B35	0.00	BUCKETS, DRAGLINE																		
B35	0.10	LIGHT WEIGHT	1.15	1.13	1.06	1.00	0.97	0.95												
B35	0.20	MEDIUM WEIGHT	1.15	1.13	1.06	1.00	0.97	0.95	0.88											
B35	0.30	HEAVY WEIGHT	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90										
C05	0.00	CHAIN SAWS	1.15	1.12		1.00														
C10	0.00	COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER																		
C10	0.10	COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES	1.14	1.11	1.07	1.00														
C10	0.20	ROLLERS, VIBRATORY	1.16	1.13	1.07	1.00														
C15	0.00	CONCRETE CLEANERS / ABRASIVE BLASTERS																		
C15	0.10	WALK BEHIND	1.17	1.14	1.08	1.00														
C15	0.20	TRUCK/TRAILER MOUNTED	1.16	1.13	1.08	1.00	0.96	0.94												
C20	0.00	CONCRETE BUGGIES	1.17	1.14	1.08	1.00														
C25	0.00	CONCRETE FINISHERS/SCREEDS/SPREADERS																		
C25	0.10	FINISHERS/TROWELS	1.17	1.13	1.08	1.00														
C25	0.20	VIBRATORY SCREED	1.17	1.13	1.08	1.00														
C25	0.25	VIBRATORY LASER SCREED	1.18	1.15	1.09	1.00	0.95	0.94												
C25	0.30	MATERIAL/TOPPING SPREADERS	1.18	1.15	1.09	1.00	0.95	0.94												
C30	0.00	CONCRETE GRINDERS	1.17	1.13	1.08	1.00														
C35	0.00	CONCRETE GUNITERS / SHOTCRETERS	1.17	1.14	1.08	1.00	0.96	0.94												
C40	0.00	CONCRETE MIXING UNITS	1.17	1.13	1.08	1.00														
C45	0.00	CONCRETE PAVING MACHINES	1.16	1.12	1.06	1.00	1.00													
C55	0.00	CONCRETE PUMPS	1.15	1.12	1.07	1.00	0.96	0.95												
C60	0.00	CONCRETE SAWS (Add cost for sawblade wear)	1.15	1.12	1.07	1.00	0.96													

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
C65	0.00	CONCRETE VIBRATORS	1.11	1.08	1.04	1.00														
C70	0.00	CRANES, GANTRY & STRADDLE																		
C75	0.00	CRANES, HYDRAULIC, SELF-PROPELLED	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88	0.85							
C80	0.00	CRANES, HYDRAULIC, TRUCK MOUNTED																		
C80	0.01	UNDER 26 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88	0.85							
C80	0.02	26 TON THRU 65 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84						
C80	0.03	66 TON THRU 125 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81					
C80	0.04	OVER 125 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.80	0.79			
C85	0.00	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED																		
C85	0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85							
C85	0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83						
C85	0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.80					
C85	0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.81	0.79	0.78			
C85	0.21	LIFTING, 0 THRU 25 TON	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83						
C85	0.22	LIFTING, 26 TON THRU 50 TON	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.80					
C85	0.23	LIFTING, 51 TON THRU 150 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.80	0.79			
C85	0.24	LIFTING, OVER 150 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75		
C90	0.00	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED																		
C90	0.01	UNDER 26 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.88	0.85							
C90	0.02	26 TON THRU 65 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84						
C90	0.03	66 TON THRU 125 TON	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.80					
C90	0.04	OVER 125 TON	1.15	1.13	1.06	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.81	0.79	0.78			
C95	0.00	CRANES, TOWER	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.80					
D10	0.00	DRILLS, AIR/HYDRAULIC,CRWLR MTD,0" THRU 6.5" DIA HOLE (Add cost for drill steel and bit wear)																		
D10	0.10	DRILLS, AIR TRACK (Add cost for drill steel and bit wear)	1.26	1.19	1.09	1.00	0.93	0.91	0.82	0.80	0.78	0.77	0.75							
D10	0.20	DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82	0.79										
D15	0.00	DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82	0.79										

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
D20	0.00	DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.92	0.90												
D25	0.00	DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82	0.79										
D30	0.00	DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)	1.27	1.20	1.09	1.00	0.93	0.90	0.82	0.79										
D35	0.00	DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)																		
D35	0.11	DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.80	0.78	0.77							
D35	0.12	DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.24	1.18	1.08	1.00	0.93	0.91	0.84	0.81	0.80	0.78	0.77	0.76	0.72					
D35	0.21	ELECTRIC, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.80	0.78	0.77							
D35	0.22	ELECTRIC, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.24	1.18	1.08	1.00	0.93	0.91	0.84	0.81	0.80	0.78	0.77	0.76	0.72					
F10	0.00	FORK LIFTS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92										
G10	0.00	GENERATOR SETS																		
G10	0.10	PORTABLE	1.16	1.11	1.06	1.00	0.98	0.98												
G10	0.20	SKID MOUNTED	1.16	1.11	1.06	1.00	0.98	0.98	0.98	0.97										
G15	0.00	GRADERS, MOTOR	1.13	1.10	1.05	1.00	0.96	0.95	0.93	0.93	0.91	0.88	0.85							
H10	0.00	HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)	1.16	1.13	1.08	1.00	0.96													
H13	0.00	HAZARDOUS/TOXIC WASTE EQUIPMENT																		
H13	0.11	COMPACTORS (Compression force) 0 THRU 50 TONS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93										
H13	0.12	COMPACTORS (Compression force) OVER 50 TONS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91									
H13	0.21	FILTER PRESSES, STATIONARY	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92										
H13	0.22	FILTER PRESSES, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93										
H13	0.30	CENTRIFUGES	1.17	1.14	1.08	1.00														
H13	0.40	SHREDDERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93										
H13	0.51	SOIL TREATMENT PLANT, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93										
H13	0.61	SLUDGE PROCESSING EQUIP, SLUDGE DISPENSERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93										
H13	0.71	WASTE HANDLING EQUIPMENT, DRUM HANDLING	1.16	1.13	1.07	1.00														
H15	0.00	HEATERS, SPACE																		
H20	0.00	HOISTS & AIR WINCHES	1.16	1.13	1.08	1.00	0.96	0.94	0.93											
H25	0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED																		

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	1.18	1.15	1.07	1.00	0.97	0.94												
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	1.17	1.15	1.07	1.00	0.97	0.94	0.86											
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	1.17	1.14	1.07	1.00	0.97	0.94	0.86	0.88	0.88									
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82						
H25	0.14	OVER 160,000 LBS	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83	0.80	0.78				
H25	0.21	ATTACHMENTS, MOBILE SHEARS	1.15	1.13	1.07	1.00	0.96													
H25	0.22	ATTACHMENTS, MATERIAL HANDLING	1.16	1.13	1.08	1.00	0.96													
H25	0.23	ATTACHMENTS, CONCRETE PULVERIZERS	1.15	1.13	1.07	1.00	0.96													
H25	0.24	ATTACHMENTS, COMPACTORS	1.15	1.13	1.07	1.00	0.96													
H30	0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED																		
H30	0.01	0 THRU 1.0 CY	1.18	1.15	1.07	1.00	0.97	0.94												
H30	0.02	OVER 1.0 CY	1.17	1.15	1.07	1.00	0.97	0.94	0.86	0.88										
H35	0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED																		
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85							
H35	0.12	DIESEL, OVER 5.0 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83						
H35	0.21	ELECTRIC, OVER 2.5 CY	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89	0.89	0.87	0.85	0.83	0.80					
L10	0.00	LAND CLEARING EQUIPMENT	1.13	1.11	1.06	1.00	0.97	0.95	0.95	0.94										
L15	0.00	LANDSCAPING EQUIPMENT	1.16	1.13	1.07	1.00														
L20	0.00	LIGHTING SETS, TRAILER MOUNTED																		
L20	0.10	METALLIC VAPOR	1.16	1.13	1.08	1.00	0.96	0.94												
L25	0.00	LINE STRIPING EQUIPMENT	1.16	1.13	1.08	1.00	0.96	0.94												
L30	0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92										
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	1.13	1.11	1.06	1.00	0.97	0.95	0.95	0.94										
L40	0.00	LOADERS, FRONT END, WHEEL TYPE																		
L40	0.11	ARTICULATED, 0 THRU 225 HP	1.14	1.11	1.06	1.00	0.97	0.95	0.94											
L40	0.12	ARTICULATED, OVER 225 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91								
L40	0.20	SKID STEER	1.13	1.11	1.06	1.00	0.97	0.95												

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
L40	0.21	SKID STEER ATTACHMENTS	1.14	1.11	1.06	1.00														
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	1.14	1.11	1.06	1.00	0.97	0.95	0.94	0.94										
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.94	0.93									
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	1.13	1.11	1.06	1.00	0.97	0.95												
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	1.14	1.11	1.06	1.00	0.97	0.95	0.94	0.94										
L55	0.00	LOADER / BACKHOE, ATTACHMENTS	1.16	1.13	1.08	1.00	0.96													
L60	0.00	LOG SKIDDERS	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.89										
M10	0.00	MARINE EQUIPMENT (NON DREDGING)																		
M10	0.11	AQUATIC MAINTENANCE	1.14	1.09	1.04	1.00	0.94	0.89	0.88	0.86										
M10	0.12	AQUATIC MAINTENANCE ATTACHMENTS	1.15	1.09	1.04	1.00	0.94													
M10	0.21	HYDRAULIC CUTTERHEAD DREDGE, 8" OR LESS,TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80						
M10	0.22	HYDRAULIC CUTTERHEAD DREDGE,8" - 12",TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80						
M10	0.23	HYDRAULIC AUGERHEAD DREDGE,12" OR LESS,TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80						
M10	0.24	HYDRAULIC FLOATING PUMPS,12" OR LESS,TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90												
M10	0.25	HYDRUALIC DREDGE PUMPS,12" OR LESS,TRANSPORTABLE	1.14	1.09	1.04	1.00	0.94													
M10	0.26	HYDRAULIC DREDGE / PUMP ATTACHMENTS	1.14	1.09	1.04	1.00	0.94													
M10	0.31	SMALL MECH DREDGES,CLAMSHELL,BARGE-MTD TO 5 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81					
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	1.16	1.13	1.07	1.00	0.97	0.94	0.88	0.89										
M10	0.33	SMALL MECH DREDGES,HOE-MOUNTED DREDGING ATTACH	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.86	0.85	0.84	0.83	0.80	0.76	0.75	0.73			
M10	0.41	WORK FLOATS (NON-DREDGING)	1.14	1.08	1.04	1.00	0.94													
M10	0.42	WORK BARGES (SECTIONAL, NON-DREDGING)	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.45	FLAT-DECK OR CARGO BARGE (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.82	0.78	0.77	0.76	0.73	0.69	0.67
M10	0.46	DUMP SCOW (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.82	0.78	0.77	0.76	0.73	0.69	0.67
M10	0.47	DRILL BARGE (NON-DREDGING)	1.12	1.08	1.04	1.00	0.95	0.91	0.89	0.87	0.86	0.85	0.84	0.81	0.78	0.76	0.75	0.72	0.68	0.66
M10	0.48	ALL OTHER BARGES (NON-DREDGING)	1.12	1.08	1.04	1.00	0.95	0.91	0.89	0.87	0.86	0.85	0.84	0.81	0.78	0.76	0.75	0.72	0.68	0.66
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	1.14	1.08	1.04	1.00	0.94	0.90	0.88	0.86	0.85	0.84	0.82	0.79						
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80	0.77					

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
M10	0.54	TUGS, 501 THRU 1,000 HP	1.13	1.08	1.04	1.00	0.95	0.91	0.89	0.87	0.86	0.85	0.84	0.81	0.78	0.76	0.75	0.72	0.68	0.65
M10	0.55	TUGS, 1,000 THRU 2,000 HP	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.85	0.84	0.81	0.78	0.77	0.76	0.72	0.69	0.66
P10	0.00	PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS	1.20	1.16	1.09	1.00	0.95													
P20	0.00	PILE HAMMERS, DOUBLE ACTING																		
P20	0.10	DIESEL	1.17	1.14	1.08	1.00	0.96													
P20	0.20	PNUEMATIC (STEAM/AIR)	1.16	1.13	1.08	1.00	0.96													
P25	0.00	PILE HAMMERS, SINGLE ACTING																		
P25	0.10	DIESEL	1.16	1.13	1.08	1.00	0.96													
P25	0.20	PNUEMATIC (STEAM/AIR)	1.15	1.13	1.07	1.00	0.96													
P30	0.00	PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY	1.16	1.13	1.08	1.00	0.96													
P35	0.00	PIPELAYERS	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88							
P40	0.00	PLATFORMS & MAN-LIFTS	1.15	1.13	1.06	1.00	0.97	0.95												
P45	0.00	PUMPS, GROUT	1.15	1.12	1.07	1.00	0.96	0.95												
P50	0.00	PUMPS, WATER, CENTRIFUGAL, TRASH																		
P50	0.11	ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50	0.12	ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P50	0.31	HOSES, PUMP, SUCTION & DISCHARGE	1.15	1.12	1.07	1.00														
P55	0.00	PUMPS, WATER, SUBMERSIBLE																		
P55	0.01	ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P55	0.02	ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P60	0.00	PUMPS, WATER, CENTRIFUGAL, DEWATERING																		
P60	0.11	SKID MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P60	0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P60	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P60	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
P65	0.00	PUMPS, WATER, DIAPHRAGM																		
P65	0.11	SKID MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P65	0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P65	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
P65	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95												
P70	0.00	PUMPS, WATER (For core drills)																		
P70	0.01	ENGINE DRIVE	1.17	1.14	1.08	1.00	0.96	0.94												
P70	0.02	ELECTRIC DRIVE	1.17	1.14	1.08	1.00	0.96	0.94												
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	1.13	1.11	1.06	1.00	0.97	0.95												
R15	0.00	ROLLERS, STATIC, TOWED, PNEUMATIC	1.14	1.10	1.05	1.00	0.95	0.92	0.91	0.89										
R20	0.00	ROLLERS, STATIC, TOWED, STEEL DRUM	1.14	1.10	1.05	1.00	0.95	0.92	0.91	0.89										
R30	0.00	ROLLERS, STATIC, SELF-PROPELLED																		
R30	0.01	PNEUMATIC	1.14	1.10	1.05	1.00	0.95	0.93												
R30	0.02	SMOOTH DRUM	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.90										
R30	0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	1.14	1.10	1.05	1.00	0.95	0.92	0.91	0.89	0.91									
R40	0.00	ROLLERS, VIBRATORY, TOWED	1.14	1.11	1.05	1.00	0.95	0.92												
R45	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM	1.14	1.11	1.05	1.00	0.95	0.92												
R50	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM	1.15	1.11	1.05	1.00	0.94	0.92												
R55	0.00	ROOFING EQUIPMENT	1.15	1.13	1.07	1.00	0.96													
S10	0.00	SCRAPERS, ELEVATING																		
S10	0.01	0 THRU 200 HP	1.12	1.10	1.05	1.00	0.96	0.95	0.94	0.93										
S10	0.02	OVER 200 HP	1.13	1.10	1.05	1.00	0.96	0.95	0.93	0.93	0.91	0.88								
S15	0.00	SCRAPERS, CONVENTIONAL	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.91	0.88	0.86							
S20	0.00	SCRAPERS, TANDEM POWERED	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.91	0.88	0.86							
S25	0.00	SCRAPERS, TRACTOR DRAWN	1.12	1.10	1.05	1.00	0.96	0.95	0.94	0.93	0.91									
S30	0.00	SCREENING & CRUSHING PLANTS																		
S30	0.10	CONVEYORS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
S30	0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
S30	0.21	CRUSHERS - CONE	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
S30	0.22	CRUSHERS - JAW	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
S30	0.30	SCREENING PLANT	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										
S35	0.00	SNOW REMOVAL EQUIPMENT	1.16	1.13	1.08	1.00	0.96	0.94												
S40	0.00	SOIL & ROAD STABILIZERS	1.12	1.10	1.05	1.00	0.96	0.95	0.94	0.93										
S45	0.00	SPLITTERS, ROCK & CONCRETE	1.16	1.13	1.08	1.00	0.96													
T10	0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	1.13	1.11	1.06	1.00	0.97	0.95	0.95	0.94										
T15	0.00	TRACTORS, CRAWLER (DOZER) (includes blade)																		
T15	0.01	0 THRU 225 HP	1.14	1.12	1.06	1.00	0.96	0.94	0.94	0.93										
T15	0.02	226 HP THRU 425 HP	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.92									
T15	0.03	OVER 425 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88							
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	1.13	1.10	1.05	1.00	0.95	0.93	0.92	0.90	0.88	0.85	0.84							
T25	0.00	TRACTORS, AGRICULTURAL																		
T25	0.10	CRAWLER	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.89										
T25	0.20	WHEEL	1.14	1.10	1.05	1.00	0.95	0.93												
T30	0.00	TRENCHERS, CHAIN TYPE CUTTER	1.14	1.11	1.05	1.00	0.91	0.92												
T35	0.00	TRENCHERS, WHEEL TYPE CUTTER	1.14	1.11	1.05	1.00	0.91	0.92												
T40	0.00	TRUCK OPTIONS																		
T40	0.10	CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING	1.16	1.13	1.08	1.00	0.96	0.94												
T40	0.20	DUMP BODY, REAR	1.15	1.12	1.07	1.00	0.96	0.95												
T40	0.30	FLATBEDS, WITH SIDES	1.16	1.13	1.08	1.00	0.96	0.94												
T40	0.41	HOIST, ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94												
T40	0.50	TRANSIT MIXERS	1.15	1.12	1.07	1.00	0.96	0.95												
T40	0.60	WATER TANKS	1.17	1.14	1.08	1.00	0.96	0.94												
T40	0.70	ALL OTHER OPTIONS	1.16	1.13	1.08	1.00	0.96	0.94												
T45	0.00	TRUCK TRAILERS																		

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T45	0.10	BOTTOM DUMP	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										
T45	0.20	END DUMP	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										
T45	0.30	PUP TRAILER	1.15	1.12	1.07	1.00	0.96	0.95												
T45	0.41	LOWBOY, RIGID NECK, DROP DECK	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										
T45	0.50	FLATBED TRAILER	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										
T45	0.60	MISCELLANEOUS / UTILITY	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93										
T45	0.70	WATER TANKER TRAILER	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92										
T45	0.80	DECONTAMINATION FACILITY	1.17	1.14	1.08	1.00	0.96	0.94												
T45	0.90	TANK TRAILERS	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92										
T50	0.00	TRUCKS, HIGHWAY (Add attachments as required)																		
T50	0.01	0 THRU 10,000 GVW	1.14	1.10	1.05	1.00	0.97	0.96												
T50	0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	1.14	1.10	1.05	1.00	0.97	0.96	0.94	0.94										
T50	0.03	OVER 30,000 GVW (Chassis only - Add options)	1.13	1.10	1.05	1.00	0.97	0.96	0.94	0.94	0.96									
T55	0.00	TRUCKS, OFF-HIGHWAY																		
T55	0.10	RIGID FRAME	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.87	0.85	0.83	0.80	0.75	0.73			
T55	0.20	ARTICULATED FRAME	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87	0.86								
T56	0.00	TRUCKS,OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS																		
T56	0.10	PRIME MOVER TRACTORS	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.87	0.85	0.83	0.80	0.75	0.73			
T56	0.20	WAGONS, BOTTOM DUMP	1.19	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87	0.86	0.85							
T56	0.30	WAGONS, REAR DUMP	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
T57	0.00	TRUCKS, VACUUM	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92										
T60	0.00	TRUCKS, WATER, OFF-HIGHWAY	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
T65	0.00	TUNNEL/MINING EQUIPMENT																		
T65	0.10	DRIFTING & TUNNELING DRILLS	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.80	0.79	0.78							
T65	0.20	TUNNEL BORING MACHINES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85					
T65	0.30	PRODUCTION DRILLING RIGS	1.24	1.17	1.08	1.00	0.93	0.92	0.84	0.82	0.80									
T65	0.40	ROADHEADERS & CONTINUOUS MINERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87						

Table 3-1 Equipment Age Adjustment Factors for Ownership Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T65	0.50	ROCK BOLTING EQUIPMENT	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92										
T65	0.61	LOADING & HAULING EQUIPMENT, DIESEL OR GAS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91									
T65	0.62	LOADING & HAULING EQUIPMENT, ELECTRIC	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.92	0.90	0.88							
T65	0.63	LOADING & HAULING EQUIPMENT, AIR-POWERED	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92										
T65	0.70	LOCOMOTIVES	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91									
T65	0.90	OTHER TUNNELING EQUIPMENT	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92										
W10	0.00	WAGONS, BOTTOM DUMP	1.19	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87									
W15	0.00	WAGONS, REAR DUMP	1.19	1.14	1.08	1.00	0.94	0.93	0.91	0.89	0.87									
W25	0.00	WATER & CO2 BLASTERS																		
W25	0.10	LOW PRESSURE, (< 5,000 PSI)	1.17	1.14	1.08	1.00														
W25	0.20	HIGH PRESSURE, (>= 5,000 PSI)	1.17	1.14	1.08	1.00														
W25	0.30	STEAM CLEANERS	1.17	1.14	1.08	1.00														
W25	0.40	CO2 BLASTERS	1.16	1.13	1.08	1.00	0.96													
W25	0.50	WET ABRASIVE BLASTING SYSTEM (TORBO)	1.19	1.15	1.09	1.00	0.95	0.93	0.91	0.91										
W30	0.00	WATER TANKS																		
W30	0.10	PORTABLE WITH WHEELS	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
W30	0.20	SKID MOUNTED	1.20	1.15	1.09	1.00	0.94	0.93	0.91	0.89	0.87									
W35	0.00	WELDERS																		
W35	0.10	ENGINE DRIVEN	1.17	1.14	1.08	1.00	0.96	0.94												
W35	0.20	ELECTRIC DRIVEN	1.16	1.13	1.08	1.00	0.96													

TOTAL HOURLY RATE CALCULATION FOR OVERAGE EQUIPMENT

EXAMPLE

Assume the following set of given information for the rate calculation example:

1. The unit of equipment is not listed in table 2-1.

2. The equipment is contractor owned.

3. Data for the unit in question:

   a. Caterpillar front-end wheel loader
   b. Model 966E, 4WD, 4 CY capacity
   c. Serial number indicates year of manufacture = 1991
   d. Actual purchase price in 1991 = $220,404
      (includes all regional discounts, sales tax and freight)
   e. Horsepower is 200 hp (fuel is Diesel off-road)
   f. Drive tire (DT) size = 23.50 x 25, 16 ply, L-3 (appendix F tire code ANNB5)
      DT cost (2007) = 4 tires x $2,215 /tire = $8,860
   g. Weight = 444 cwt

4. Table 3-1, Age Adjustment Factors for Ownership Costs:

   a. The category L40, subcategory 0.11 (wheel loaders < 225 hp)
   b. The year corresponding to the last age adjustment factor = 2001

5. Adjust the actual purchase price:

   a. Economic Indexes from appendix E (wheel loaders EK = 45)
      (1) For 2001 (first year of economic life), the economic index = 5591
      (2) For 1991 (year of manufacture), the economic index = 4640

   b. Purchase price [total equipment value (TEV)] indexed to 2001 (first year of economic life): (Purchase price includes discount, sales tax, and freight for this region).

      (5591 / 4640) x $220,404 = $265,577 (= 2001 purchase price)

6. Hourly rate is computed as follows in accordance with figure 2-1, Equipment Rate Computation Worksheet.

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment

Example: *The piece of equipment shown in this example is based on a known piece of equipment for illustration purposes only.*

USE THIS WORKSHEET TO COMPUTE A HOURLY RATE FOR EQUIPMENT THAT IS NOT IN THIS PAMPHLET OR IS IN THE PAMPHLET BUT NOT EQUIVALENT IN SIZE, CAPACITY, HORSEPOWER OR VALUE. ***(See Appendix A for a blank form)***

Region 12

1. EQUIPMENT INFORMATION AND EXPENSE FACTORS

ID No: _____

a. Equipment Specification Data:

(1)	Equipment Description:	Loader, Front-end, Wheel, 4WD, 4 CY capacity		
(2)	Model and Series:	Caterpillar Model 966E		
(3)	Present Year or Year of Use:			2007
(4)	Year Manufactured:	1991	indexed to	2001
(5)	Horsepower - Equipment:			200
(6)	Horsepower - Carrier:			0
(7)	Fuel - **Equipment**: 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel	**Enter number from 0 to 6 ==>**	3	**D-off**
	- **Carrier**: 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel	**Enter number from 0 to 6 ==>**	0	**None**
(8)	Shipping Weight (cwt):			444 cwt

(9) Tire size and number of tires: (Cost of tires based on present year - see 1.a.(3) and Appendix F)

	Size/Ply	App F Code	No.	Unit Price	Cost
(a) Front (FT):			0	$0	$0
(b) Drive (DT):	23.5X25/16Ply	ANNB5	4	$2,215	$8,860
(c) Trailing (TT):			0	$0	$0
(d) Total Tire Cost:					$8,860

(10) List Price + Accessories:
[at Year (yr) of Manufacture] $0 OR actual purchase price: $265,577

USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:

b.	Category and Subcategory Number:	L40	0.11
c.	Hourly Expense Calculation Factors:		
(1)	Economic Key (EK):		45
(2)	Condition (C): **A**=Average **D**=Difficult **S**=Severe	A	AVERAGE
(3)	Discount Code (DC): **B** = 7.5% (0.075) or **S** = 15.0% (0.15)	B	0.075
(4)	Life in Hours (LIFE):		9,250
(5)	Salvage Value Percentage (SLV):		0.25
(6)	Fuel Factor - Equipment [Electric (E) Gas (G) Diesel (D)]:		0.031
(7)	Fuel Factor - Carrier (E G D):		0.000
(8)	Filter, Oil, and Grease (FOG) Factor (E G D):		0.111
(9)	Tire Wear Factor:		
	(a) Front (FT):		0.83
	(b) Drive (DT):		0.54
	(c) Trailing (TT):		0.92
(10)	Repair Cost Factor (RCF):		0.70

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment **Page 1 of 6**

Region 12

2. EQUIPMENT VALUE

a. List Price + Accessories: *[at Year (yr) of Manufacture]* = $0

(1) Discount: (List Price + Accessories) x (Discount Code)

1.a.(10) [1.c.(3)]

($0 + $0.00) x (0.075) = $0

(2) Subtotal [2.a.] - [2.a.(1)] Subtotal = $0

(3) Sales or Import Tax: (Subtotal) x (Tax Rate)

[2.a.(2)] [Appendix B]

($0) x (4.40%) = $0

(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)] Subtotal = $0

b. Freight: (Shipping Weight) x (Freight Rate per cwt)

[1.a.(8)] [Appendix B]

(0,000 cwt) x ($0.00 /cwt) = $0

c. **TOTAL EQUIPMENT VALUE (TEV):** **TOTAL[2.]: = $265,577**

[(2.a.(4)] + [(2.b)]

(*See chapter 3 for used and overage equipment rate adjustments.)*

3. DEPRECIATION PERIOD (N)

a. (LIFE) / (Working Hours Per Year (WHPY)) = N

[1.c.(4)] [Appendix B]

(9,250 hr) / (1,390 hr/yr) = 6.65 yrs (N)

4. OWNERSHIP COST

a. Depreciation

(1) Tire Cost Index (TCI):

(Tire Index, Year of Manufacture, 1.a.(4)) / (Tire Index, Present Year or Year of Use, 1.a.(3)) = Tire Cost Index (TCI)

[Appendix E, EK=100] [Appendix E, EK=100]

(2401) / (3058) = 0.785 (TCI)

(2) [(TEV) x [1.0-(SLV)] - [(TCI) x (Tire Cost)]] / (LIFE)

[2.c.] [1.c.(5)] [4.a.(1)] [1.a.(9)(d)] [1.c.(4)]

[($265,577) x [1.0-(0.25)] - [(0.785) x ($8,860)]] / (9,250 hr) = $20.78 /hr

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment **Page 2 of 6**

Region 12

4. OWNERSHIP COST (Continued)

b. Facilities Capital Cost of Money (FCCM):

(1)	[[(N) - 1.0]	x	[1.0 + (SLV)]	+	2.0]	/	[2.0 x (N)]	=	Avg Value Factor (AVF)
	[3.a.]		[1.c.5.]				[3.a.]		
	[(6.65 yr) - 1.0]	x	[1.0 + (0.25)]	+	2.0]	/	[2.0 x (6.65 yr)]	=	0.681 (AVF)

(2)	(TEV)	x	(AVF)	x	(Adjusted Cost-of-Money)	/	(WHPY)		
	[2.c.]		[4.b.(1)]		[Appendix B]		[Appendix B]		
	($265,577)	x	(0.681)	x	(4.20%)	/	(1,390 hr/yr)	=	$5.46 /hr

c. **TOTAL HOURLY OWNERSHIP COST:** **TOTAL [4.]: = $26.24 /hr**
[4.a.(2)] + [4.b.(2)]

5. OPERATING COST

a. Fuel Costs:

(1) Equipment:

(Fuel Factor)	x	(Horsepower (hp))	x	(Fuel Cost per Gallon (gal))		
[1.c.(6)]		[1.a.(5)]		[Appendix B]		
(0.031)	x	(200 hp)	x	($1.94 /gal)	=	$12.03 /hr

(2) Carrier:

(Fuel Factor)	x	(hp)	x	(Fuel Cost per gal)		
[1.c.(7)]		[1.a.(6)]		[Appendix B]		
(0.000)	x	(0 hp)	x	($0.00 /gal)	=	$0.00 /hr

(3) Total Hourly Fuel Cost: **Total [5.a.] = $12.03 /hr**
[(5.a (1)] + [5.a (2)]

b. FOG Cost:

(1) Equipment:

(FOG Factor)	x	(Equipment Hourly Fuel Cost)	x	(Labor Adjustment Factor (LAF))		
[1.c.(8)]		[5.a.(1)]		[Appendix B]		
(0.111)	x	($12.03 /hr)	x	($ 1.10 /hr)	=	$1.47 /hr

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment **Page 3 of 6**

Region 12

5. OPERATING COST (Continued)

(2) Carrier:

(FOG Factor)	x	(Carrier Hourly Fuel Cost)	x	(LAF)		
[1.c.(8)]		[5.a.(2)]		[Appendix B]		
(0.111)	x	($0.00 /hr)	x	(1.10)	=	$0.00 /hr

(3) Total Hourly FOG Cost: **Total [5.b.]** = **$1.47 /hr**
[(5.b.(1)] + [5.b.(2)]

c. Alternative Fuel/FOG Cost: **Total [5.c.]** = **$0.00 hr**
(See chapter 2, paragraph 2.24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):
(EK is from [1c. (1)])

(Economic Index, Present Year or Year of Use,1.a.(3))	/	(Economic Index, Year of Manufacture, 1.a.(4))		
[Appendix E, EK=1.c.(1)]		[Appendix E, EK=1.c.(1)]		
(6489)	/	(5591)	=	1.161 (EAF)

(See table 3-1 for last year of economic life.)

(2) Repair Factor (RF):

(RCF)	x	(EAF)	x	(LAF)	=	Repair Factor (RF)
[1.c.(10)]		[5.d.(1)]		[Appendix B]		
(0.70)	x	(1.161)	x	(1.10)	=	0.894 (RF)

(3) Repair Cost:

[(TEV)	-	[(TCI)	x	(Tire Cost)]]	x	(RF)	/	(LIFE)
[2.c.]		[4.a.(1)]		[1.a.(9)(d)]		[5.d.(2)]		[1.c.(4)]
[($265,577)	-	[(0.785)	x	($8,860)]]	x	(0.894)	/	(9,250)

(4) Total Hourly Repair Cost: **Total [5.d.]** = **$25.00 /hr**

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment **Page 4 of 6**

Region 12

5. OPERATING COST (Continued)

e. Tire Wear Cost: *(Use current price levels. See Appendix F.)*

(1) Front Tires (FT):

[1.5 x (FT Cost)]	/	[1.8 x (FT Wear Factor)	x	(Maximum Tire Life Hours)]	
[1.a.(9)(a)]		[1.c.(9)(a)]		[Appendix F]	
[1.5 x ($0)]	/	[1.8 x (0.83)	x	(0 hr)]	= $0.00 /hr

(2) Drive Tires (DT):

[1.5 x (DT Cost)]	/	[1.8 x (DT Wear Factor)	x	(Maximum Tire Life Hours)]	
[1.a.(9)(b)]		[1.c.(9)(b)]		[Appendix F]	
[1.5 x ($8,860)]	/	[1.8 x (0.54)	x	(3,200 hr)]	= $4.27 /hr

(3) Trailing Tires (TT):

[1.5 x (TT Cost)]	/	[1.8 x (TT Wear Factor)	x	(Maximum Tire Life Hours)]	
[1.a.(9)(c)]		[1.c.(9)(c)]		[Appendix F]	
[1.5 x ($0)]	/	[1.8 x (0.92)	x	(0 hr)]	= $0.00 /hr

(4) Total Tire Wear Cost: **Total [5.e.] = $4.27 /hr**
[Sum 5.e.(1) through 5.e.(3)]

f. Tire Repair Cost:

(Total Tire Wear Cost per Hour)	x	0.15 x (LAF)	
[5.e.(4)]		[Appendix B]	
($4.27 /hr)	x	0.15 x (1.10)	**Total [5.f.] = $0.70 /hr**

g. TOTAL HOURLY OPERATING COST: **Total [5.] = $43.47 /hr**
[Sum 5.a. through 5.f.]

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment **Page 5 of 6**

Region 12

6. HOURLY RATES

a. Total Hourly Rate: [*based on 40 hours per week (wk)*]

(Ownership Cost) [4.c.]	+	(Operating Cost) [5.g.]		
($26.24 /hr)	+	($43.47 /hr)	=	**$69.71 /hr**

b. Other Work Shifts Hourly Rate:

(Refer to Chapter 3, Adjustments to Rates, for methodology.)

[(Depreciation) [4.a.(2)]	+	[(FCCM) [4.b.(2)]	x	(40 hr/wk)	/	(Work hr/wk)] (example:60 hr/wk)	+	(Operating Cost)] [5.g.]		
[($0.00 /hr)	+	[($0.00 /hr)	x	(40 hr/wk)	/	(hr/wk)] (example:60 hr/wk)	+	($0.00 /hr)]	=	**$0.00 /hr**

c. Standby Hourly Rate:

(Refer to Chapter 2, paragraph 2.28 for guidance on use.)

[(Depreciation) [4.a.(2)]	x 0.50]	+	(FCCM) [4.b.(2)]		
[($0.00 /hr)	x 0.50]	+	($0.00 /hr)	=	**$0.00 /hr**

(Refer to Chapter 3, paragraph 3.12 for guidance for overage equipment.)

See Figure 3-2 for standby calculations for overage equipment

See Chapter 3 if rate adjustments are necessary.

Figure 3-1. Total Hourly Rate Calculation for Overage Equipment **Page 6 of 6**

Table 3-2. Equipment Age Adjustment Factors

for

Standby costs

The factors in this table are used when the age of a unit of equipment is other than the age of the equipment listed in table 2-1.

These factors are multiplied by the hourly standby costs shown in table 2-1 and result in a standby rate adjusted for the actual age of the equipment being considered.

When the actual "life" in hours of the unit of equipment has exceeded the economic life given in appendix D, the age will be determined as discussed in chapter 3.

Refer to chapter 3, as follows:

3-13. Rate Adjustments Overage Equipment Standby

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12	Life in Years																	
			Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		TYPE OF EQUIPMENT	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
A10	0.00	AGGREGATE / CHIP SPREADERS																		
A10	0.10	SELF-PROPELLED	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.86	0.84	0.82	0.79	0.80	0.75
A10	0.20	TOWED & TAILGATE	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
A15	0.00	AIR COMPRESSORS, PORTABLE																		
A15	0.10	ROTARY SCREW	1.12	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.93	0.93
A15	0.20	SHOP TYPE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.93
A20	0.00	AIR HOSE, TOOLS & EQUIPMENT																		
A20	0.10	AIR DRILL HOSE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.94
A20	0.20	SANDBLAST HOSE	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.94
A20	0.30	SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.93
A25	0.00	ASPHALT PAVING DISTRIBUTORS	1.14	1.10	1.06	1.00	1.00	1.00	1.00	0.99	0.97	0.95	0.92	0.89	0.87	0.85	0.84	0.81	0.81	0.77
A30	0.00	ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT																		
A30	0.10	SELF PROPELLED	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.85	0.83	0.80	0.81	0.76
A30	0.20	TOWED	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.84	0.83	0.80	0.80	0.76
A30	0.30	SLURRY SEAL PAVERS (Cold mix)	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.85	0.83	0.80	0.80	0.76
A30	0.40	MISCELLANEOUS ROAD EQUIPMENT	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.84	0.83	0.80	0.80	0.76
A35	0.00	ASPHALT PAVING KETTLES	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
A40	0.00	ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
A45	0.00	ASPHALT RECYCLERS & SEALERS	1.16	1.12	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.74
B10	0.00	BATCH PLANTS, ASPHALT & CONCRETE																		
B10	0.10	ASPHALT	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.86	0.84	0.82	0.79	0.80	0.75
B10	0.20	CONCRETE	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.86	0.84	0.82	0.79	0.80	0.75
B10	0.30	PUGMILL	1.15	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.92	0.89	0.87	0.84	0.83	0.80	0.80	0.76
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
B20	0.00	BRUSH CHIPPERS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
B25	0.00	BUCKETS, CLAMSHELL	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.87	0.86	0.86	0.82	0.76	0.72
B30	0.00	BUCKETS, CONCRETE																		

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12	Life in Years																	
			Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		TYPE OF EQUIPMENT	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
B30	0.10	GENERAL PURPOSE, MANUAL TRIP	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B30	0.20	LAYDOWN	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B30	0.30	LOWBOY	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B30	0.40	LOW SLUMP	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.91	0.91	0.90	0.88	0.87	0.87	0.87	0.83	0.77	0.73
B35	0.00	BUCKETS, DRAGLINE																		
B35	0.10	LIGHT WEIGHT	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.87	0.86	0.86	0.82	0.76	0.72
B35	0.20	MEDIUM WEIGHT	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.87	0.86	0.86	0.82	0.76	0.72
B35	0.30	HEAVY WEIGHT	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.91	0.90	0.90	0.88	0.87	0.86	0.87	0.83	0.76	0.72
C05	0.00	CHAIN SAWS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
C10	0.00	COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER																		
C10	0.10	COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES	1.14	1.11	1.06	1.00	0.97	0.95	0.94	0.93	0.93	0.91	0.89	0.88	0.86	0.84	0.82	0.80	0.78	0.76
C10	0.20	ROLLERS, VIBRATORY	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
C15	0.00	CONCRETE CLEANERS / ABRASIVE BLASTERS																		
C15	0.10	WALK BEHIND	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
C15	0.20	TRUCK/TRAILER MOUNTED	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
C20	0.00	CONCRETE BUGGIES	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
C25	0.00	CONCRETE FINISHERS/SCREEDS/SPREADERS																		
C25	0.10	FINISHERS/TROWELS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
C25	0.20	VIBRATORY SCREED	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
C25	0.25	VIBRATORY LASER SCREED	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92	0.91	0.89	0.87	0.85	0.82	0.80	0.79	0.76	0.73	0.70
C25	0.30	MATERIAL/TOPPING SPREADERS	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92	0.91	0.89	0.87	0.85	0.82	0.80	0.79	0.76	0.73	0.70
C30	0.00	CONCRETE GRINDERS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
C35	0.00	CONCRETE GUNITERS / SHOTCRETERS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.85	0.83	0.81	0.79	0.77	0.74	0.71
C40	0.00	CONCRETE MIXING UNITS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.80	0.77	0.75	0.72
C45	0.00	CONCRETE PAVING MACHINES	1.16	1.11	1.06	1.00	1.00	1.00	1.00	0.99	0.96	0.95	0.91	0.88	0.86	0.84	0.82	0.79	0.79	0.75
C55	0.00	CONCRETE PUMPS	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
C60	0.00	CONCRETE SAWS (Add cost for sawblade wear)	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12	Life in Years																	
			Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		TYPE OF EQUIPMENT	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
C65	0.00	CONCRETE VIBRATORS	1.11	1.08	1.04	1.00	0.99	0.99	1.00	0.98	1.00	0.99	0.99	0.99	0.98	0.96	0.97	0.96	0.94	0.93
C70	0.00	CRANES, GANTRY & STRADDLE																		
C75	0.00	CRANES, HYDRAULIC, SELF-PROPELLED	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
C80	0.00	CRANES, HYDRAULIC, TRUCK MOUNTED																		
C80	0.01	UNDER 26 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
C80	0.02	26 TON THRU 65 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69
C80	0.03	66 TON THRU 125 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.86	0.85	0.82	0.80	0.80	0.76	0.72	0.69
C80	0.04	OVER 125 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.87	0.85	0.82	0.81	0.80	0.76	0.72	0.69
C85	0.00	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED																		
C85	0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.79	0.75	0.70	0.68
C85	0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68
C85	0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
C85	0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69
C85	0.21	LIFTING, 0 THRU 25 TON	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68
C85	0.22	LIFTING, 26 TON THRU 50 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
C85	0.23	LIFTING, 51 TON THRU 150 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.87	0.85	0.82	0.81	0.80	0.76	0.72	0.69
C85	0.24	LIFTING, OVER 150 TON	1.14	1.12	1.06	1.00	0.98	0.95	0.89	0.90	0.90	0.89	0.87	0.85	0.82	0.81	0.80	0.76	0.72	0.70
C90	0.00	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED																		
C90	0.01	UNDER 26 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
C90	0.02	26 TON THRU 65 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69
C90	0.03	66 TON THRU 125 TON	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
C90	0.04	OVER 125 TON	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.69
C95	0.00	CRANES, TOWER	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
D10	0.00	DRILLS, AIR/HYDRAULIC,CRWLR MTD,0" THRU 6.5" DIA HOLE (Add cost for drill steel and bit wear)																		
D10	0.10	DRILLS, AIR TRACK (Add cost for drill steel and bit wear)	1.24	1.17	1.08	1.00	0.93	0.92	0.84	0.82	0.80	0.79	0.77	0.76	0.73	0.71	0.70	0.68	0.67	0.64
D10	0.20	DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.63
D15	0.00	DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.63

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
D20	0.00	DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)	1.25	1.19	1.09	1.00	0.93	0.91	0.83	0.80	0.79	0.77	0.76	0.74	0.71	0.69	0.67	0.65	0.64	0.62
D25	0.00	DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.63
D30	0.00	DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)	1.25	1.18	1.09	1.00	0.93	0.91	0.83	0.81	0.79	0.78	0.76	0.75	0.71	0.69	0.68	0.66	0.65	0.63
D35	0.00	DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)																		
D35	0.11	DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.81	0.79	0.78	0.77	0.74	0.72	0.70	0.69	0.68	0.65
D35	0.12	DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.22	1.16	1.08	1.00	0.94	0.92	0.85	0.83	0.81	0.80	0.79	0.77	0.74	0.73	0.71	0.70	0.69	0.66
D35	0.21	ELECTRIC, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	1.23	1.17	1.08	1.00	0.94	0.92	0.84	0.82	0.81	0.79	0.78	0.77	0.74	0.72	0.70	0.69	0.68	0.65
D35	0.22	ELECTRIC, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	1.22	1.16	1.08	1.00	0.94	0.92	0.85	0.83	0.81	0.80	0.79	0.77	0.74	0.73	0.71	0.70	0.69	0.66
F10	0.00	FORK LIFTS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.78	0.76	0.73
G10	0.00	GENERATOR SETS																		
G10	0.10	PORTABLE	1.16	1.11	1.06	1.00	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.97	0.96	0.93	0.92	0.91	0.89	0.88
G10	0.20	SKID MOUNTED	1.16	1.11	1.06	1.00	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.97	0.96	0.93	0.92	0.91	0.89	0.88
G15	0.00	GRADERS, MOTOR	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.89	0.86	0.85	0.80	0.78	0.75	0.70	0.68	0.65
H10	0.00	HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
H13	0.00	HAZARDOUS/TOXIC WASTE EQUIPMENT																		
H13	0.11	COMPACTORS (Compression force) 0 THRU 50 TONS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.12	COMPACTORS (Compression force) OVER 50 TONS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.74
H13	0.21	FILTER PRESSES, STATIONARY	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.78	0.76	0.73
H13	0.22	FILTER PRESSES, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.30	CENTRIFUGES	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
H13	0.40	SHREDDERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.51	SOIL TREATMENT PLANT, MOBILE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.61	SLUDGE PROCESSING EQUIP, SLUDGE DISPENSERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
H13	0.71	WASTE HANDLING EQUIPMENT, DRUM HANDLING	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
H15	0.00	HEATERS, SPACE																		
H20	0.00	HOISTS & AIR WINCHES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
H25	0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED																		

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	1.17	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82	0.79	0.77	0.76	0.72	0.67	0.64
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82	0.80	0.78	0.77	0.72	0.67	0.64
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	1.16	1.13	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83	0.80	0.78	0.78	0.74	0.69	0.66
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.78	0.75	0.70	0.67
H25	0.14	OVER 160,000 LBS	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68
H25	0.21	ATTACHMENTS, MOBILE SHEARS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
H25	0.22	ATTACHMENTS, MATERIAL HANDLING	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
H25	0.23	ATTACHMENTS, CONCRETE PULVERIZERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
H25	0.24	ATTACHMENTS, COMPACTORS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
H30	0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED																		
H30	0.01	0 THRU 1.0 CY	1.17	1.14	1.07	1.00	0.97	0.94	0.87	0.88	0.88	0.87	0.84	0.82	0.79	0.77	0.76	0.72	0.67	0.64
H30	0.02	OVER 1.0 CY	1.16	1.14	1.07	1.00	0.97	0.94	0.87	0.89	0.88	0.87	0.85	0.83	0.80	0.78	0.77	0.73	0.68	0.65
H35	0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED																		
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.79	0.79	0.75	0.70	0.68
H35	0.12	DIESEL, OVER 5.0 CY	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.75	0.71	0.68
H35	0.21	ELECTRIC, OVER 2.5 CY	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
L10	0.00	LAND CLEARING EQUIPMENT	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.84	0.80	0.77	0.72	0.70	0.68
L15	0.00	LANDSCAPING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.81	0.78	0.76	0.73
L20	0.00	LIGHTING SETS, TRAILER MOUNTED																		
L20	0.10	METALLIC VAPOR	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
L25	0.00	LINE STRIPING EQUIPMENT	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
L30	0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.78	0.76	0.73
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.84	0.80	0.77	0.72	0.70	0.68
L40	0.00	LOADERS, FRONT END, WHEEL TYPE																		
L40	0.11	ARTICULATED, 0 THRU 225 HP	1.13	1.11	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.82	0.80	0.78	0.75	0.73
L40	0.12	ARTICULATED, OVER 225 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.94	0.93	0.92	0.89	0.89	0.86	0.84	0.82	0.79	0.77	0.75
L40	0.20	SKID STEER	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.83	0.81	0.78	0.76	0.74

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
L40	0.21	SKID STEER ATTACHMENTS	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.88	0.87	0.84	0.82	0.80	0.77	0.75	0.72
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.82	0.80	0.78	0.75	0.73
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.95	0.94	0.92	0.90	0.89	0.86	0.84	0.82	0.80	0.77	0.75
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.86	0.83	0.80	0.76	0.72	0.69	0.67
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.91	0.89	0.88	0.85	0.82	0.80	0.78	0.75	0.73
L55	0.00	LOADER / BACKHOE, ATTACHMENTS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
L60	0.00	LOG SKIDDERS	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.82	0.81	0.78	0.77	0.75	0.74
M10	0.00	MARINE EQUIPMENT (NON DREDGING)																		
M10	0.11	AQUATIC MAINTENANCE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.86	0.85	0.84	0.83	0.80	0.76	0.74	0.73	0.70	0.66	0.63
M10	0.12	AQUATIC MAINTENANCE ATTACHMENTS	1.15	1.09	1.04	1.00	0.94	0.89	0.88	0.85	0.84	0.83	0.81	0.78	0.74	0.72	0.71	0.67	0.63	0.60
M10	0.21	HYDRAULIC CUTTERHEAD DREDGE, 8" OR LESS,TRANSPORTABLE	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.22	HYDRAULIC CUTTERHEAD DREDGE,8" - 12",TRANSPORTABLE	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.23	HYDRAULIC AUGERHEAD DREDGE,12" OR LESS,TRANSPORTABLE	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.68	0.65
M10	0.24	HYDRAULIC FLOATING PUMPS,12" OR LESS,TRANSPORTABLE	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80	0.77	0.75	0.74	0.71	0.67	0.64
M10	0.25	HYDRUALIC DREDGE PUMPS,12" OR LESS,TRANSPORTABLE	1.14	1.08	1.04	1.00	0.94	0.90	0.88	0.86	0.84	0.84	0.82	0.79	0.75	0.74	0.72	0.69	0.65	0.62
M10	0.26	HYDRAULIC DREDGE / PUMP ATTACHMENTS	1.14	1.08	1.04	1.00	0.94	0.90	0.88	0.86	0.84	0.84	0.82	0.79	0.75	0.74	0.72	0.69	0.65	0.62
M10	0.31	SMALL MECH DREDGES,CLAMSHELL,BARGE-MTD TO 5 CY	1.14	1.12	1.06	1.00	0.97	0.95	0.89	0.90	0.90	0.88	0.86	0.85	0.82	0.80	0.80	0.76	0.72	0.69
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	1.15	1.13	1.06	1.00	0.97	0.95	0.88	0.89	0.89	0.88	0.86	0.84	0.81	0.80	0.79	0.75	0.70	0.68
M10	0.33	SMALL MECH DREDGES,HOE-MOUNTED DREDGING ATTACH	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.71	0.67	0.65
M10	0.41	WORK FLOATS (NON-DREDGING)	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.84	0.83	0.80	0.76	0.75	0.74	0.70	0.66	0.63
M10	0.42	WORK BARGES (SECTIONAL, NON-DREDGING)	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.81	0.78	0.77	0.76	0.72	0.69	0.66
M10	0.45	FLAT-DECK OR CARGO BARGE (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.87	0.86	0.85	0.82	0.79	0.77	0.76	0.73	0.70	0.67
M10	0.46	DUMP SCOW (NON-DREDGING)	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.87	0.86	0.85	0.82	0.79	0.77	0.76	0.73	0.70	0.67
M10	0.47	DRILL BARGE (NON-DREDGING)	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.81	0.78	0.77	0.76	0.73	0.69	0.66
M10	0.48	ALL OTHER BARGES (NON-DREDGING)	1.12	1.07	1.04	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.81	0.78	0.77	0.76	0.73	0.69	0.66
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	1.13	1.08	1.04	1.00	0.94	0.90	0.89	0.87	0.85	0.85	0.83	0.80	0.77	0.75	0.74	0.71	0.67	0.64
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	1.13	1.08	1.04	1.00	0.95	0.90	0.89	0.87	0.86	0.85	0.84	0.81	0.77	0.76	0.75	0.72	0.68	0.65

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
M10	0.54	TUGS, 501 THRU 1,000 HP	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.86	0.86	0.84	0.82	0.78	0.77	0.76	0.73	0.69	0.67
M10	0.55	TUGS, 1,000 THRU 2,000 HP	1.12	1.07	1.03	1.00	0.95	0.91	0.90	0.88	0.87	0.86	0.85	0.82	0.79	0.78	0.76	0.73	0.70	0.67
P10	0.00	PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS	1.19	1.15	1.09	1.00	0.95	0.93	0.92	0.91	0.90	0.88	0.86	0.83	0.81	0.78	0.77	0.74	0.70	0.67
P20	0.00	PILE HAMMERS, DOUBLE ACTING																		
P20	0.10	DIESEL	1.17	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.80	0.79	0.76	0.74	0.71
P20	0.20	PNUEMATIC (STEAM/AIR)	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
P25	0.00	PILE HAMMERS, SINGLE ACTING																		
P25	0.10	DIESEL	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
P25	0.20	PNUEMATIC (STEAM/AIR)	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
P30	0.00	PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
P35	0.00	PIPELAYERS	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.95	0.93	0.90	0.88	0.87	0.84	0.81	0.78	0.73	0.71	0.69
P40	0.00	PLATFORMS & MAN-LIFTS	1.15	1.12	1.06	1.00	0.97	0.95	0.88	0.90	0.89	0.88	0.86	0.84	0.82	0.80	0.79	0.76	0.71	0.68
P45	0.00	PUMPS, GROUT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P50	0.00	PUMPS, WATER, CENTRIFUGAL, TRASH																		
P50	0.11	ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50	0.12	ELECTRIC DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P50	0.31	HOSES, PUMP, SUCTION & DISCHARGE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.79	0.77	0.74
P55	0.00	PUMPS, WATER, SUBMERSIBLE																		
P55	0.01	ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P55	0.02	ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P60	0.00	PUMPS, WATER, CENTRIFUGAL, DEWATERING																		
P60	0.11	SKID MOUNTED, ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P60	0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P60	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P60	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12	Life in Years																	
			Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		TYPE OF EQUIPMENT	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
P65	0.00	PUMPS, WATER, DIAPHRAGM																		
P65	0.11	SKID MOUNTED, ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P65	0.12	SKID MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P65	0.21	WHEEL MOUNTED, ENGINE DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
P65	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74
P70	0.00	PUMPS, WATER (For core drills)																		
P70	0.01	ENGINE DRIVE	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.80	0.77	0.74	0.72
P70	0.02	ELECTRIC DRIVE	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.80	0.77	0.74	0.72
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	1.13	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.86	0.83	0.80	0.76	0.72	0.69	0.67
R15	0.00	ROLLERS, STATIC, TOWED, PNEUMATIC	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.90	0.91	0.89	0.87	0.86	0.84	0.81	0.76	0.76	0.80	0.79
R20	0.00	ROLLERS, STATIC, TOWED, STEEL DRUM	1.13	1.10	1.05	1.00	0.95	0.93	0.91	0.90	0.91	0.89	0.87	0.86	0.84	0.81	0.76	0.76	0.80	0.79
R30	0.00	ROLLERS, STATIC, SELF-PROPELLED																		
R30	0.01	PNEUMATIC	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.91	0.89	0.87	0.86	0.84	0.82	0.77	0.76	0.81	0.80
R30	0.02	SMOOTH DRUM	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.91	0.89	0.87	0.86	0.84	0.82	0.77	0.77	0.81	0.80
R30	0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	1.13	1.10	1.05	1.00	0.95	0.93	0.92	0.90	0.91	0.89	0.87	0.86	0.84	0.82	0.77	0.76	0.81	0.80
R40	0.00	ROLLERS, VIBRATORY, TOWED	1.14	1.10	1.05	1.00	0.95	0.93	0.91	0.89	0.91	0.89	0.87	0.86	0.84	0.81	0.76	0.75	0.80	0.79
R45	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM	1.14	1.10	1.05	1.00	0.95	0.93	0.91	0.89	0.91	0.89	0.87	0.86	0.84	0.81	0.76	0.75	0.80	0.79
R50	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM	1.14	1.11	1.05	1.00	0.95	0.92	0.91	0.89	0.90	0.88	0.86	0.85	0.83	0.80	0.75	0.74	0.79	0.78
R55	0.00	ROOFING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.73
S10	0.00	SCRAPERS, ELEVATING																		
S10	0.01	0 THRU 200 HP	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.88	0.86	0.85	0.80	0.78	0.75	0.70	0.67	0.65
S10	0.02	OVER 200 HP	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.88	0.86	0.85	0.79	0.78	0.75	0.70	0.67	0.64
S15	0.00	SCRAPERS, CONVENTIONAL	1.11	1.09	1.05	1.00	0.97	0.95	0.94	0.94	0.92	0.89	0.87	0.85	0.80	0.79	0.76	0.71	0.69	0.66
S20	0.00	SCRAPERS, TANDEM POWERED	1.11	1.09	1.05	1.00	0.97	0.95	0.94	0.94	0.92	0.89	0.87	0.85	0.80	0.79	0.76	0.71	0.69	0.66
S25	0.00	SCRAPERS, TRACTOR DRAWN	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.89	0.86	0.85	0.80	0.78	0.76	0.70	0.68	0.65
S30	0.00	SCREENING & CRUSHING PLANTS																		
S30	0.10	CONVEYORS	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
S30	0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.90	0.88	0.86	0.84	0.83	0.81	0.79	0.76
S30	0.21	CRUSHERS - CONE	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.90	0.88	0.86	0.84	0.83	0.81	0.79	0.76
S30	0.22	CRUSHERS - JAW	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.93	0.91	0.90	0.88	0.86	0.84	0.83	0.81	0.79	0.76
S30	0.30	SCREENING PLANT	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
S35	0.00	SNOW REMOVAL EQUIPMENT	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
S40	0.00	SOIL & ROAD STABILIZERS	1.12	1.09	1.05	1.00	0.96	0.95	0.94	0.93	0.92	0.88	0.86	0.85	0.80	0.78	0.75	0.70	0.67	0.65
S45	0.00	SPLITTERS, ROCK & CONCRETE	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T10	0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.84	0.80	0.77	0.72	0.70	0.68
T15	0.00	TRACTORS, CRAWLER (DOZER) (includes blade)																		
T15	0.01	0 THRU 225 HP	1.13	1.11	1.06	1.00	0.97	0.95	0.94	0.94	0.92	0.89	0.87	0.86	0.82	0.79	0.75	0.70	0.68	0.65
T15	0.02	226 HP THRU 425 HP	1.12	1.10	1.06	1.00	0.97	0.95	0.95	0.94	0.93	0.90	0.88	0.87	0.83	0.80	0.77	0.72	0.70	0.67
T15	0.03	OVER 425 HP	1.12	1.10	1.05	1.00	0.97	0.95	0.95	0.95	0.93	0.90	0.89	0.87	0.84	0.81	0.78	0.73	0.71	0.69
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	1.13	1.09	1.04	1.00	0.95	0.93	0.92	0.90	0.89	0.86	0.84	0.83	0.83	0.82	0.79	0.77	0.76	0.74
T25	0.00	TRACTORS, AGRICULTURAL																		
T25	0.10	CRAWLER	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.82	0.81	0.78	0.77	0.75	0.74
T25	0.20	WHEEL	1.13	1.10	1.04	1.00	0.95	0.93	0.92	0.90	0.88	0.85	0.84	0.82	0.82	0.81	0.78	0.77	0.75	0.73
T30	0.00	TRENCHERS, CHAIN TYPE CUTTER	1.14	1.10	1.05	1.00	0.92	0.93	0.91	0.89	0.87	0.84	0.81	0.80	0.78	0.76	0.70	0.67	0.66	0.65
T35	0.00	TRENCHERS, WHEEL TYPE CUTTER	1.14	1.10	1.05	1.00	0.92	0.93	0.91	0.89	0.87	0.84	0.81	0.80	0.78	0.76	0.70	0.67	0.66	0.65
T40	0.00	TRUCK OPTIONS																		
T40	0.10	CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
T40	0.20	DUMP BODY, REAR	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
T40	0.30	FLATBEDS, WITH SIDES	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
T40	0.41	HOIST, ELECTRIC DRIVE	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
T40	0.50	TRANSIT MIXERS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.82	0.81	0.79	0.76	0.74
T40	0.60	WATER TANKS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.80	0.77	0.74	0.72
T40	0.70	ALL OTHER OPTIONS	1.15	1.13	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.78	0.75	0.73
T45	0.00	TRUCK TRAILERS																		

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T45	0.10	BOTTOM DUMP	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45	0.20	END DUMP	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45	0.30	PUP TRAILER	1.14	1.12	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.77	0.75
T45	0.41	LOWBOY, RIGID NECK, DROP DECK	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45	0.50	FLATBED TRAILER	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45	0.60	MISCELLANEOUS / UTILITY	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75
T45	0.70	WATER TANKER TRAILER	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T45	0.80	DECONTAMINATION FACILITY	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.80	0.77	0.74	0.72
T45	0.90	TANK TRAILERS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T50	0.00	TRUCKS, HIGHWAY (Add attachments as required)																		
T50	0.01	0 THRU 10,000 GVW	1.13	1.10	1.05	1.00	0.98	0.96	0.94	0.94	0.96	0.94	0.95	0.97	0.96	0.93	0.89	0.84	0.80	0.76
T50	0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	1.13	1.09	1.05	1.00	0.98	0.96	0.94	0.94	0.96	0.94	0.95	0.97	0.96	0.93	0.89	0.84	0.80	0.77
T50	0.03	OVER 30,000 GVW (Chassis only - Add options)	1.13	1.09	1.05	1.00	0.98	0.96	0.94	0.94	0.96	0.94	0.95	0.97	0.96	0.93	0.89	0.85	0.80	0.77
T55	0.00	TRUCKS, OFF-HIGHWAY																		
T55	0.10	RIGID FRAME	1.17	1.13	1.08	1.00	0.95	0.93	0.92	0.90	0.88	0.87	0.86	0.84	0.81	0.76	0.74	0.73	0.72	0.70
T55	0.20	ARTICULATED FRAME	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.76	0.73	0.72	0.71	0.69
T56	0.00	TRUCKS,OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS																		
T56	0.10	PRIME MOVER TRACTORS	1.17	1.13	1.08	1.00	0.95	0.93	0.92	0.90	0.88	0.87	0.86	0.84	0.81	0.76	0.74	0.73	0.72	0.70
T56	0.20	WAGONS, BOTTOM DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.75	0.73	0.72	0.71	0.69
T56	0.30	WAGONS, REAR DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.86	0.85	0.83	0.80	0.75	0.72	0.71	0.70	0.68
T57	0.00	TRUCKS, VACUUM	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.78	0.76	0.73
T60	0.00	TRUCKS, WATER, OFF-HIGHWAY	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.86	0.85	0.83	0.80	0.75	0.72	0.71	0.70	0.68
T65	0.00	TUNNEL/MINING EQUIPMENT																		
T65	0.10	DRIFTING & TUNNELING DRILLS	1.22	1.16	1.08	1.00	0.94	0.92	0.85	0.83	0.81	0.80	0.79	0.77	0.74	0.73	0.71	0.70	0.69	0.66
T65	0.20	TUNNEL BORING MACHINES	1.14	1.11	1.07	1.00	0.97	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.85	0.83	0.82	0.80	0.78	0.75
T65	0.30	PRODUCTION DRILLING RIGS	1.23	1.17	1.08	1.00	0.94	0.92	0.85	0.82	0.81	0.80	0.78	0.77	0.74	0.72	0.71	0.69	0.68	0.66
T65	0.40	ROADHEADERS & CONTINUOUS MINERS	1.14	1.11	1.07	1.00	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.82	0.80	0.78	0.75

Table 3-2 Equipment Age Adjustment Factors for Standby Cost

CATEGORY	SUB	REGION 12 TYPE OF EQUIPMENT	Life in Years / Year Purchased New																	
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
			2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
T65	0.50	ROCK BOLTING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.78	0.76	0.73
T65	0.61	LOADING & HAULING EQUIPMENT, DIESEL OR GAS	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.74
T65	0.62	LOADING & HAULING EQUIPMENT, ELECTRIC	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.89	0.87	0.85	0.83	0.81	0.79	0.77	0.74
T65	0.63	LOADING & HAULING EQUIPMENT, AIR-POWERED	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.92	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
T65	0.70	LOCOMOTIVES	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.91	0.88	0.87	0.84	0.82	0.81	0.79	0.76	0.74
T65	0.90	OTHER TUNNELING EQUIPMENT	1.15	1.12	1.07	1.00	0.96	0.95	0.93	0.93	0.92	0.90	0.88	0.87	0.84	0.82	0.81	0.78	0.76	0.73
W10	0.00	WAGONS, BOTTOM DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.75	0.73	0.72	0.71	0.69
W15	0.00	WAGONS, REAR DUMP	1.18	1.14	1.08	1.00	0.94	0.93	0.92	0.90	0.88	0.87	0.86	0.83	0.80	0.75	0.73	0.72	0.71	0.69
W25	0.00	WATER & CO2 BLASTERS																		
W25	0.10	LOW PRESSURE, (< 5,000 PSI)	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W25	0.20	HIGH PRESSURE, (>= 5,000 PSI)	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W25	0.30	STEAM CLEANERS	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.79	0.77	0.74	0.71
W25	0.40	CO2 BLASTERS	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72
W25	0.50	WET ABRASIVE BLASTING SYSTEM (TORBO)	1.17	1.14	1.08	1.00	0.96	0.94	0.92	0.92	0.91	0.89	0.87	0.85	0.82	0.80	0.78	0.76	0.73	0.70
W30	0.00	WATER TANKS																		
W30	0.10	PORTABLE WITH WHEELS	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.86	0.85	0.83	0.80	0.75	0.72	0.71	0.70	0.68
W30	0.20	SKID MOUNTED	1.18	1.14	1.08	1.00	0.94	0.93	0.91	0.90	0.88	0.86	0.85	0.83	0.80	0.75	0.72	0.71	0.70	0.68
W35	0.00	WELDERS																		
W35	0.10	ENGINE DRIVEN	1.16	1.13	1.08	1.00	0.96	0.94	0.93	0.92	0.91	0.90	0.87	0.86	0.83	0.81	0.80	0.77	0.74	0.72
W35	0.20	ELECTRIC DRIVEN	1.16	1.13	1.07	1.00	0.96	0.94	0.93	0.93	0.91	0.90	0.88	0.86	0.84	0.81	0.80	0.78	0.75	0.72

STANDBY HOURLY RATE CALCULATION FOR OVERAGE EQUIPMENT

EXAMPLE

Assume the following set of given information for the rate calculation

1. The unit of equipment is not listed in table 2-1.

2. The equipment is contractor owned.

3. Data for the unit in question:

   a. Caterpillar front-end wheel loader
   b. Model 966E, 4WD, 4 CY capacity
   c. Serial number indicates year of manufacture = 1991
   d. Actual purchase price in 1991 = $220,404
      (includes all regional discounts, sales tax and freight)
   e. Horsepower is 200 hp (fuel is Diesel off-road)
   f. Drive tire (DT) size = 23.50 x 25, 16 ply, L-3 (appendix F tire code ANNB5)
      DT cost (2007) = 4 tires x $2,215 /tire = $8,860
   g. Weight = 44,400 lbs

4. Use the actual cost data as follows:

   a. Purchase price (TEV) = $220,404
   b. Year of manufacture = 1991

5. Hourly rate is computed as follows:

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment

Example: *The piece of equipment shown in this example is based on a known piece of equipment for illustration purposes only.*

USE THIS WORKSHEET TO COMPUTE A HOURLY RATE FOR EQUIPMENT THAT IS NOT IN THIS PAMPHLET OR IS IN THE PAMPHLET BUT NOT EQUIVALENT IN SIZE, CAPACITY, HORSEPOWER OR VALUE.*(See Appendix A for a blank form)*

Region 12

1. EQUIPMENT INFORMATION AND EXPENSE FACTORS

ID No: _____

a. Equipment Specification Data:

(1)	Equipment Description:	Loader, Front-end, Wheel, 4WD, 4 CY capacity	
(2)	Model and Series:	Caterpillar Model 966E	
(3)	Present Year or Year of Use:		2007
(4)	Year Manufactured:		1991
(5)	Horsepower - Equipment:		200
(6)	Horsepower - Carrier:		0
(7)	Fuel - **Equipment**: 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel	**Enter number from 0 to 6 ==>** 3	**D-off**
	- **Carrier**: 0-None; 1-electric; 2-gasoline; 3-diesel off-road; 4-diesel on-road; 5-marine gas; 6-marine diesel	**Enter number from 0 to 6 ==>** 0	**None**
(8)	Shipping Weight (cwt):		444 cwt

(9) Tire size and number of tires: (Cost of tires based on present year - see 1.a.(3) and Appendix F)

	Size/Ply	App F Code	No.	Unit Price	Cost
(a) Front (FT):			0	$0	$0
(b) Drive (DT):	23.5X25/16Ply	ANNB5	4	$2,215	$8,860
(c) Trailing (TT):			0	$0	$0
(d) Total Tire Cost:					$8,860

(10) List Price + Accessories: [at Year (yr) of Manufacture] $0 OR actual purchase price: $220,404

USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:

b.	Category and Subcategory Number:	L40	0.11
c.	Hourly Expense Calculation Factors:		
(1)	Economic Key (EK):		45
(2)	Condition (C): **A**=Average **D**=Difficult **S**=Severe	A	AVERAGE
(3)	Discount Code (DC): **B** = 7.5% (0.075) or **S** = 15.0% (0.15)	B	0.075
(4)	Life in Hours (LIFE):		9,250
(5)	Salvage Value Percentage (SLV):		0.25
(6)	Fuel Factor - Equipment [Electric (E) Gas (G) Diesel (D)]:		0.031
(7)	Fuel Factor - Carrier (E G D):		0.000
(8)	Filter, Oil, and Grease (FOG) Factor (E G D):		0.111
(9)	Tire Wear Factor:		
	(a) Front (FT):		0.83
	(b) Drive (DT):		0.54
	(c) Trailing (TT):		0.92
(10)	Repair Cost Factor (RCF):		0.70

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment **Page 1 of 6**

Region 12

2. EQUIPMENT VALUE

a. List Price + Accessories: *[at Year (yr) of Manufacture]* = $0

(1) Discount: (List Price + Accessories) x (Discount Code)
1.a.(10) [1.c.(3)]
($0 + $0.00) x (0.075) = $0

(2) Subtotal [2.a.] - [2.a.(1)] Subtotal = $0

(3) Sales or Import Tax: (Subtotal) x (Tax Rate)
[2.a.(2)] [Appendix B]
($0) x (4.40%) = $0

(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)] Subtotal = $0

b. Freight: (Shipping Weight) x (Freight Rate per cwt)
[1.a.(8)] [Appendix B]
(0,000 cwt) x ($0.00 /cwt) = $0

c. **TOTAL EQUIPMENT VALUE (TEV):** **TOTAL[2.]:** **= $220,404**
[(2.a.(4)] + [(2.b)]
(*See chapter 3 for used and overage equipment rate adjustments.)*

3. DEPRECIATION PERIOD (N)

a. (LIFE) / (Working Hours Per Year (WHPY)) = N
[1.c.(4)] [Appendix B]
(9,250 hr) / (1,390 hr/yr) = 6.65 yrs (N)

4. OWNERSHIP COST

a. Depreciation
(1) Tire Cost Index (TCI):
(Tire Index, Year of Manufacture, 1.a.(4)) / (Tire Index, Present Year or Year of Use, 1.a.(3)) = Tire Cost Index (TCI)
[Appendix E, EK=100] [Appendix E, EK=100]
(2506) / (3058) = 0.819 (TCI)

(2) [(TEV) x [1.0-(SLV)] - [(TCI) x (Tire Cost)]] / (LIFE)
[2.c.] [1.c.(5)] [4.a.(1)] [1.a.(9)(d)] [1.c.(4)]
[($220,404) x [1.0-(0.25)] - [(0.819) x ($8,860)]] / (9,250 hr) = $17.09 /hr

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment **Page 2 of 6**

Region 12

4. OWNERSHIP COST (Continued)

b. Facilities Capital Cost of Money (FCCM):

(1)	[[(N) - 1.0] [3.a.]	x	[1.0 + (SLV)] [1.c.5.]	+	2.0]	/	[2.0 x (N)] [3.a.]	=	Avg Value Factor (AVF)
	[[(6.65 yr) - 1.0]	x	[1.0 + (0.25)]	+	2.0]	/	[2.0 x (6.65 yr)]	=	0.681 (AVF)
(2)	(TEV) [2.c.]	x	(AVF) [4.b.(1)]	x	(Adjusted Cost-of-Money) [Appendix B]	/	(WHPY) [Appendix B]		
	($220,404)	x	(0.681)	x	(4.20%)	/	(1,390 hr/yr)	=	$4.54 /hr

c. **TOTAL HOURLY OWNERSHIP COST:** **TOTAL [4.]: = $21.63 /hr**
[4.a.(2)] + [4.b.(2)]

5. OPERATING COST

a. Fuel Costs:

(1) Equipment:

(Fuel Factor) [1.c.(6)]	x	(Horsepower (hp)) [1.a.(5)]	x	(Fuel Cost per Gallon (gal)) [Appendix B]		
(0.000)	x	(0 hp)	x	($0.00 /gal)	=	$0.00 /hr

(2) Carrier:

(Fuel Factor) [1.c.(7)]	x	(hp) [1.a.(6)]	x	(Fuel Cost per gal) [Appendix B]		
(0.000)	x	(0 hp)	x	($0.00 /gal)	=	$0.00 /hr

(3) Total Hourly Fuel Cost: **Total [5.a.] = $0.00 /hr**
[(5.a (1)] + [5.a (2)]

b. FOG Cost:

(1) Equipment:

(FOG Factor) [1.c.(8)]	x	(Equipment Hourly Fuel Cost) [5.a.(1)]	x	(Labor Adjustment Factor (LAF)) [Appendix B]		
(0.000)	x	($0.00 /hr)	x	(0.00)	=	$0.00 /hr

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment **Page 3 of 6**

Region 12

5. OPERATING COST (Continued)

(2) Carrier:

(FOG Factor)	x	(Carrier Hourly Fuel Cost)	x	(LAF)		
[1.c.(8)]		[5.a.(2)]		[Appendix B]		
(0.000)	x	($0.00 /hr)	x	(0.00)	=	$0.00 /hr

(3) Total Hourly FOG Cost: **Total [5.b.]** = **$0.00 /hr**
[(5.b.(1)] + [5.b.(2)]

c. Alternative Fuel/FOG Cost: **Total [5.c.]** = **$0.00 hr**
(See chapter 2, paragraph 2.24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):
(EK is from [1c. (1)])

(Economic Index, Present Year or Year of Use,1.a.(3))	/	(Economic Index, Year of Manufacture, 1.a.(4))		
[Appendix E, EK=1.c.(1)]		[Appendix E, EK=1.c.(1)]		
(0000)	/	(0000)	=	0.000 (EAF)

(See table 3-1 for last year of economic life.)

(2) Repair Factor (RF):

(RCF)	x	(EAF)	x	(LAF)	=	Repair Factor (RF)
[1.c.(10)]		[5.d.(1)]		[Appendix B]		
(0.00)	x	(0.000)	x	(0.00)	=	0.000 (RF)

(3) Repair Cost:

[(TEV)	-	[(TCI)	x	(Tire Cost)]]	x	(RF)	/	(LIFE)
[2.c.]		[4.a.(1)]		[1.a.(9)(d)]		[5.d.(2)]		[1.c.(4)]
[($0)	-	[(0.000)	x	($0)]]	x	(0.000)	/	(0)

(4) Total Hourly Repair Cost: **Total [5.d.]** = **$0.00 /hr**

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment **Page 4 of 6**

Region 12

5. OPERATING COST (Continued)

e. Tire Wear Cost: *(Use current price levels. See Appendix F.)*

(1) Front Tires (FT):

[1.5 x (FT Cost)]	/	[1.8 x (FT Wear Factor)	x	(Maximum Tire Life Hours)]		
[1.a.(9)(a)]		[1.c.(9)(a)]		[Appendix F]		
[1.5 x ($0)]	/	[1.8 x (0.00)	x	(0 hrs)]	=	$0.00/hr

(2) Drive Tires (DT):

[1.5 x (DT Cost)]	/	[1.8 x (DT Wear Factor)	x	(Maximum Tire Life Hours)]		
[1.a.(9)(b)]		[1.c.(9)(b)]		[Appendix F]		
[1.5 x ($0)]	/	[1.8 x (0.00)	x	(0 hrs)]	=	$0.00/hr

(3) Trailing Tires (TT):

[1.5 x (TT Cost)]	/	[1.8 x (TT Wear Factor)	x	(Maximum Tire Life Hours)]		
[1.a.(9)(c)]		[1.c.(9)(c)]		[Appendix F]		
[1.5 x ($0)]	/	[1.8 x (0.00)	x	(0 hrs)]	=	$0.00/hr

(4) Total Tire Wear Cost: **Total [5.e.] = $0.00/hr**
[Sum 5.e.(1) through 5.e.(3)]

f. Tire Repair Cost:

(Total Tire Wear Cost per Hour)	x	0.15 x (LAF)			
[5.e.(4)]		[Appendix B]			
$0.00/hr	x	0.15 x (0.00)	**Total [5.f.]**	**=**	**$0.00/hr**

g. TOTAL HOURLY OPERATING COST: **Total [5.] = $0.00/hr**
[Sum 5.a. through 5.f.]

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment **Page 5 of 6**

Region 12

6. HOURLY RATES

a. Total Hourly Rate: [*based on 40 hours per week (wk)*]

(Ownership Cost) [4.c.]	+	(Operating Cost) [5.g.]		
($0.00 /hr)	+	($0.00 /hr)	=	**$0.00 /hr**

See Figure 3-1 for hourly rate calculations for overage equipment

b. Other Work Shifts Hourly Rate:
(Refer to Chapter 3, Adjustments to Rates, for methodology.)

[(Depreciation) [4.a.(2)]	+	[(FCCM) [4.b.(2)]	x	(40 hr/wk)	/	(Work hr/wk)] (example:60 hr/wk)	+	(Operating Cost)] [5.g.]		
[($0.00 /hr)	+	[($0.00 /hr)	x	(40 hr/wk)	/	(60 hr/wk)] (example:60 hr/wk)	+	($0.00 /hr)]	=	**$0.00 /hr**

c. Standby Hourly Rate:
(Refer to Chapter 2, paragraph 2.28 for guidance on use.)

[(Depreciation) [4.a.(2)]	x 0.50]	+	(FCCM) [4.b.(2)]		
[($17.09 /hr)	x 0.50]	+	($4.54 /hr)	=	**$13.09 /hr**

(Refer to Chapter 3, paragraph 3.12 for guidance for overage equipment.)

See Chapter 3 if rate adjustments are necessary.

Figure 3-2. Standby Hourly Rate Calculation for Overage Equipment **Page 6 of 6**

CHAPTER 4.0 - METHODOLOGY FOR DREDGING PLANT AND MARINE EQUIPMENT

SECTION I. GENERAL

4.1 Contents

This chapter contains the methodology used to compute ownership and operating rates for dredging plant and permanent floating plant such as floating pile-driving equipment. Dredging plant is marine equipment used for dredging operations for the majority of its life or designed and built for marine/dredging use.

4.2 General

a. The ownership and operating rates provided in table 2-1, category M-10, are based on the methodology in chapter 2 for nondredging equipment. However, the cost data (Acquisition Cost, Horsepower, and Fuel Type) may be used for calculation of dredging plant and marine equipment rates, provided they are calculated in accordance with the methodology provided in this chapter.

b. Table 4-1 shows ownership and operating cost factors for various types of dredging plant. When a type of plant is not listed, the cost is estimated by using the factors listed in this table for a similar type of plant.

c. The methodology for determining operating rates for hopper dredges was omitted from this pamphlet due to the limited number of hopper dredges and the complexity of the methods used to calculate the rates. Further information on hopper dredges can be found in Engineer Regulation (ER) 1110-2-1302, *Engineering and Design, Civil Works Cost Engineering*, and on the Internet at http://www.usace.army.mil/inet/usace-docs/eng-regs/er1110-2-1302/toc.htm. The methodology for calculating ownership cost is in section V of this chapter.

d. For mechanical dredges, the cost of the bucket is typically included in the plant value; therefore, no additional allowance should be made for ownership cost. If the bucket cost is not included in the plant value, the bucket may be treated as a separate unit of equipment.

SECTION II. ANNUAL USE

4.3 Time Available to Dredge

a. The number of months available per calendar year (yr) for dredging shall be based on the work time available to dredge, excluding downtime for major repairs, work in dry dock, bad weather, and environmental restrictions. Figure 4-1 depicts months available for dredging, including mobilization and demobilization, based on historic data collected by the U.S. Army Corps of Engineers' regional dredge estimating teams.

The data in figure 4-1 shall be used for computing the ownership costs unless specified otherwise in the contract documents.

AVAILABLE TIME TO DREDGE BY REGION
(In Months)

Region	Type of Dredging Operation		
	Pipeline	Bucket	Hopper
Atlantic Coast and tributaries	9	10	10
Gulf Coast, Lower Mississippi, and Tributaries	10	10	11
Great Lakes, Upper Mississippi, and Tributaries	8	8	8
West Coast and Tributaries	9	9	9

Figure 4-1. Months Available by Region

SECTION III. LIFE

4.4 Life

The life for determining ownership and operating costs is defined as follows:

a. The Useful Life is expressed in years in table 4-1. It is the economic life of the equipment and is used to develop ownership rates for various types of dredging plant.

b. The Physical Life is expressed in hours (hrs) in table 4-1. It is the life of the unit based on effective working time and is used to develop operating rates for various types of dredging plant.

4.5 Annual Hours Available

The annual hours available to dredge can be established for each type of plant based on the months available and the estimated effective monthly hours worked. Dredging time is defined as effective plus noneffective working time. “Effective working time" is defined as time during the dredging operation when actual production is taking place. "Noneffective working time" is defined as time during the dredging operation when the dredge is operational but no production is taking place. For complete definition of terms see ER 1110-2-1302*, Engineering and Design*, *Civil Works Cost Engineering.* The total annual hours available can be expressed by formula, as follows:

Available Hours per yr = Months Available/yr x Effective Hours/Month

Where:

- Months Available/yr is found in figure 4-1.
- Effective Hours/Month is the effective working time.

SECTION IV. SALVAGE VALUE

4.6 Salvage Value (SLV)

The salvage value, expressed as a decimal, is shown in table 4-1 for different types of plant.

SECTION V. OWNERSHIP COST

4.7 Ownership Cost

Ownership cost is calculated based on a percent of plant value. Plant value is the acquisition cost plus the cost of any initial capital improvements. The value of initial capital improvements is based on those betterments, which were made within 1 year of purchase. Capital improvements do not include any replacement or repair work. Repairs or replacements are an operating cost and are covered in the repair cost allowance. Capital improvements are considered betterments, where the plant has been improved (*e.g.,* adding radar or upgrade of engines). (Note: Only the cost difference between replacement of existing similar engines and actual cost for upgrading engines should be considered as capital improvement). For capital improvements not made within the first year after the initial acquisition, see section VIII.

a. The ownership cost is determined from the plant value and is the total expense rate based on depreciation and CMR. When cost or pricing data is available, the actual acquisition price shall be used. Otherwise, the value of a similar piece of plant is used and, if necessary, adjusted so that capacity, size, and horsepower are properly considered.

b. Ownership rate is determined on a yearly basis and distributed over a monthly basis. The monthly rate is calculated based on the available use months by using the following formula:

$$\text{Monthly Ownership Cost} = \frac{\text{Plant Value x (Yearly DEPR Percent} + \text{Yearly CMR Percent)}}{\text{Available Use Months}}$$

Where:

- Plant Value = Acquisition price plus initial capital improvements.
- Yearly DEPR Percent = Ownership percent per year for depreciation.

- Yearly CMR Percent = Ownership percent per year for cost of money rate.
- Available Use Months is from figure 4-1.

4.8 Depreciation Factor

Depreciation is computed using the straight-line method. The depreciable value is the acquisition cost, plus initial capital improvements, less estimated salvage. The basis for determining the yearly percentage factor for depreciation is expressed by the following formula:

$$\text{Yearly DEPR Percent} = (1 - \text{SLV})/\text{N}$$

Where:

- N = Useful Life from table 4-1.
- SLV = Salvage Value from table 4-1.

4.9 The Cost of Money Rate (CMR) Factor

The CMR factor is calculated on a yearly basis and is expressed here as an annual percentage factor. The CMR used in the calculation is the rate in effect at the time the work was performed. This formula is expressed as follows:

$$\text{Yearly CMR Percent} = \frac{[(\text{N}-1)(1+\text{SLV})+2](\text{discounted CMR})}{2\text{N}}$$

Where:

- N = Useful Life from table 4-1.
- SLV = Salvage Value from table 4-1.
- Discounted CMR = Cost of money rate (appendix I) reduced by 25 percent for overhead and profit allowance.

4.10 Other Ownership Elements

Taxes, storage (lay up), and insurance are considered indirect (overhead) costs as defined in ER 1110-2-1302, appendix D. These costs are not included in ownership rates since they vary by geographic area and with individual contractors. These costs are considered as overhead costs and are, therefore, not included here so they will not be duplicated in the overhead in the estimate or submitted proposal.

SECTION VI. OPERATING FACTORS

4.11 Hourly Operating Cost

Operating cost is based on effective working time. Dredging plant operating factors are shown in table 4-1. These factors, which are described in paragraph 4.12, are not intended to replace historical data but shall be used when historical data is limited or nonexistent.

4.12 Prime and Secondary Power

Prime power refers to the primary operating engine for the dredge or other piece of attendant plant. Secondary power refers to all other secondary engines or power plants. If more than one secondary power engine is present, the horsepower is totaled. Fuel consumption factors are prepared on the same basis as in chapter 2. Hourly fuel costs are calculated separately for the primary and secondary engines. The formula used is expressed as follows:

Hourly Fuel Cost = Horsepower x Fuel Cost/Gallon x Engine Fuel Factor

Where:

- Horsepower is the engines rated horsepower.
- Fuel Cost/Gallon is based on values shown in appendix B. See chapter 3 for fuel cost adjustments.
- Fuel Factor - Gas or Diesel Fuel. The fuel factor is listed in table 4-1 for the primary and secondary engines.

4.13 Water, Lube, and Supplies (WLS)

This factor is similar to the filters, oil, and grease (FOG) factor described in chapter 2. This item is computed as either a percentage of the hourly fuel costs or, if the type of plant has no engine, a reasonable hourly cost should be included.

This factor <u>does not include</u> an allowance for the oiler normally assigned to the dredge or other piece of dredging plant. The formula is expressed as follows:

Water, Lube, and Supply Cost = WLS factor x Hourly Fuel Cost

Where:

- WLS Factor is obtained from table 4-1.
- Hourly Fuel cost is calculated as shown in paragraph 4-12.

4.14 Repairs (RPR)

This factor includes an allowance for all major and minor repairs and is similar to the maintenance and repair cost factor (RCF) described in chapter 2. The economic

adjustment factor (EAF) and the labor adjustment factor (LAF) are required to develop this cost. The formula is expressed as follows:

$$\text{Repair Cost} = \frac{\text{(Total Plant Value x RPR x EAF x LAF)}}{\text{Life in hr}}$$

Where:

- Total Plant Value = Acquisition price plus Initial capital improvements.
- RPR = Repair Factor from table 4-1.
- EAF = Economic Index (present year)/ Economic Index (acquisition year).
- LAF = Labor Adjustment Factor from appendix B.
- Life in hrs = Physical Life from table 4-1.

It should be noted that the repair allowance does not include the following estimated additive items:

a. Excessive dredge wear for parts (*e.g.,* cutter teeth and main suction pumps) is not included due to the wide variety of materials being dredged. The original cost of the bucket and normal wear are typically included in the plant value covered in the plant rate. Excessive bucket wear for mechanical dredges is estimated as an additive item or treated as a separate unit of equipment from table 2-1. Allowances for wear due to abrasive material should only be included as an additive item if it is warranted and is not considered elsewhere in the estimate.

b. Dry docking costs, which represent an allowance for rental of the dry dock facility, are not included because they vary greatly depending on the facilities available. Repairs incurred while in dry dock, which occur periodically, are in the repairs. Dry docking costs will be allocated on an average annual basis over the years between such occurrences in accordance with Cost Accounting Standards and Generally Accepted Accounting Practices.

c. There is no predetermined allowance in the dredging plant methodology for jobsite yard costs, mobilization, or demobilization. All of these cost elements must be separately estimated to match each project's construction conditions.

SECTION VII. STANDBY

4.15 Standby Rate

The standby rate is computed by allowing the full ownership cost. In addition to the standby ownership rate, it may be necessary on dredges to include operating costs. Examples of allowable operating cost are as follows: a generator fuel allowance to account for operation of a diesel engine generator for power to operate pumps; navigation lights; minimum crew; *etc*.

a. Standby is a directed delay by the Government and will not be allowed during periods when the plant would have otherwise been in idle status, such as noneffective working time. Since ownership is calculated based on life in years computed monthly, standby should be paid only when additional time has been directed by the Government. Standby is to be paid on a 24-hour basis.

b. Standby for pipeline and accessories shall be based on pumping mud in determining values from table 4-1.

SECTION VIII. NEGOTIATED PROCUREMENT

4.16 Rates

The calculated dredging plant rates based on the methodology presented in this chapter should be used for preparing a reasonable contract estimate. When adequate cost or pricing data is available and submitted by the contractor for negotiated procurement, the rates may be adjusted in accordance with the methodology in this chapter. Cost or pricing data is defined in FAR 15.4*, Contract Pricing*.

4.17 Allowance for Additional Capital Improvements

Allowance for additional capital improvements shall be calculated in accordance with accepted general accounting principles. When adequate cost or pricing data is not available, factors for a similar unit of equipment may be used for determining the ownership rate for overage equipment and plant.

4.18 Overage Plant

When the plant has exceeded the useful life given in table 4-1, it is considered overage. The ownership rate for overage plant should be determined with the same methodology described in section V.

a. When actual cost or pricing data is available to adjust the operating rate, the data must be accurate, complete, and established in accordance with accepted general accounting principles.

b. When actual cost or pricing data is not available, the total hourly operating rate for overage equipment shall be computed on the basis that the equipment is equal to the useful life as shown in table 4-1.

4.19 Dredging Plant Purchased Used

For plant purchased used, the ownership and operating rate must be calculated on an individual case, due to the varying conditions. When actual cost or pricing data is not available, the methodology from this chapter shall be used and values for life and salvage from table 4-1 can be adjusted. Support for adjustments can be obtained by calling the Chief, Cost Engineering Branch, Engineering and Construction Division,

Walla Walla District, U.S. Army Corps of Engineers (CENWW-EC-X), telephone 509-527-7511 or 509-527-7510.

SECTION IX. RATE CALCULATION EXAMPLE

4.20 Rate Calculation Example

The example shown in figure 4-2 illustrates the use of figure 4-1, table 4-1, and the regional data from appendix B to generate a rate. For illustration purposes, assume that a 24-inch hydraulic dredge (pipeline) was purchased new in 1991 for $3,700,000, including tax and delivery, and there were no initial capital improvements. This example uses 500 hours per month and a discounted CMR of 4.20 percent.

Table 4-1. Dredging Plant Cost Factors

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
Hydraulic Dredges - Pipeline (Cutterhead or Dustpan) (Based on Discharge Diameter) (Non-Truckable)												
8 inch and under	5	10,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	70
9 inch through 10 inch	6	12,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	80
11 inch through 12 inch	8	16,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	90
13 inch through 15 inch	15	40,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	100
16 inch through 17 inch	20	80,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	110
18 inch through 20 inch	20	100,000	0.05	80	0.083	0.045	70	0.072	0.039	20	22	120
21 inch through 22 inch	25	120,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
23 inch through 24 inch	25	130,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
25 inch through 29 inch	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
30 inch or larger	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	20	22	130
Barge Mounted Booster Pump (For Pipeline Dredges)												
16 inch through 17 inch	20	80,000	0.05	80	0.083	0.045	70	0.072	0.039	22	24	80
18 inch through 20 inch	20	100,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	90
21 inch through 22 inch	25	120,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	100
23 inch through 24 inch	25	130,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	110
25 inch through 29 inch	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	120
30 inch or larger	30	135,000	0.10	80	0.083	0.045	70	0.072	0.039	22	24	120

SLV = Salvage Value HPF = Horsepower Factor G = Gas D = Diesel
WLS = Water, Lube and Supplies RPR = Repairs

Table 4-1. Dredging Plant Cost Factors (Continued)

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
Mechanical Dredges (Large)[1]												
Clamshell - under 5 cy	8	18,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	90
Clamshell - 6 cy to 10 cy	13	26,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	100
Clamshell - 11 cy to 15 cy	20	40,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	110
Clamshell - 16 cy to 20 cy	25	75,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	120
Clamshell - 20 cy and over	30	90,000	0.05	70	0.072	0.039	60	0.062	0.033	22	24	130
All Other Types (Bucket or Dipper)	25	90,000	0.10	70	0.072	0.039	60	0.062	0.033	22	24	120
Barge Mounted Crane with Clamshell Bucket Non - Dredging												
Clamshell - under 6 cy	9	18,000	0.05	55	0.055	0.031	45	0.045	0.025	22	24	85
Clamshell - 6 cy to 10 cy	14	28,000	0.05	55	0.055	0.031	45	0.045	0.025	22	24	95
Clamshell - 11 cy to 15 cy	21	42,000	0.05	55	0.055	0.031	45	0.045	0.025	22	24	105
Barge Mounted Lifting Crane												
25 Ton to 75 Ton, 45' Boom	9	18,000	0.05	40	0.040	0.022	30	0.030	0.017	22	24	80
75 Ton to 125 Ton, 60' Boom	14	28,000	0.05	40	0.040	0.022	30	0.030	0.017	22	24	90
Over 125 Ton, over 60' Boom	21	42,000	0.05	40	0.040	0.022	30	0.030	0.017	22	24	100
Barges (Used with Dredging)												
Fuel or Water	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Equipment or Work	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Derrick	20	90,000	0.10	20	0.021	0.011	20	0.021	0.011	18	20	70
Anchor	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Mooring Barge	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	60
Dump Scow	20	90,000	0.05	20	0.021	0.011	20	0.021	0.011	18	20	70

SLV = Salvage Value HPF = Horsepower Factor G = Gas D = Diesel
WLS = Water, Lube and Supplies RPR = Repairs
[1] Sized by the largest bucket used (normally a mud bucket)

Table 4-1. Dredging Plant Cost Factors (Continued)

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
Boats – See Category M10.50												
Tugs and Tenders (Used with Dredging)												
Under 500 hp	8	18,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	80
501 through 1,000 hp	10	40,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	90
1,001 through 2,000 hp	15	55,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	100
2,001 through 3,000 hp	20	100,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	110
Over 3,000 hp	25	120,000	0.10	80	0.083	0.045	70	0.072	0.039	32	38	120
Pipeline and Accessories (Inland Environment)												
Metal Pipeline (under 20 inch)												
Pumping Mud	2	9,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1	4,500	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.3	1,500	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Joints	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	30
Pontoons/Floats	12	60,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Metal Pipeline (20 inch and Larger)												
Pumping Mud	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1.5	6,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.5	2,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Joints	3	12,00	0.10	0	0.000	0.000	0	0.000	0.000	0	0	30
Pontoons/Floats	12	60,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5

SLV = Salvage Value HPF = Horsepower Factor G = Gas D = Diesel
WLS = Water, Lube and Supplies RPR = Repairs

Table 4-1. Dredging Plant Cost Factors (Continued)

Type of Plant	Useful Life	Physical Life	Salvage Value	Prime Engine Fuel Factor			Secondary Engine Fuel Factor			WLS %		RPR %
	YRS	HR	SLV	HPF	G	D	HPF	G	D	G	D	
Pipeline and Accessories (Ocean Environment)												
Metal Pipeline (All sizes)												
Pumping Mud	2	9,000	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1	4,500	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.3	1,500	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Joints	1	4,500	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Pontoons/Floats	2	9,000	0.40	0	0.000	0.000	0	0.000	0.000	0	0	5
Metal Pipeline On-Shore												
Pumping Mud	3	12,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Sand	1.5	6,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5
Pumping Rock (Gravel)	0.5	2,000	0.10	0	0.000	0.000	0	0.000	0.000	0	0	5

Standby Calculation: Standby for pipeline and accessories shall be based on pumping mud.

SLV = Salvage Value HPF = Horsepower Factor G = Gas D = Diesel
WLS = Water, Lube and Supplies RPR = Repairs

Example: *The piece of equipment shown is based on a known piece of equipment for illustration purposes only.*

USE THIS WORKSHEET TO COMPUTE A MONTHLY AND HOURLY RATE FOR MARINE AND DREDGING PLANT

Region 12 **ID No:** _____

1. MARINE AND DREDGING PLANT INFORMATION AND EXPENSE FACTORS

a.	Plant Pertinent Data:	
(1)	Equipment Description:	24" Hydraulic Cutter Suction Dredge
(2)	Model and Series:	Ellicott Series 4900 Super Dragon
(3)	Present Year or Year of Use:	2007
(4)	Acquisition Year:	1991
(5)	Horsepower (hp) - Prime	3,730 hp
(6)	Horsepower (hp) - Secondary Engine (s):	
	(a) Electrical Generators	200 hp
	(b) Hydraulic System	1,325 hp
	(c) Cutter Head Drive	750 hp
	(d) Hydraulic Water Jet	200 hp
	Total Secondary hp	**2,475 hp**
(7)	Plant Value:	
	(a) Acquisition Costs	$3,700,000
	(b) Capital Improvements	$0
	Total Plant Value	**$3,700,000**
(8)	Hours Worked per Month (Effective Time)	500 hrs/mo
(9)	Additive Item(s) (Monthly Costs To be Estimated)	
	(a) Excessive Dredge Wear (Gravel)	$8,000 /mo
	(b)	$0 /mo
	(c)	$0 /mo
	(d)	$0 /mo
	(e)	$0 /mo
	Total Additive Items	**$8,000 /mo**
b.	Appendix B, Area Factors Data	
(1)	Labor Adjustment Factor (LAF)	1.1
(2)	Fuel type	Marine Diesel
	Fuel Cost Per Gallon	$2.50
(3)	Cost of Money Rate (undiscounted)	5.25%
(4)	Cost of Money Rate (discounted)	4.20%
c.	Appendix E, Economic Index Data (EK 105)	
(1)	Economic Index, Acquisition Year	4438
(2)	Economic Index, Present Year or Year of Use	7221

Input data, methodology and notes used in the following sections of this form are or have reference to EP 1110-1-8, CONSTRUCTION EQUIPMENT OWNERSHIP AND EXPENSE SCHEDULE (see chapter 4).

Figure 4-2. Dredging Plant Ownership and Operating Rate Worksheet **Page 1 of 4**

Region 12

1. MARINE AND DREDGING PLANT INFORMATION AND EXPENSE FACTORS (Continued)

d. Figure 4-1, Available Time to Dredge By Region Data (See Chapter 4, paragraph 4.3 for guidance)

(1) Months Available Per Year *(9 months is used for this example)* — 9 months/yr

e. Table 4-1, Dredging Plant Cost Factors Data

(1)	Useful Life (in Years) for Ownership (N)	25 yrs
(2)	Physical Life (in Hours) for Repairs	130,000 hrs
(3)	SLV (Salvage Value Factor)	0.10
(4)	Prime Engine Fuel Factor (gal/bhp-hr)	0.045
(5)	Secondary Engine Fuel Factor (gal/bhp-hr)	0.039
(6)	WLS (Water, Lube & Supplies Factor) percent	22%
(7)	RPR (Repair Cost Factor)	1.30

2. ANNUAL OWNERSHIP PERCENTAGE FACTORS

a. Depreciation Percent Per Year (DEPR)

(1.0 - SLV)	/	(N)		
1.e.(3)		1.e.(1)		
(1.0 - 0.10)	/	(25 yrs)	=	3.60% /yr

b. Facilities Capital Cost of Money Percent Per Year (FCCM)

[(N-1)	x	(1+SLV)+2]	x	(Discounted Money Rate)	/	2N		
1.e.(1)		1.e.(3)		[Appendix B]		1.e.(1)		
[(25-1)	x	(1+ 0.10) + 2]	x	(4.200%)	/	50.00	=	2.39% /yr

c. Total Ownership Percent Per Year (DEPR + FCCM) = **5.99% /yr**

3. OWNERSHIP COSTS

a. Ownership per Year

[Plant Value	x	Total Ownership Percent Per Year (DEPR + FCCM)		
1.a.(7)(a)		2.c.		
[$3,700,000	x	(5.99%)]	=	$221,630.00 /yr

b. Monthly Ownership Expense

(Ownership per Year	/	Months Available per Year)		
3.a.		1.d.(1)		
($221,630.00 /yr	/	9 months/yr)	rounded =	$24,626.00 /mo

Figure 4-2. Dredging Plant Ownership and Operating Rate Worksheet **Page 2 of 4**

Region 12

4. OPERATING COSTS

a. Fuel Cost

(1) Prime Engine Fuel

(Fuel Factor)	x	(HP)	x	(Fuel Cost per Gallon)		
1.e.(4)		1.a.(5)		1.b.(2)		
(0.045 gal/bhp-hr)	x	(3,730)	x	($2.50)	=	$419.63 /hr

(2) Secondary Engine Fuel

(Fuel Factor)	x	(HP)	x	(Fuel Cost per Gallon)		
1.e.(5)		1.a.(6)		1.b.(2)		
(0.039 gal/bhp-hr)	x	(2,475)	x	($2.50)	=	$241.31 /hr

(3) Total Fuel (Prime Engine Fuel + Secondary Engine Fuel) = $660.94 /hr

b. Water, Lube, and Supply (WLS) Cost

(1) Prime Engine WLS

(WLS Factor)	x	(Hourly Fuel Cost)		
1.e.(6)		4.a.(1)		
(0.22)	x	($419.63 /hr)	=	$92.32 /hr

(2) Secondary Engine WLS

(WLS Factor)	x	(Hourly Fuel Cost)		
1.e.(6)		4.a.(2)		
(0.22)	x	($241.31 /hr)	=	$53.09 /hr

(3) Total Fuel (Prime Engine WLS + Secondary Engine WLS) = $145.41 /hr

c. Repair Cost

(1) Economic Adjustment Factor (EAF)

(Economic Index for Present Year or Year of Use)	/	(Economic Index for Acquisition Year)		
1.c.(2)		1.c.(1)		
(7221)	/	(4438)	=	1.627

(2) Repair Cost

(Total Plant Value)	x	(RPR)	x	EAF	x	LAF	/	Life in Hrs		
1.a.(7)		1.e.(7)		4.c.(1)		1.b.(1)		1.e.(2)		
($3,700,000)	x	(1.30)	x	(1.627)	x	(1.1)	/	(130,000)	=	$66.22 /hr

Figure 4-2. Dredging Plant Ownership and Operating Rate Worksheet **Page 3 of 4**

Region 12

4. OPERATING COSTS (Continued)

d. Total Hourly Operating Cost (Fuel + WLS + Repairs)

(Fuel	+	WLS	+	Repairs)		
4.a.(3)		4.b.(3)		4.c.(2)		
($660.94 /hr	+	$145.41 /hr	+	$66.22 /hr)	=	**$872.57 /hr**

e. Monthly Operating Cost

(Total Hourly Operating Cost)	x	(Hrs Worked per Mo)			
4.d.		1.a.(8)			
($872.57 /hr)	x	(500 hrs/mo)	rounded	=	$436,285.00 /mo

5. TOTAL MONTHLY RATE

a. Ownership (3.b.)	=	$24,626.00 /mo
b. Operating (4.e.)	=	$436,285.00 /mo
c. Total Estimated Additive Items (1.a.(9)):	=	$8,000.00 /mo
d. TOTAL MONTHLY RATE	=	**$468,911.00 /mo**

6. STANDYBY ALLOWANCE

a. Standard Hourly Standby Expense

(Monthly Ownership Expense	/	Maximum hrs/mo = 30.4 days/mo x 24 hrs/day)		
3.b.				
($24,626.00 /mo	/	730 hrs/mo)	=	**$33.73 /hr**

b. Generator Fuel Allowance for Dredge *(An additional generator fuel allowance may be allowed under certain circumstances. This allowance is applicable to dredges only.)*

((Generator HP	/	Total Secondary HP)	x	Secondary Fuel Cost)		
1.a.(6)		1.a.		4.a.(2)		
((200 hp	/	2,475 hp)	x	$241.31)	=	**$19.50 /hr**

c. TOTAL HOURLY STANDBY ALLOWANCE FOR DREDGE

(Standard Hourly Standby Expense	+	Generator Fuel Allowance)		
6.a.		6.b.		
($33.73 /hr	+	$19.50 /hr)	=	**$53.23 /hr**

Figure 4-2. Dredging Plant Ownership and Operating Rate Worksheet **Page 4 of 4**

APPENDIX A REFERENCES

Section I:	Required Publications
Section II:	Related Publications
Section III.	EFAR Reference
Section IV:	Government Bookstores

Sample Equipment Rate Computation Worksheet

APPENDIX A

REFERENCES

SECTION I: REQUIRED PUBLICATIONS

Public Law 92-41. *The Renegotiation Act of 1971* [PL 92-41 (85 Stat. 97)].

Federal Acquisition Regulation 15.400. *Contract Pricing*, Government Printing Office, Washington, DC.

_____. 30.101. *Cost Accounting Standards*, Part 30, Government Printing Office, Washington, DC.

_____. 31.105. *Construction and Architect-Engineer Contracts*, Government Printing Office, Washington, DC.

_____. 31.205-10. *Cost of Money*, Government Printing Office, Washington, DC.

_____. 31.205-36. *Rental Costs,* Government Printing Office, Washington, DC.

_____. 49.000. *Termination of Contracts,* Government Printing Office, Washington, DC.

_____. 52.230-2. *Cost Accounting Standards*, Government Printing Office, Washington, DC.

Engineer Federal Acquisition Regulation Supplement (EFARS). 31.105 *Construction and Architect-Engineer Contracts*, Regulation Supplement, Government Printing Office, Washington, DC.

_____. 31.105-100. *Contract Clause*, Government Printing Office, Washington, DC.

Engineer Regulation 1110-2-1302. 1994. *Engineering and Design - Civil Works Cost Engineering*, U.S. Army Corps of Engineers.

U.S. Department of Labor, Bureau of Labor Statistics. *Producer Prices and Price Indexes,* Government Printing Office, Washington, DC.

FAR 31.105(d)(2)(i).

SECTION II: RELATED PUBLICATIONS

_____. 2000. *Caterpillar Performance Handbook*, 31st ed, Peoria, Illinois.

_____. 2001. *Caterpillar Performance Handbook*, 32nd ed, Peoria, Illinois.

_____. 2004. *Caterpillar Performance Handbook*, 34th ed, Peoria, Illinois.

_____. 2005. *Caterpillar Performance Handbook*, 35th ed, Peoria, Illinois.

_____. 2006. *Caterpillar Performance Handbook*, 36th ed, Peoria, Illinois.

Caterpillar Tractor Company, *Fundamentals of Earthmoving*, Peoria, Illinois, 1975.

Energy Information Administration, Official Energy Statistics from the U.S. Government. *Electric Power Monthly*, Washington, DC.

_____. *Petroleum Marketing Monthly*, Washington, DC.

Equipment Watch. 2006. *Green Guide for Off-Highway Trucks and Trailers*, San Jose, California.

_____. 2006. *Green Guide Volume I*, San Jose, California.

_____. 2006. *Green Guide Volume II*, San Jose, California.

_____. 2006. *Contractor's Equipment Cost Guide*.

_____. 2006. *Cost Reference Guide*.

Euclid, Inc. 1982. *Euclid Hauler Handbook*, 15th ed, Cleveland, Ohio.

Fiat-Allis Construction Machinery, Inc. 1983. *Owning and Operating Costs*, Springfield, Illinois.

Goodyear Tire and Rubber Company. 2006. *Bulletin B300*, Akron, Ohio.

International Harvester, Pay Line Division. 1975. *Earthmoving Principles*, Schaumburg, Illinois.

Koehring Company. 1981. *Application Manual for Hydraulic Excavators and Shovels*, 1st ed, Milwaukee, Wisconsin.

Nichols, H L Jr. 2005. *Moving the Earth*, 5th ed, McGraw-Hill Professional; 5 edition (March 28, 2005).

R S Means Company, Inc. 2007. *Labor Rates for the Construction Industry*, 34th ed., Kingston, Massachusetts.

Terex Corporation. 1981. *Production and Cost Estimating of Material Movement with Earthmoving Equipment*, Hudson, Ohio.

SECTION III: EFAR REFERENCE

EFARS PART 31
CONTRACT COST PRINCIPLE AND PROCEDURES

EAC 95-6

SUBPART 31.1 -- APPLICABILITY

31.105 Construction and Architect-Engineer Contracts.

(d)(2)(i)(b) In this case, equipment ownership and operating costs shall be determined using the Construction Equipment Ownership and Operating Expense Schedule published by the U.S. Army Corps of Engineers.

31.105-100 Contract Clause.

The contracting officer shall insert the statement at 52.231-5000 in all solicitations and contracts for construction within the United States that are expected to exceed the small purchase threshold.

EFARS Clause - 52.231-5000 Equipment Ownership and Operating Expense Schedule.

As prescribed in 31.105-100, insert the following clause in all solicitations and contracts for construction that are expected to exceed the small purchase threshold.

EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995) – EFARS.

(a) This clause does not apply to terminations. See 52.249-5000, *Basis for Settlement of Proposals*, and FAR Part 49, *Termination of Contracts*.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, *Construction Equipment Ownership and Operating Expense Schedule,* Region *[Insert roman numeral for the appropriate region of the schedule].* Working conditions shall be considered to

SECTION III: EFAR REFERENCE (Continued)

be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105, *Construction and Architect-Engineer Contract,* and FAR 31.205-36, *Rental Costs*. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment or unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

SECTION IV. GOVERNMENT BOOKSTORES

U.S. Government periodicals are sold by the Office of the Superintendent of Documents. Orders may be placed by telephone or fax (Visa/Mastercard is accepted). Telephone: toll free 866-512-1800 (D.C. area: 202-512-1800). Fax: 202-512-2104.

Orders may also be placed electronically at Internet address http://bookstore.gpo.gov/.

RETURN POLICY: Publications are not accepted for exchange or credit unless an error was made in filling your order.

When ordering, please give the following information:

Title of Publication:	EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule
Region:	Region I through XII
Volume No.	Volume No. 1 through No. 12
Media:	CD-ROM

Use this worksheet to compute rates for equipment that is not in this pamphlet.

1. **EQUIPMENT INFORMATION AND EXPENSE FACTORS**

ID No.: _____

a. Equipment Specification Data:
   (1) Equipment Description: _____
   (2) Model and Series: _____
   (3) Year of Use: _____
   (4) Year Manufactured: _____
   (5) Horsepower - Equipment: _____
   (6) Horsepower - Carrier: _____
   (7) Fuel type: - Equipment: gas/diesel off-road/diesel on-road/electric/air _____
   - Carrier: gas/diesel off-road/diesel on-road/electric/air _____
   (8) Shipping Weight (cwt): _____
   (9) Tire size and number of tires: (Cost of tires based on year of use – see 1.a.(3) and appendix F)

	No.	Size/Ply	Unit Price	Cost
(a) Front (FT):	_____	_____	$_____	$_____
(b) Drive (DT):	_____	_____	$_____	$_____
(c) Trailing (TT):	_____	_____	$_____	$_____
(d) Total Tire Cost:				$_____

USE APPENDIX D TO COMPLETE THE FOLLOWING DATA:

b. Category and Subcategory Number: _____
c. Hourly Expense Calculation Factors:
   (1) Economic Key (EK): _____
   (2) Condition (C): _____ Average or Severe or Difficult
   (3) Discount Code (DC): B = 7.5% (0.075) – or – S = 15.0% (0.15) _____
   (4) Life in Hours (LIFE): _____
   (5) Salvage Value Percentage (SLV): _____
   (6) Fuel Factor – Equipment [Electric (E) Gas (G) Diesel (D)]: _____
   (7) Fuel Factor – Carrier (E G D): _____
   (8) Filters, Oil, and Grease (FOG) Factor (E G D): _____
   (9) Tire Wear Factor:
      (a) Front (FT): _____
      (b) Drive (DT): _____
      (c) Trailing (TT): _____
   (10) Repair Cost Factor (RCF): _____

Page 1 of 6

Equipment Rate Computation Worksheet (copy as needed).

2. **EQUIPMENT VALUE**

a. List Price + Accessories: *[at Year of Manufacture]* =$_____

(1) Discount: (List Price + Accessories) x (Discount Code)
[1.c.(3)]

($_____ + $_____) x (_____) =-($_____

(2) Subtotal [2.a.] – [2.a.(1)] Subtotal=$_____

(3) Sales or Import Tax: (Subtotal) x (Tax Rate)
[2.a.(2)] [Appendix B]

($_____) x (_____) =+$_____

(4) Total Discounted Price: Subtotal: [2.a.(2)] + [2.a.(3)] Subtotal=$_____

b. Freight: (Shipping Weight) x (Freight Rate per cwt)
[1.a.(8)] [Appendix B]

(_____cwt) x ($_____/cwt) =+$_____

c. **TOTAL EQUIPOMENT VALUE (TEV):** **TOTAL[2.]:=$_____**
[(2.a.(4)] + [(2.b)]
(See chapter 3 for used and overage equipment rate adjustments.)

3. **DEPRECIATION PERIOD (N)**

a. (LIFE hours (hr)) / (Working Hours Per Year (WHPY)) = N
[1.c.(4)] [Appendix B]

(_____hr) / (_____hr/yr) =_____

4. **OWNERSHIP COST**

a. Depreciation

(1) Tire Cost Index (TCI):
(Tire Index, Yr of Mfg) / (Tire Index, Based on 1.a.(3)) =___Tire Cost Index (TCI)
[Appendix E, EK=100] [Appendix E, EK=100]

(_____) / (_____) =_____(TCI)

(2) [(TEV) x [1.0 - (SLV)] - [(TCI) x (Tire Cost)]] / (LIFE)
[2.c.] [1.c.(5)] [4.a.(1)] [1.a.(9)(d)] [1.c.(4)]

[($_____) x [1.0 – (_____)] – [(_____) x ($_____)]] / (_____hr)

=$_____/hr

Page 2 of 6

Equipment Rate Computation Worksheet (copy as needed).

4. **OWNERSHIP COST (Continued)**

b. Facilities Capital Cost of Money (FCCM):

(1) [[(N) - 1.0] x [1.0 + (SLV)] + 2.0] / [2.0x (N)] = Avg Value Factor
[3.a.] [1.c.5.] [3.a.] (AVF)

[[(_____yr) – 1.0] x [1.0 + (_____)] + 2.0] / [2.0 x (_____yr)]

=_____ (AVF)

(2) (TEV) x (AVF) x (Adjusted Cost - of - Money) / (WHPY)
[2.c] [4.b.(1)] [Appendix B] [Appendix B]

($_____) x (_____) x (_____) / (_____hr/yr)
=$_____ /hr

c. **TOTAL HOURLY OWNERSHIP COST: TOTAL [4.]:** **=$_____** /hr
[4.a.(2)] + [4.b.(2)]

5. **OPERATING COST**

a. Fuel Costs:

(1) Equipment:

(Fuel Factor x (Horsepower (hp)) x (Fuel Cost Per Gallon (gal))
[1.c.(6)] [1.a.(5)] [Appendix B]

(_____) x (_____hp) x ($_____/ gal) =$_____ /hr

(2) Carrier:

(Fuel Factor) x (Horsepower) x (Fuel Cost Per Gallon)
[1.c.(7)] [1.a.(6)] [Appendix B]

(_____) x (_____hp) x ($_____/gal) =$_____/hr

(3) Total Hourly Fuel Cost: **Total [5.a.]** =$_____/hr
[(5.a.(1)] + [5.a.(2)]

b. FOG Cost:

(1) Equipment:

(FOG Factor) x (Equipment Fuel Cost) x (Labor Adjustment Factor (LAF))
[1.c.(8)] [5.a.(1)] [Appendix B]

(_____) x ($_____/hr) x (_____) =$_____/hr

Page 3 of 6

Equipment Rate Computation Worksheet (copy as needed).

5. **OPERATING COST (Continued)**

(2) Carrier:

(FOG Factor) x (Carrier Fuel Cost) x (LAF)
[1.c.(8)] [5.a.(2) [Appendix B]

(_____) x ($_____/hr) x (_____) =$_____ /hr

(3) Total Hourly FOG Cost: **Total [5.b.]** =$_____ /hr
[(5.b.(1)] + [5.b.(2)]

c. Alternative Fuel/FOG Cost: **Total [5.c.]** =$_____ /hr

(See chapter 2, paragraph 24.d. for guidance on when to use.)

d. Repair Cost:

(1) Economic Adjustment Factor (EAF):
(EK is from [1.c.(1)])

(Economic Index for Year 1.a.(3)) / (Economic Index for Year 1.a.(4))
[Appendix E] [Appendix E]

(_____) / (_____) =_____ (EAF)

(See table 3-1 for last year of economic life.)

(2) Repair Factor (RF):

(RCF) x (EAF) x (LAF) =___Repair Factor (RF)
[1.c.(10)] [5.d.(1)] [Appendix B]

(_____) x (_____) x (_____) =_____ (RF)

(3) Repair Cost:

[(TEV) - [(TCI) x (Tire Cost)]] x (RF) / (LIFE)
[2.c.] [4.a.(1)] [1.a.(9)(d)] [5.d.(2)] [1.c.(4)]

[($_____) – [(_____) x ($_____)]] x (_____) / (_____)

(4) Total Hourly Repair Cost: **Total [5.d.]** =$_____ /hr

Page 4 of 6

Equipment Rate Computation Worksheet (copy as needed).

5. **OPERATING COST (Continued)**

e. Tire Wear Cost: (Use current price levels. See Appendix F)

(1) Front Tires (FT):

[1.5 x (FT Cost)] / [1.8 x (FT Wear Factor) x (Maximum Tire Life Hours)]
[1.a.(9)(a)] [1.c.(9)(a)] [Appendix G]

[1.5 x ($_____)] / [1.8 x (_____) x (_____/hr)]

=$_____ /hr

(2) Drive Tires (DT):

[1.5 x (DT Cost)] / [1.8 x (DT Wear Factor) x (Maximum Tire Life Hours)]
[1.a.(9)(b)] [1.c.(9)(b)] [Appendix G]

[1.5 x ($_____)] / [1.8 x (_____) x (_____/hr)]

=$_____ /hr

(3) Trailing Tires (TT):

[1.5 x (TT Cost)] / [1.8 x (TT Wear Factor) x (Maximum Tire Life Hours)]
[1.a.(9)(c)] [1.c.(9)(c)] [Appendix G]

[1.5 x ($_____)] / [1.8 x (_____) x (_____/hr)]

=$_____ /hr

(4) Total Tire Wear Cost: **Total [5.e.]** =$_____ /hr
[Sum 5.e.(1) through 5.e.(3)]

f. Tire Repair Cost:

(Total Tire Wear Cost) x 0.15 x (LAF)
[5.e.(4)] [Appendix B]

($_____/hr) x 0.15 x (_____) **Total [5.f.]** =$_____ /hr

g. **TOTAL HOURLY OPERATING COST:** **TOTAL [5.] =$_____ /hr**
[Sum 5.a. through 5.f.]

Page 5 of 6

Equipment Rate Computation Worksheet (copy as needed).

6. **HOURLY RATES**

a. Total Hourly Rate: [*based on 40 hours per week (wk)*]

(Ownership Cost) + (Operating Cost)

($_____/hr) + ($_____/hr) =$_____ /hr

b. Other Work Shifts Hourly Rate:
(Refer to Chapter 3, Adjustments to Rates, for methodology.)

[(Depreciation) + [(FCCM) x (40 hr/wk) / (Work hr/wk)] + (Operating Cost)]
[4.a.(2)] [4.b.(2)] (example: 60 hr/wk) [5.g.]

[($_____/hr) + [($_____/hr) x (40 hr/wk) / (_____hr/wk)] + ($_____/hr)]

=$_____ /hr

c. Standby Hourly Rate:

[(Depreciation) x 0.50] + (FCCM)
[4.a.(2)] [4.b.(2)]

[($_____/hr) x 0.50] + ($_____/hr) =$_____ /hr)

See Chapter 3 if rate adjustments are necessary.

Page 6 of 6

Equipment Rate Computation Worksheet (copy as needed).

APPENDIX B AREA FACTORS

APPENDIX B

AREA FACTORS

KWAJALEIN

Region: 12

Total State Sales or Import Tax Rate:	4.40%	
Working Hours Per Year (WHPY):	1,390	hrs/yr
Labor Adjustment Factor (LAF):	1.10	
Electricity Cost Per Kilowatt-Hour:	$0.202	/kW-Hr
Gasoline Cost Per Gallon:	$2.84	/gal
Diesel Cost Per Gallon (Off-Road Use):	$2.34	/gal
Diesel Cost Per Gallon (On-Road Use):	$2.34	/gal
Cost-of-Money Rate (Full Rate):	5.250%	
Cost-of-Money Rate (Adjusted):	4.200%	

Freight Rates

over	0	cwt	thru	240	$27.87
over	240	cwt	thru	300	$27.70
over	300	cwt	thru	400	$23.56
over	400	cwt	thru	500	$20.21
over	500	cwt	thru	700	$12.23
over	700	cwt	thru	800	$10.61
over	800	cwt	thru	99,999	$8.09

APPENDIX B

AREA FACTORS (for all regions)

Below is a listing of all regional area factors for reference only. The area factor's used for this pamphlet are loacted on previous page B-1.

Reg			SST	WHPY	LAF	Elec	Gas	D-Off	D-On	Freight Cost Thru CWT $		Thru CWT $		Thru CWT $		Thru CWT $		Thru CWT $		Thru CWT $		Thru CWT $	
1	NORTHEAST	2007	5.60%	1360	1.18	$0.147	$3.03	$2.33	$2.85	240	$12.35	300	$12.07	400	$10.39	500	$9.36	700	$5.30	800	$5.30	99,999	$7.27
2	MIDEAST	2007	5.40%	1450	1.07	$0.089	$3.03	$2.26	$2.76	240	$7.31	300	$7.32	400	$6.32	500	$5.97	700	$3.56	800	$3.56	99,999	$4.88
3	SOUTHEAST	2007	7.40%	1530	0.83	$0.090	$2.90	$2.26	$2.72	240	$10.26	300	$9.59	400	$8.41	500	$7.64	700	$4.49	800	$4.36	99,999	$4.99
4	NORTHCENTRAL	2007	5.10%	1260	1.08	$0.088	$3.06	$2.35	$2.83	240	$13.74	300	$13.53	400	$11.81	500	$10.48	700	$5.92	800	$5.36	99,999	$4.04
5	MIDWEST	2007	6.70%	1400	1	$0.083	$2.98	$2.31	$2.80	240	$10.65	300	$10.00	400	$8.23	500	$7.51	700	$4.48	800	$4.15	99,999	$3.18
6	SOUTHWEST	2007	7.60%	1590	0.86	$0.102	$3.01	$2.28	$2.71	240	$14.74	300	$14.51	400	$12.25	500	$10.94	700	$5.87	800	$5.39	99,999	$4.17
7	WEST	2007	7.40%	1630	1.17	$0.107	$3.11	$2.43	$2.87	240	$22.36	300	$22.27	400	$18.78	500	$16.17	700	$8.90	800	$7.79	99,999	$5.62
8	NORTHWEST	2007	4.80%	1540	1.06	$0.068	$3.13	$2.30	$2.82	240	$27.58	300	$26.71	400	$22.79	500	$19.45	700	$11.26	800	$9.51	99,999	$6.48
9	ALASKA	2007	1.25%	1040	1.21	$0.148	$3.02	$2.49	$2.81	240	$37.93	300	$37.12	400	$33.03	500	$29.12	700	$20.50	800	$18.63	99,999	$15.34
10	HAWAII	2007	4.40%	1480	1.22	$0.236	$3.46	$2.34	$3.00	240	$100.12	300	$77.63	400	$51.16	500	$48.93	700	$43.16	800	$32.39	99,999	$20.03
11	PUERTO RICO	2007	6.60%	1560	0.74	$0.202	$2.97	$2.28	$2.72	240	$47.05	300	$37.33	400	$25.74	500	$23.70	700	$22.47	800	$19.33	99,999	$16.35
12	KWAJALEIN	2007	4.40%	1390	1.1	$0.202	$2.84	$2.34	$2.34	240	$27.87	300	$27.70	400	$23.56	500	$20.21	700	$12.23	800	$10.61	99,999	$8.09

SST = State Sales tax **WHPY = Work Hours Per Year** **LAF = Labor Adjustment Factor** **Elec = Electricty Cost Per kW-Hr**
Gas = Gasoline Cost per Gal **D-Off = Diesel-Off Road Cost per Gal** **D-On = Diesel-On Road Cost per Gal** **CWT = Hundred Pounds**

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
B25 and B35: Buckets Clamshell or Dragline Depreciation Period:	Working in gravels, silts, and sands at low impact freshwater environment. 8,000 - 10,000 hours	Working in rock, hard digging, high impact, or saltwater environment. 6,500 - 8,000 hours
C80 and C90: Cranes Hydraulic, Truck Mounted Mechanical, Truck Mounted Depreciation Period:	Lift less than rated capacity, intermittent duty. 14,000 - 20,000 hours	Continuous lift near rated capacity, excessive swing, abrasive materials, sloped surfaces, and saltwater environment. 12,000 - 18,000 hours
C85: Cranes Mechanical Dragline, Lifting, or Clamshell Crawler Mounted Depreciation Period:	Gravels, silts, pull, and lift less than rated capacity. 14,000 - 22,000 hours	Highly abrasive materials, impact breakout, continuous load near rated capacity, and saltwater environment. 12,000 - 18,000 hours
G10: Generators Depreciation Period:	Working below rated capacity, good field conditions. 8,000 - 10,000 hours	Working at or above rated capacity, poor field conditions, such as saltwater. 7,000 - 8,000 hours

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
G15: Graders, Motor Depreciation Period:	Haul road maintenance; road construction, ditching; loose fill spreading; landforming, landleveling; summer road maintenance with medium to heavy winter snow removal; and elevating grader use. 14,500 hours	Maintenance of hard-packed roads with embedded rock; heavy fill spreading; ripping scarifying of asphalt or concrete; continuous high load factor; and high impact. 13,500 hours
H25: Hydraulic Excavators Crawler Mounted Depreciation Period:	Mass excavation or trenching where machine digs all the time in natural bed clay soils; some traveling and steady, full throttle operation; and most log loading operations. 8,500 - 19,000 hours	Continuous trenching or truck loading in rock or shot rock soils; large amount of travel over rough ground; machine continuously working on rock floor with constant high load factor and high impact; and saltwater environment. 7,000 – 15,000 hours
H30: Hydraulic Excavators Wheel Mounted Depreciation Period:	Continuous digging in sandy clay/sandy gravel, site development, and lumber yard applications. 8,000 - 10,000 hours	Continuous digging in rock/natural bed clay, high impact, using hammer, and working in forests or quarries. 6,500 - 8,000 hours
H35: Hydraulic Shovels Crawler Mounted (nonelectric)	Continuous loading in well shot rock or fairly tight bank. Good underfoot conditions: dry floor, little	Continuous loading in poorly shot rock, virgin, or lightly blasted tight banks. Adverse underfoot

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
Depreciation Period:	impact, or sliding on undercarriage. 14,000 - 18,000 hours	conditions: rough floors, high impact sliding on undercarriage; and saltwater environment. 12,000 - 16,000 hours
L10: Land Clearing Equipment Depreciation Period:	Working in low impact conditions at or below rated capacity. 10,000 hours	High impact conditions working at or above rated capacity. 7,000 hours
L30: Loaders, Belt (conveyors) Depreciation Period:	Working below rated capacity, with intermittent service. 10,000 hours	Working at or above rated capacity with continuous service. 8,000 hours
L35: Loaders, Front End Crawler Type Depreciation Period:	Bank excavation, intermittent ripping, basement digging of natural bed clays, sands, silts, and gravels; some traveling; and steady full throttle operations. 10,000 hours	Loading shot rock, cobbles, glacial till, and caliche; steel millwork; high density materials in standard bucket; continuous work on rock surfaces; large amount of ripping of tight rock materials; high impact conditions; and saltwater environment. 8,000 hours
L40: Loaders, Front End Wheel Type (does not include	Continuous truck loading from stockpile; low to medium density materials in	Loading shot rock (large loaders); handling high density materials with

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
skid steer and tool carriers) Depreciation Period:	properly sized bucket; hopper charging in low to medium rolling resistance; loading from bank in good digging; and load and carry on poor surfaces and slight adverse grades. 9,250 - 13,500 hours	counterweighted machine; steady loading from very tight banks; continuous work on rough or very soft surfaces; load and carry in hard digging; travel longer distances on poor surfaces with adverse grades and saltwater environment. 8,750 - 12,000 hours
L45 and L50: Loaders with Backhoe Crawler Type and Wheel Type Depreciation Period:	Utility applications in medium to heavy soil; occasional use of constant flow implements and dig depths to 3.05 meters (10 feet). 8,000 hours	Production applications or digging in rock; regular use of constant flow implements; and dig depths over 3.05 meters (10 feet). 6,000 hours
L60: Log Skidders Depreciation Period:	Continuous turning, steady skidding for medium distances with moderate decking. Good underfooting: dry floor with few stumps and gradual rolling terrain. 10,000 hours	Continuous turning, steady skidding for long distances with frequent decking; poor underfoot conditions: wet floor, steep slopes, and numerous stumps; and saltwater environment. 8,000 hours
M10 - .31 and .32: Clamshell dredges < 5 cy Amphibious Excavator	Gravel, silts, breakout force at less than capacity, freshwater conditions.	Rock, abrasive materials, load at rated capacity, saltwater conditions.

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
Depreciation Period:	10,000 - 20,000 hours	9,000 - 18,000 hours
M10 - .51 and .53: Boats, Skiffs, Crew Boats, Work Boats, Survey Boats, and Launches Depreciation Period:	Freshwater applications, light waves, and steady to light use. 16,000 - 18,000 hours	Saltwater use, medium to high waves, heavy use. 13,000 - 15,000 hours
P35: Pipelayers Depreciation Period:	Typical pipelayer use in operating conditions ranging from very good to severe. 14,000 hours	Continuous use in deep mud or water or on rock surfaces. 11,500 hours
R10: Rippers and Bank Slopers Depreciation Period:	Light rock, medium breakout force required. 8,000 hours	Hard rock, excessive wear due to high breakout force. 6,500 hours
S10, S15, S20, and S25: Scrapers Self-Propelled Tractor Drawn Soil Stabilizers Depreciation Period:	Varying loading and haul road conditions; long and short hauls; adverse and favorable grades; some impact; and typical road-building use on a variety of jobs. 10,000 - 15,000 hours	High impact conditions, such as loading ripped rock; overloading, continuous high total resistance conditions; and rough haul roads. 8,000 - 13,500 hours
T15: Tractors Crawler (Dozer)	Production dozing in clays, sands, gravels, and talus rock. Push-loading scrapers, borrow pit ripping,	Heavy rock ripping; tandem ripping; pushloading and dozing in hard rock; work on rock surfaces;

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
Depreciation Period:	most land clearing and skidding applications. Medium impact conditions. Production landfill work. 10,000 - 15,000 hours	continuous high impact conditions; and saltwater environment. 8,000 - 12,500 hours
T20: Tractors Wheel Type (Dozer) Depreciation Period:	Production dozing, push loading in clays, sands, silts, loose gravels; and shovel cleanup. 14,000 hours	Production dozing in rock; push loading in rocky, boulder strewn borrow pits; high impact conditions; and landfill compactor work. 13,000 hours
T30: Trenchers Chain and Wheel Type Depreciation Period:	Working in sands and silts below rated capacity of the machine. 8,000 hours	Working in gravels and abrasive materials at or above the rated capacity of the machine. 6,000 hours
T45 and T50: Truck Trailers Trucks, Highway Depreciation Period:	Varying loading and road conditions; and typical construction use on a variety of jobs. 8,000 - 12,000 hours	Consistently poor road conditions; and oversized loading equipment. 6,500 - 10,000 hours
T55 and T60: Truck, Off-Highway Trucks, Water, Off-Highway (Articulated and Rigid)	Varying load and haul road conditions; high rolling resistance and poor traction during part of the job; some adverse grades; some	Continuous use on very poorly maintained haul roads, high rolling resistance, and poor traction; frequent adverse

APPENDIX C GUIDE FOR SELECTING OPERATING CONDITIONS		
EQUIPMENT TYPE	**AVERAGE**	**SEVERE**
	impact loads; and typical use in road building, dam construction, open-pit mining, *etc*.	grades and high impact loads; and poorly matched loading equipment with continuous overloading.
Depreciation Period:	12,000 - 20,000 hours	10,000 - 18,000 hours
W10 and W15: Wagons Bottom Dump Rear Dump Chapter 1	Varying load and haul road conditions; long and short hauls; high rolling resistance and poor traction during part of the job; some adverse grades; some impact; typical road building use in a variety of jobs; and dam construction, open-pit mining, *etc*.	Continuous use on very poorly maintained haul roads, high rolling resistance, and poor traction; high impact conditions, such as loading ripped rock; frequent adverse grades and high impact loads; and poorly matched loading equipment with continuous overloading.
Depreciation Period:	12,000 hours	10,000 hours

APPENDIX D EQUIPMENT HOURLY CALCULATION FACTORS

APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
A10	0.00	AGGREGATE / CHIP SPREADERS	1																			
A10	0.10	SELF-PROPELLED	10	A	B	8,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.102	.102	0.83	0.72	0.92	0.75
A10	0.20	TOWED & TAILGATE	10	A	B	6,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.73	0.00	0.82	0.60
A15	0.00	AIR COMPRESSORS, PORTABLE	1																			
A15	0.10	ROTARY SCREW	5	A	B	10,000	0.20	75	.750	.068	.036	0	.000	.000	.000	.477	.136	.119	0.66	0.00	0.73	0.75
A15	0.20	SHOP TYPE	5	A	B	12,000	0.15	75	.750	.068	.036	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.65
A20	0.00	AIR HOSE, TOOLS & EQUIPMENT	1																			
A20	0.10	AIR DRILL HOSE	5	A	B	3,500	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.50
A20	0.20	SANDBLAST HOSE	5	A	B	3,500	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.65
A20	0.30	SANDBLASTERS, BREAKERS, & MISC. AIR TOOLS	5	A	B	6,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.96	0.84	1.07	1.50
A25	0.00	ASPHALT PAVING DISTRIBUTORS	10	A	B	6,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	0.96	0.63	1.07	0.85
A30	0.00	ASPHALT PAVERS & MISCELLANEOUS ROAD EQUIPMENT	1																			
A30	0.10	SELF PROPELLED	10	A	B	8,000	0.15	70	.700	.063	.034	0	.000	.000	.000	.000	.136	.119	1.08	0.72	1.20	1.00
A30	0.20	TOWED	10	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.00	1.20	0.80
A30	0.30	SLURRY SEAL PAVERS (Cold mix)	10	A	B	12,000	0.20	60	.600	.054	.029	13	.130	.012	.006	.000	.100	.100	1.08	0.71	1.20	0.55
A30	0.40	MISCELLANEOUS ROAD EQUIPMENT	10	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	0.80
A35	0.00	ASPHALT PAVING KETTLES	10	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	0.80
A40	0.00	ASPHALT & CONCRETE MILLERS / PROFILERS / PLANERS / ROTARY GRINDERS	10	A	B	6,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	1.00
A45	0.00	ASPHALT RECYCLERS & SEALERS	10	A	B	5,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	1.08	0.71	1.20	0.90
B10	0.00	BATCH PLANTS, ASPHALT & CONCRETE	1																			
B10	0.10	ASPHALT	10	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.72	1.20	1.00
B10	0.20	CONCRETE	10	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.71	1.20	1.00
B10	0.30	PUGMILL	10	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.71	1.20	1.00
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	95	A	B	8,000	0.10	65	.650	.059	.031	13	.130	.012	.006	.000	.102	.119	0.96	0.63	1.07	0.80
B20	0.00	BRUSH CHIPPERS	95	A	B	8,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	0.00	0.00	0.92	0.90
B25	0.00	BUCKETS, CLAMSHELL	15	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B25	0.00	BUCKETS, CLAMSHELL	15	S	B	6,500	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80

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SLV=Salvage Value
HPF=Horsepower Factor

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
B30	0.00	BUCKETS, CONCRETE	1																			
B30	0.10	GENERAL PURPOSE, MANUAL TRIP	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B30	0.20	LAYDOWN	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.75
B30	0.30	LOWBOY	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B30	0.40	LOW SLUMP	15	A	B	8,000	0.05	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B35	0.00	BUCKETS, DRAGLINE	1																			
B35	0.10	LIGHT WEIGHT	15	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B35	0.10	LIGHT WEIGHT	15	S	B	6,500	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B35	0.20	MEDIUM WEIGHT	15	A	B	9,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B35	0.20	MEDIUM WEIGHT	15	S	B	7,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
B35	0.30	HEAVY WEIGHT	15	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
B35	0.30	HEAVY WEIGHT	15	S	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
C05	0.00	CHAIN SAWS	95	A	B	2,000	0.10	90	.900	.081	.043	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	2.50
C10	0.00	COMPACTORS, WALK-BEHIND OR REMOTE CONTROLLER	1																			
C10	0.10	COMPACTORS, RAMMERS / TAMPERS & VIBRATORY PLATES	95	A	B	4,000	0.05	90	.900	.081	.043	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.20
C10	0.20	ROLLERS, VIBRATORY	95	A	B	4,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.20
C15	0.00	CONCRETE CLEANERS / ABRASIVE BLASTERS	1	A																		
C15	0.10	WALK BEHIND	95	A	B	4,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.90
C15	0.20	TRUCK/TRAILER MOUNTED	95	A	B	8,000	0.20	95	.950	.086	.045	50	.500	.045	.024	.000	.136	.119	0.72	0.66	0.79	0.90
C20	0.00	CONCRETE BUGGIES	95	A	B	4,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.96	0.63	1.07	0.70
C25	0.00	CONCRETE FINISHERS/SCREEDS/SPREADERS	1																			
C25	0.10	FINISHERS/TROWELS	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.80
C25	0.20	VIBRATORY SCREED	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.96	0.84	1.07	0.80
C25	0.25	VIBRATORY LASER SCREED	95	A	B	8,000	0.30	65	.000	.059	.031	0	.000	.000	.000	.000	.180	.160	0.96	0.84	1.07	0.60
C25	0.30	MATERIAL/TOPPING SPREADERS	95	A	B	8,000	0.30	65	.000	.059	.031	0	.000	.000	.000	.000	.180	.160	0.96	0.84	1.07	0.60
C30	0.00	CONCRETE GRINDERS	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.90
C35	0.00	CONCRETE GUNITERS / SHOTCRETERS	95	A	B	7,000	0.25	75	.750	.068	.036	0	.000	.000	.000	.477	.136	.119	0.96	0.86	1.07	0.90

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
C40	0.00	CONCRETE MIXING UNITS	95	A	B	5,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.92	0.80
C45	0.00	CONCRETE PAVING MACHINES	10	A	B	6,000	0.20	75	.750	.068	.036	0	.000	.000	.000	.000	.136	.119	1.08	0.72	1.20	1.00
C55	0.00	CONCRETE PUMPS	95	A	B	8,000	0.10	70	.700	.063	.034	10	.100	.009	.005	.477	.136	.119	0.96	0.86	1.07	1.00
C60	0.00	CONCRETE SAWS (Add cost for sawblade wear)	95	A	B	6,000	0.10	90	.900	.081	.043	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	1.00
C65	0.00	CONCRETE VIBRATORS	5	A	B	4,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	2.50
C70	0.00	CRANES, GANTRY & STRADDLE	1																			
C75	0.00	CRANES, HYDRAULIC, SELF-PROPELLED	20	A	B	14,000	0.15	75	.750	.068	.036	0	.000	.000	.000	.000	.136	.127	0.66	0.59	0.73	0.80
C80	0.00	CRANES, HYDRAULIC, TRUCK MOUNTED	1																			
C80	0.01	UNDER 26 TON	20	A	B	14,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.161	.153	0.66	0.58	0.73	0.60
C80	0.01	UNDER 26 TON	20	S	B	12,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.161	.153	0.18	0.14	0.20	0.65
C80	0.02	26 TON THRU 65 TON	20	A	B	16,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.70
C80	0.02	26 TON THRU 65 TON	20	S	B	14,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.75
C80	0.03	66 TON THRU 125 TON	20	A	B	18,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.80
C80	0.03	66 TON THRU 125 TON	20	S	B	16,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.85
C80	0.04	OVER 125 TON	20	A	B	20,000	0.15	65	.650	.059	.031	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.90
C80	0.04	OVER 125 TON	20	S	B	18,000	0.15	85	.850	.077	.041	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.95
C85	0.00	CRANES, MECHANICAL, LATTICE BOOM, CRAWLER MOUNTED	1																			
C85	0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	20	A	B	14,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.80
C85	0.11	DRAGLINE, CLAMSHELL, 0 THRU 1.0 CY	20	S	B	12,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.90
C85	0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	20	A	B	16,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.144	.144	0.00	0.00	0.00	0.85
C85	0.12	DRAGLINE, CLAMSHELL, OVER 1.0 CY THRU 2.5 CY	20	S	B	13,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.144	.144	0.00	0.00	0.00	0.95
C85	0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	20	A	B	18,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	0.95
C85	0.13	DRAGLINE, CLAMSHELL, OVER 2.5 CY THRU 5.0 CY	20	S	B	15,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	1.05
C85	0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	20	A	B	20,000	0.20	55	.550	.050	.026	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	1.05
C85	0.14	DRAGLINE, CLAMSHELL, OVER 5.0 CY	20	S	B	16,000	0.20	72	.720	.065	.034	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	1.15

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EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
C85	0.21	LIFTING, 0 THRU 25 TON	20	A	B	16,000	0.20	40	.400	.036	.019	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.65
C85	0.21	LIFTING, 0 THRU 25 TON	20	S	B	13,000	0.20	52	.520	.047	.025	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.70
C85	0.22	LIFTING, 26 TON THRU 50 TON	20	A	B	18,000	0.20	40	.400	.036	.019	0	.000	.000	.000	.000	.085	.085	0.00	0.00	0.00	0.75
C85	0.22	LIFTING, 26 TON THRU 50 TON	20	S	B	15,000	0.20	52	.520	.047	.025	0	.000	.000	.000	.000	.085	.085	0.00	0.00	0.00	0.80
C85	0.23	LIFTING, 51 TON THRU 150 TON	20	A	B	20,000	0.15	40	.400	.036	.019	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	0.85
C85	0.23	LIFTING, 51 TON THRU 150 TON	20	S	B	16,000	0.15	52	.520	.047	.025	0	.000	.000	.000	.000	.093	.093	0.00	0.00	0.00	0.90
C85	0.24	LIFTING, OVER 150 TON	20	A	B	22,000	0.15	40	.400	.036	.019	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.95
C85	0.24	LIFTING, OVER 150 TON	20	S	B	18,000	0.15	52	.520	.047	.025	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	1.00
C90	0.00	CRANES, MECHANICAL, LATTICE BOOM, TRUCK MOUNTED	1																			
C90	0.01	UNDER 26 TON	20	A	B	14,000	0.15	50	.500	.045	.024	10	.100	.009	.005	.000	.161	.153	0.66	0.58	0.73	0.60
C90	0.01	UNDER 26 TON	20	S	B	12,000	0.15	65	.650	.059	.031	13	.130	.012	.006	.000	.161	.153	0.18	0.14	0.20	0.65
C90	0.02	26 TON THRU 65 TON	20	A	B	16,000	0.15	50	.500	.045	.024	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.70
C90	0.02	26 TON THRU 65 TON	20	S	B	14,000	0.15	65	.650	.059	.031	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.75
C90	0.03	66 TON THRU 125 TON	20	A	B	18,000	0.20	50	.500	.045	.024	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.80
C90	0.03	66 TON THRU 125 TON	20	S	B	16,000	0.20	65	.650	.059	.031	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.85
C90	0.04	OVER 125 TON	20	A	B	20,000	0.20	50	.500	.045	.024	10	.100	.009	.005	.000	.127	.110	0.66	0.58	0.73	0.90
C90	0.04	OVER 125 TON	20	S	B	18,000	0.20	65	.650	.059	.031	13	.130	.012	.006	.000	.127	.110	0.18	0.14	0.20	0.95
C95	0.00	CRANES, TOWER	20	A	B	18,000	0.20	65	.650	.059	.031	10	.100	.009	.005	.530	.127	.110	0.00	0.00	0.92	0.85
D10	0.00	DRILLS, AIR/HYDRAULIC,CRWLR MTD,0" THRU 6.5" DIA HOLE (Add cost for drill steel and bit wear)	1																			
D10	0.10	DRILLS, AIR TRACK (Add cost for drill steel and bit wear)	25	A	B	14,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
D10	0.20	DRILLS, HYDRAULIC TRACK (Add cost for drill steel and bit wear)	25	A	B	10,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
D15	0.00	DRILLS, HORIZONTAL BORING & GROUND PIERCING (Add cost for drill steel and bit wear)	25	A	B	10,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.90
D20	0.00	DRILLS, CORE, COLUMN MOUNTED (Add cost for drill steel and bit wear)	25	A	B	8,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.068	.102	0.00	0.00	0.00	0.85

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HPF=Horsepower Factor

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
D25	0.00	DRILLS, CORE & DOWELLING (Add cost for drill steel and bit wear)	25	A	B	10,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.477	.068	.102	0.00	0.00	0.92	1.00
D30	0.00	DRILLS, EARTH / AUGER (Add cost for drill steel and cutting edge wear)	25	A	B	10,000	0.25	80	.800	.072	.038	10	.100	.009	.005	.477	.136	.119	0.96	0.86	1.07	1.00
D35	0.00	DRILLS, ROTARY BLASTHOLE (Add cost for drill steel and bit wear)	1																			
D35	0.11	DIESEL, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	25	A	B	14,000	0.20	80	.800	.072	.038	10	.100	.009	.005	.005	.161	.161	0.00	0.00	0.00	1.00
D35	0.12	DIESEL, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	25	A	B	18,000	0.20	80	.800	.072	.038	10	.100	.009	.005	.011	.136	.136	0.96	0.86	1.07	1.00
D35	0.21	ELECTRIC, 4.5" THRU 9.875" DIAMETER HOLE (Add cost for drill steel and bit wear)	25	A	B	14,000	0.20	70	.700	.063	.034	10	.100	.009	.005	.530	.000	.000	0.00	0.00	0.00	0.55
D35	0.22	ELECTRIC, OVER 9.875" DIAMETER (Add cost for drill steel and bit wear)	25	A	B	18,000	0.20	70	.700	.063	.034	10	.100	.009	.005	.530	.000	.000	0.00	0.00	0.00	0.55
F10	0.00	FORK LIFTS	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.102	.102	0.83	0.46	0.92	0.75
G10	0.00	GENERATOR SETS	1																			
G10	0.10	PORTABLE	30	A	B	8,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.73	0.60
G10	0.10	PORTABLE	30	S	B	7,000	0.10	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.20	0.70
G10	0.20	SKID MOUNTED	30	A	B	10,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.70
G10	0.20	SKID MOUNTED	30	S	B	8,000	0.10	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80
G15	0.00	GRADERS, MOTOR	35	A	B	14,500	0.25	60	.600	.054	.029	0	.000	.000	.000	.000	.085	.144	0.83	0.54	0.92	0.75
G15	0.00	GRADERS, MOTOR	35	S	B	13,500	0.25	78	.780	.070	.037	0	.000	.000	.000	.000	.085	.144	0.27	0.16	0.30	0.85
H10	0.00	HAMMERS, HYDRAULIC (Demolition tool) (Add cost for point wear)	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
H13	0.00	HAZARDOUS/TOXIC WASTE EQUIPMENT	1																			
H13	0.11	COMPACTORS (Compression force) 0 THRU 50 TONS	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	1.08	0.86	1.20	0.80
H13	0.12	COMPACTORS (Compression force) OVER 50 TONS	95	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	1.08	0.86	1.20	0.90
H13	0.21	FILTER PRESSES, STATIONARY	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	0.00	0.00	0.00	0.90
H13	0.22	FILTER PRESSES, MOBILE	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.530	.102	.102	0.66	0.59	0.73	0.80
H13	0.30	CENTRIFUGES	95	A	B	4,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.70

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
H13	0.40	SHREDDERS	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.90
H13	0.51	SOIL TREATMENT PLANT, MOBILE	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.77	0.69	0.86	1.00
H13	0.61	SLUDGE PROCESSING EQUIP, SLUDGE DISPENSERS	95	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
H13	0.71	WASTE HANDLING EQUIPMENT, DRUM HANDLING	95	A	B	4,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	1.00
H15	0.00	HEATERS, SPACE	1																			
H20	0.00	HOISTS & AIR WINCHES	95	A	B	9,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80
H25	0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED	1																			
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	A	B	8,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.70
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	S	B	7,000	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.80
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	65	A	B	8,500	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.70
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	65	S	B	7,000	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.85
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	65	A	B	12,000	0.25	65	.600	.059	.031	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.80
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	65	S	B	10,000	0.25	85	.800	.077	.041	0	.000	.000	.000	.000	.149	.149	0.00	0.00	0.00	0.95
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	65	A	B	16,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.00
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	65	S	B	13,500	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.10
H25	0.14	OVER 160,000 LBS	65	A	B	19,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.10
H25	0.14	OVER 160,000 LBS	65	S	B	15,000	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.25
H25	0.21	ATTACHMENTS, MOBILE SHEARS	95	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.90
H25	0.22	ATTACHMENTS, MATERIAL HANDLING	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.80
H25	0.23	ATTACHMENTS, CONCRETE PULVERIZERS	95	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
H25	0.24	ATTACHMENTS, COMPACTORS	95	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
H30	0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED	1																			
H30	0.01	0 THRU 1.0 CY	65	A	B	8,000	0.25	60	.600	.054	.029	10	.100	.009	.005	.000	.149	.141	0.83	0.54	0.92	0.50
H30	0.01	0 THRU 1.0 CY	65	S	B	6,500	0.25	78	.780	.070	.037	13	.130	.012	.006	.000	.149	.141	0.25	0.15	0.28	0.55
H30	0.02	OVER 1.0 CY	65	A	B	10,000	0.25	60	.600	.054	.029	10	.100	.009	.005	.000	.149	.141	0.83	0.54	0.92	0.60
H30	0.02	OVER 1.0 CY	65	S	B	8,000	0.25	78	.780	.070	.037	13	.130	.012	.006	.000	.149	.141	0.25	0.15	0.28	0.65
H35	0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED	1																			

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APPENDIX D
EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	65	A	B	14,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.00
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	65	S	B	12,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.047	.047	0.00	0.00	0.00	1.10
H35	0.12	DIESEL, OVER 5.0 CY	65	A	B	16,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.20
H35	0.12	DIESEL, OVER 5.0 CY	65	S	B	14,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.051	.051	0.00	0.00	0.00	1.30
H35	0.21	ELECTRIC, OVER 2.5 CY	65	A	B	18,000	0.20	50	.500	.045	.024	0	.000	.000	.000	.265	.000	.000	0.00	0.00	0.00	0.80
H35	0.21	ELECTRIC, OVER 2.5 CY	65	S	B	16,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.265	.000	.000	0.00	0.00	0.00	0.90
L10	0.00	LAND CLEARING EQUIPMENT	70	A	B	10,000	0.20	60	.600	.054	.029	10	.100	.009	.005	.000	.127	.110	0.83	0.54	0.92	0.90
L10	0.00	LAND CLEARING EQUIPMENT	70	S	B	7,000	0.20	78	.780	.070	.037	13	.130	.012	.006	.000	.127	.110	0.25	0.15	0.28	1.00
L15	0.00	LANDSCAPING EQUIPMENT	95	A	B	4,000	0.15	80	.800	.072	.038	13	.130	.012	.006	.477	.102	.102	0.59	0.30	0.66	0.70
L20	0.00	LIGHTING SETS, TRAILER MOUNTED	1																			
L20	0.10	METALLIC VAPOR	95	A	B	8,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.102	0.66	0.58	0.73	1.50
L25	0.00	LINE STRIPING EQUIPMENT	95	A	B	8,000	0.20	85	.850	.077	.041	13	.130	.012	.006	.000	.102	.102	0.66	0.58	0.73	1.20
L30	0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.119	.119	0.66	0.58	0.73	1.00
L30	0.00	LOADERS, BELT (Conveyor belts) & ACCESSORIES	95	S	B	8,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.477	.119	.119	0.21	0.16	0.23	1.10
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	40	A	B	10,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.170	.101	0.00	0.00	0.00	1.10
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	40	S	B	8,000	0.20	91	.910	.082	.044	0	.000	.000	.000	.000	.170	.101	0.00	0.00	0.00	1.25
L40	0.00	LOADERS, FRONT END, WHEEL TYPE	1																			
L40	0.11	ARTICULATED, 0 THRU 225 HP	45	A	B	9,250	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.111	0.83	0.54	0.92	0.70
L40	0.11	ARTICULATED, 0 THRU 225 HP	45	S	B	8,750	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.111	0.25	0.15	0.28	0.80
L40	0.12	ARTICULATED, OVER 225 HP	45	A	B	13,500	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.080	0.83	0.54	0.92	0.70
L40	0.12	ARTICULATED, OVER 225 HP	45	S	B	12,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.080	0.25	0.15	0.28	0.75
L40	0.20	SKID STEER	45	A	B	8,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.170	.111	0.57	0.29	0.63	0.80
L40	0.21	SKID STEER ATTACHMENTS	45	A	B	4,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.170	0.00	0.00	0.00	1.00
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	A	B	10,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.111	0.83	0.54	0.92	0.85
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	S	B	9,250	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.111	0.25	0.15	0.28	0.90
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	A	B	12,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.170	.080	0.83	0.54	0.92	0.85

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CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	S	B	10,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.170	.080	0.25	0.15	0.28	0.90
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	A	B	8,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.441	.524	0.00	0.00	0.00	1.35
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	S	B	6,000	0.20	91	.910	.082	.044	0	.000	.000	.000	.000	.441	.524	0.00	0.00	0.00	1.40
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	45	A	B	10,000	0.25	50	.500	.045	.024	0	.000	.000	.000	.000	.441	.441	0.83	0.54	0.92	0.80
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	45	S	B	6,000	0.25	70	.700	.063	.034	0	.000	.000	.000	.000	.441	.441	0.25	0.15	0.28	0.85
L55	0.00	LOADER / BACKHOE, ATTACHMENTS	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.441	.441	0.00	0.00	0.00	1.00
L60	0.00	LOG SKIDDERS	75	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.83	0.54	0.92	0.70
L60	0.00	LOG SKIDDERS	75	S	B	8,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.119	0.25	0.15	0.28	0.80
M10	0.00	MARINE EQUIPMENT (NON DREDGING)	1																			
M10	0.11	AQUATIC MAINTENANCE	105	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.12	AQUATIC MAINTENANCE ATTACHMENTS	105	A	B	6,000	0.20	80	.800	.072	.038	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.60
M10	0.21	HYDRAULIC CUTTERHEAD DREDGE, 8" OR LESS,TRANSPORTABLE	105	A	B	16,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.22	HYDRAULIC CUTTERHEAD DREDGE,8" - 12",TRANSPORTABLE	105	A	B	16,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.80
M10	0.23	HYDRAULIC AUGERHEAD DREDGE,12" OR LESS,TRANSPORTABLE	105	A	B	16,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.80
M10	0.24	HYDRAULIC FLOATING PUMPS,12" OR LESS,TRANSPORTABLE	105	A	B	8,000	0.10	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.25	HYDRUALIC DREDGE PUMPS,12" OR LESS,TRANSPORTABLE	105	A	B	6,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.70
M10	0.26	HYDRAULIC DREDGE / PUMP ATTACHMENTS	105	A	B	6,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.60
M10	0.31	SMALL MECH DREDGES,CLAMSHELL,BARGE-MTD TO 5 CY	20	A	B	18,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.00
M10	0.31	SMALL MECH DREDGES,CLAMSHELL,BARGE-MTD TO 5 CY	20	S	B	16,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	1.05
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	65	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.161	.161	0.00	0.00	0.00	1.00
M10	0.32	SMALL MECH DREDGES, AMPHIBIOUS EXCAVATORS	65	S	B	9,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.477	.161	.161	0.00	0.00	0.00	1.10

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
M10	0.33	SMALL MECH DREDGES,HOE-MOUNTED DREDGING ATTACH	105	A	B	20,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.90
M10	0.41	WORK FLOATS (NON-DREDGING)	105	A	B	6,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.50
M10	0.42	WORK BARGES (SECTIONAL, NON-DREDGING)	105	A	B	30,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.60
M10	0.45	FLAT-DECK OR CARGO BARGE (NON-DREDGING)	105	A	B	90,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.60
M10	0.46	DUMP SCOW (NON-DREDGING)	105	A	B	90,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.70
M10	0.47	DRILL BARGE (NON-DREDGING)	105	A	B	30,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.70
M10	0.48	ALL OTHER BARGES (NON-DREDGING)	105	A	B	30,000	0.05	20	.000	.018	.010	0	.000	.000	.000	.000	.000	.136	0.00	0.00	0.00	0.70
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	105	A	B	16,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.70
M10	0.51	BOATS & LAUNCHES, 0 THRU 250 HP	105	S	B	13,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.75
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	105	A	B	18,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.80
M10	0.53	BOATS & LAUNCHES, 251 THRU 500 HP	105	S	B	15,000	0.10	85	.850	.077	.041	0	.000	.000	.000	.477	.136	.161	0.00	0.00	0.00	0.85
M10	0.54	TUGS, 501 THRU 1,000 HP	105	A	B	40,000	0.10	60	.600	.054	.029	50	.500	.045	.024	.477	.136	.161	0.00	0.00	0.00	0.90
M10	0.55	TUGS, 1,000 THRU 2,000 HP	105	A	B	55,000	0.10	60	.600	.054	.029	50	.500	.045	.024	.477	.136	.161	0.00	0.00	0.00	1.00
P10	0.00	PILE HAMMER ACCESSORIES - EXTRACTORS & BOX LEADS	50	A	B	6,000	0.35	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.80
P20	0.00	PILE HAMMERS, DOUBLE ACTING	1																			
P20	0.10	DIESEL	50	A	B	6,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.10
P20	0.20	PNUEMATIC (STEAM/AIR)	50	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.10
P25	0.00	PILE HAMMERS, SINGLE ACTING	1																			
P25	0.10	DIESEL	50	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
P25	0.20	PNUEMATIC (STEAM/AIR)	50	A	B	6,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
P30	0.00	PILE HAMMERS, DRIVER/ EXTRACTOR, VIBRATORY	50	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	1.00
P35	0.00	PIPELAYERS	70	A	B	14,000	0.20	35	.350	.032	.017	0	.000	.000	.000	.000	.000	.170	0.00	0.00	0.00	0.95
P35	0.00	PIPELAYERS	70	S	B	11,500	0.20	46	.460	.041	.022	0	.000	.000	.000	.000	.000	.170	0.00	0.00	0.00	1.10
P40	0.00	PLATFORMS & MAN-LIFTS	20	A	B	8,000	0.10	50	.500	.045	.024	50	.500	.045	.024	.477	.136	.119	0.66	0.33	0.73	0.80
P45	0.00	PUMPS, GROUT	95	A	B	8,000	0.15	95	.950	.086	.045	0	.000	.000	.000	.477	.136	.119	0.66	0.59	0.73	1.00
P50	0.00	PUMPS, WATER, CENTRIFUGAL, TRASH	1																			
P50	0.11	ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.66	0.00	0.73	0.90

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
P50	0.12	ELECTRIC DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.66	0.00	0.73	0.50
P50	0.21	WHEEL MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.66	0.00	0.73	0.90
P50	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.66	0.00	0.73	0.50
P50	0.31	HOSES, PUMP, SUCTION & DISCHARGE	95	A	B	4,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.50
P55	0.00	PUMPS, WATER, SUBMERSIBLE	1																			
P55	0.01	ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	1.00
P55	0.02	ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.60
P60	0.00	PUMPS, WATER, CENTRIFUGAL, DEWATERING	1																			
P60	0.11	SKID MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	0.90
P60	0.12	SKID MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.50
P60	0.21	WHEEL MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.73	0.90
P60	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.73	0.50
P65	0.00	PUMPS, WATER, DIAPHRAGM	1																			
P65	0.11	SKID MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	0.90
P65	0.12	SKID MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.50
P65	0.21	WHEEL MOUNTED, ENGINE DRIVE	95	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.73	0.80
P65	0.22	WHEEL MOUNTED, ELECTRIC DRIVE	95	A	B	8,000	0.15	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.73	0.40
P70	0.00	PUMPS, WATER (For core drills)	1																			
P70	0.01	ENGINE DRIVE	95	A	B	8,000	0.25	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.161	0.00	0.00	0.00	0.80
P70	0.02	ELECTRIC DRIVE	95	A	B	8,000	0.25	90	.900	.081	.043	0	.000	.000	.000	.477	.000	.000	0.00	0.00	0.00	0.40
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	70	A	B	8,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.90
R10	0.00	RIPPERS & HYDRAULIC BANK SLOPERS (Add cost for point wear)	70	S	B	6,500	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	1.00
R15	0.00	ROLLERS, STATIC, TOWED, PNEUMATIC	55	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.92	0.70
R20	0.00	ROLLERS, STATIC, TOWED, STEEL DRUM	55	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.92	0.80
R30	0.00	ROLLERS, STATIC, SELF-PROPELLED	1																			
R30	0.01	PNEUMATIC	55	A	B	8,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.83	0.54	0.92	0.70
R30	0.02	SMOOTH DRUM	55	A	B	10,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80

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APPENDIX D
EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
R30	0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	55	A	B	12,000	0.20	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.00	0.00	0.00	0.80
R40	0.00	ROLLERS, VIBRATORY, TOWED	55	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	0.80
R45	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, DOUBLE DRUM	55	A	B	8,000	0.20	90	.900	.081	.043	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.10
R50	0.00	ROLLERS, VIBRATORY, SELF-PROPELLED, SINGLE DRUM	55	A	B	8,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.83	0.54	0.92	1.00
R55	0.00	ROOFING EQUIPMENT	95	A	B	6,000	0.15	60	.600	.054	.029	0	.000	.000	.000	.477	.102	.102	0.97	0.87	1.08	0.80
S10	0.00	SCRAPERS, ELEVATING	1																			
S10	0.01	0 THRU 200 HP	60	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.000	.170	0.84	0.55	0.93	0.90
S10	0.01	0 THRU 200 HP	60	S	B	8,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.000	.170	0.23	0.13	0.25	1.00
S10	0.02	OVER 200 HP	60	A	B	13,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.000	.000	.136	0.84	0.55	0.93	0.95
S10	0.02	OVER 200 HP	60	S	B	11,500	0.25	85	.850	.077	.041	0	.000	.000	.000	.000	.000	.136	0.23	0.13	0.25	1.00
S15	0.00	SCRAPERS, CONVENTIONAL	60	A	B	15,000	0.20	60	.600	.054	.029	0	.000	.000	.000	.000	.000	.136	0.84	0.55	0.93	0.80
S15	0.00	SCRAPERS, CONVENTIONAL	60	S	B	12,500	0.20	78	.780	.070	.037	0	.000	.000	.000	.000	.000	.136	0.23	0.13	0.25	0.85
S20	0.00	SCRAPERS, TANDEM POWERED	60	A	B	15,000	0.20	62	.620	.056	.030	62	.620	.056	.030	.000	.000	.110	0.84	0.55	0.93	0.85
S20	0.00	SCRAPERS, TANDEM POWERED	60	S	B	13,500	0.20	81	.810	.073	.039	81	.810	.073	.039	.000	.000	.110	0.23	0.13	0.25	0.90
S25	0.00	SCRAPERS, TRACTOR DRAWN	60	A	B	12,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.84	0.55	0.93	0.70
S25	0.00	SCRAPERS, TRACTOR DRAWN	60	S	B	10,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.23	0.13	0.25	0.75
S30	0.00	SCREENING & CRUSHING PLANTS	1																			
S30	0.10	CONVEYORS	95	A	B	10,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.70
S30	0.10	CONVEYORS	95	S	B	8,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	0.85
S30	0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	95	A	B	25,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	1.00
S30	0.20	CRUSHERS - VERTICAL & HORIZONTAL SHAFT IMPACTOR	95	S	B	15,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	1.25
S30	0.21	CRUSHERS - CONE	95	A	B	25,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	1.20
S30	0.21	CRUSHERS - CONE	95	S	B	15,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	1.60
S30	0.22	CRUSHERS - JAW	95	A	B	25,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.65
S30	0.22	CRUSHERS - JAW	95	S	B	15,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	0.85

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S30	0.30	SCREENING PLANT	95	A	B	10,000	0.10	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	1.08	0.86	1.20	0.80
S30	0.30	SCREENING PLANT	95	S	B	8,000	0.10	78	.780	.070	.037	0	.000	.000	.000	.577	.163	.142	0.96	0.72	1.07	1.00
S35	0.00	SNOW REMOVAL EQUIPMENT	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.000	.119	0.00	0.00	0.00	0.80
S40	0.00	SOIL & ROAD STABILIZERS	60	A	B	10,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.000	.119	0.84	0.55	0.96	0.85
S40	0.00	SOIL & ROAD STABILIZERS	60	S	B	8,000	0.20	91	.910	.082	.044	0	.000	.000	.000	.000	.000	.119	0.23	0.13	0.25	0.95
S45	0.00	SPLITTERS, ROCK & CONCRETE	95	A	B	6,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.136	0.00	0.00	0.00	1.00
T10	0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	70	A	B	10,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.96	0.80
T10	0.00	TRACTOR BLADES & ATTACHMENTS (including agricultural)	70	S	B	8,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.86	0.90
T15	0.00	TRACTORS, CRAWLER (DOZER) (includes blade)	1																			
T15	0.01	0 THRU 225 HP	70	A	B	10,000	0.30	70	.700	.063	.034	0	.000	.000	.000	.000	.000	.153	0.00	0.00	0.00	1.10
T15	0.01	0 THRU 225 HP	70	S	B	8,000	0.30	91	.910	.082	.044	0	.000	.000	.000	.000	.000	.153	0.00	0.00	0.00	1.25
T15	0.02	226 HP THRU 425 HP	70	A	B	12,500	0.25	70	.700	.063	.034	0	.000	.000	.000	.000	.000	.119	0.00	0.00	0.00	1.20
T15	0.02	226 HP THRU 425 HP	70	S	B	10,500	0.25	91	.910	.082	.044	0	.000	.000	.000	.000	.000	.119	0.00	0.00	0.00	1.25
T15	0.03	OVER 425 HP	70	A	B	15,000	0.20	60	.600	.054	.029	0	.000	.000	.000	.000	.000	.066	0.00	0.00	0.00	1.20
T15	0.03	OVER 425 HP	70	S	B	12,500	0.20	78	.780	.070	.037	0	.000	.000	.000	.000	.000	.066	0.00	0.00	0.00	1.35
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	75	A	B	14,000	0.15	60	.600	.054	.029	0	.000	.000	.000	.000	.102	.119	0.96	0.63	0.00	0.60
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	75	S	B	13,000	0.15	78	.780	.070	.037	0	.000	.000	.000	.000	.102	.119	0.25	0.15	0.00	0.65
T25	0.00	TRACTORS, AGRICULTURAL	1																			
T25	0.10	CRAWLER	75	A	B	10,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.00	0.00	0.00	0.85
T25	0.20	WHEEL	75	A	B	8,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.96	0.73	0.00	0.70
T30	0.00	TRENCHERS, CHAIN TYPE CUTTER	80	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.119	.119	1.08	0.82	0.00	0.90
T30	0.00	TRENCHERS, CHAIN TYPE CUTTER	80	S	B	6,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.119	.119	0.32	0.22	0.00	1.00
T35	0.00	TRENCHERS, WHEEL TYPE CUTTER	80	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.119	.119	1.08	0.82	0.00	0.90
T35	0.00	TRENCHERS, WHEEL TYPE CUTTER	80	S	B	6,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.119	.119	0.32	0.22	0.00	1.00
T40	0.00	TRUCK OPTIONS	1																			
T40	0.10	CRANES / HOISTS, PERSONNEL & MATERIAL HANDLING	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.80

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HPF=Horsepower Factor

E=Electric Powered
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FT=Front Tire
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APPENDIX D
EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
T40	0.20	DUMP BODY, REAR	95	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.70
T40	0.20	DUMP BODY, REAR	95	S	B	6,500	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.80
T40	0.30	FLATBEDS, WITH SIDES	95	A	B	8,000	0.20	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.00	0.60
T40	0.41	HOIST, ELECTRIC DRIVE	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.70
T40	0.50	TRANSIT MIXERS	95	A	B	8,000	0.15	65	.650	.059	.031	35	.350	.032	.017	.477	.136	.136	0.77	0.69	0.86	0.70
T40	0.60	WATER TANKS	95	A	B	8,000	0.25	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	0.00	0.00	0.00	0.60
T40	0.70	ALL OTHER OPTIONS	95	A	B	8,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.136	1.08	0.86	1.20	0.70
T45	0.00	TRUCK TRAILERS	1																			
T45	0.10	BOTTOM DUMP	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.70
T45	0.10	BOTTOM DUMP	95	S	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.18	0.00	0.20	0.80
T45	0.20	END DUMP	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.65
T45	0.20	END DUMP	95	S	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.18	0.00	0.20	0.75
T45	0.30	PUP TRAILER	95	A	B	8,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.60
T45	0.41	LOWBOY, RIGID NECK, DROP DECK	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.50
T45	0.50	FLATBED TRAILER	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.50
T45	0.60	MISCELLANEOUS / UTILITY	95	A	B	10,000	0.10	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.50
T45	0.70	WATER TANKER TRAILER	95	A	B	10,000	0.25	65	.000	.059	.031	0	.000	.000	.000	.000	.119	.102	0.66	0.92	0.73	0.60
T45	0.80	DECONTAMINATION FACILITY	95	A	B	8,000	0.25	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.66	0.00	0.73	0.70
T45	0.90	TANK TRAILERS	95	A	B	10,000	0.25	65	.000	.059	.031	0	.000	.000	.000	.000	.119	.102	0.66	0.00	0.73	0.70
T50	0.00	TRUCKS, HIGHWAY (Add attachments as required)	1																			
T50	0.01	0 THRU 10,000 GVW	85	A	S	8,000	0.20	15	.150	.014	.007	0	.000	.000	.000	.000	.119	.102	0.61	0.56	0.67	0.70
T50	0.01	0 THRU 10,000 GVW	85	S	S	6,500	0.20	20	.200	.018	.010	0	.000	.000	.000	.000	.119	.102	0.20	0.16	0.22	0.75
T50	0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	85	A	S	10,000	0.20	35	.350	.032	.017	0	.000	.000	.000	.000	.127	.110	0.72	0.66	0.79	0.65
T50	0.02	OVER 10,000 THRU 30,000 GVW (Chassis only - Add options)	85	S	S	8,000	0.20	46	.460	.041	.022	0	.000	.000	.000	.000	.127	.110	0.20	0.16	0.22	0.70
T50	0.03	OVER 30,000 GVW (Chassis only - Add options)	85	A	S	12,000	0.20	50	.500	.045	.024	0	.000	.000	.000	.000	.136	.119	0.77	0.71	0.86	0.65
T50	0.03	OVER 30,000 GVW (Chassis only - Add options)	85	S	S	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.136	.119	0.21	0.18	0.24	0.75
T55	0.00	TRUCKS, OFF-HIGHWAY	1																			

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APPENDIX D

EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
T55	0.10	RIGID FRAME	90	A	B	20,000	0.15	35	.350	.032	.017	0	.000	.000	.000	.000	.000	.144	0.84	0.73	0.93	0.90
T55	0.10	RIGID FRAME	90	S	B	18,000	0.15	45	.450	.041	.022	0	.000	.000	.000	.000	.000	.144	0.23	0.18	0.25	0.95
T55	0.20	ARTICULATED FRAME	90	A	B	13,000	0.15	50	.500	.045	.024	0	.000	.000	.000	.000	.000	.080	0.84	0.73	0.93	0.80
T55	0.20	ARTICULATED FRAME	90	S	B	12,250	0.15	60	.600	.054	.029	0	.000	.000	.000	.000	.000	.080	0.23	0.18	0.25	0.85
T56	0.00	TRUCKS,OFF-HIGHWAY/PRIME MOVER TRACTORS & WAGONS	1																			
T56	0.10	PRIME MOVER TRACTORS	90	A	B	20,000	0.15	40	.400	.036	.019	0	.000	.000	.000	.000	.102	.144	0.84	0.64	0.93	0.90
T56	0.10	PRIME MOVER TRACTORS	90	S	B	18,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.23	0.16	0.25	0.95
T56	0.20	WAGONS, BOTTOM DUMP	90	A	B	15,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.84	0.64	0.93	0.65
T56	0.20	WAGONS, BOTTOM DUMP	90	S	B	10,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.23	0.16	0.25	0.75
T56	0.30	WAGONS, REAR DUMP	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.84	0.65	0.93	0.60
T57	0.00	TRUCKS, VACUUM	95	A	B	10,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.23	0.17	0.25	0.80
T60	0.00	TRUCKS, WATER, OFF-HIGHWAY	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.90	0.69	1.00	0.70
T60	0.00	TRUCKS, WATER, OFF-HIGHWAY	90	S	B	10,000	0.20	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.25	0.17	0.28	0.80
T65	0.00	TUNNEL/MINING EQUIPMENT	1																			
T65	0.10	DRIFTING & TUNNELING DRILLS	25	A	B	14,000	0.15	80	.800	.072	.038	13	.130	.012	.006	.530	.136	.119	0.67	0.57	0.00	0.90
T65	0.20	TUNNEL BORING MACHINES	95	A	B	18,000	0.15	70	.700	.063	.034	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.70
T65	0.20	TUNNEL BORING MACHINES	95	S	B	16,000	0.15	91	.910	.082	.044	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.80
T65	0.30	PRODUCTION DRILLING RIGS	25	A	B	12,000	0.15	80	.800	.072	.038	0	.000	.000	.000	.530	.136	.119	0.00	0.00	0.00	0.90
T65	0.40	ROADHEADERS & CONTINUOUS MINERS	95	A	B	16,000	0.15	70	.700	.063	.034	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	0.90
T65	0.40	ROADHEADERS & CONTINUOUS MINERS	95	S	B	14,000	0.15	91	.910	.082	.044	0	.000	.000	.000	.530	.000	.000	0.00	0.00	0.00	1.00
T65	0.50	ROCK BOLTING EQUIPMENT	95	A	B	10,000	0.20	80	.800	.072	.038	10	.100	.009	.005	.530	.136	.119	0.00	0.00	0.00	0.80
T65	0.61	LOADING & HAULING EQUIPMENT, DIESEL OR GAS	95	A	B	12,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.000	.136	.127	0.00	0.00	0.00	0.75
T65	0.62	LOADING & HAULING EQUIPMENT, ELECTRIC	95	A	B	14,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.477	.102	.102	0.00	0.00	0.00	0.70
T65	0.63	LOADING & HAULING EQUIPMENT, AIR-POWERED	95	A	B	10,000	0.25	70	.700	.063	.034	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.65
T65	0.70	LOCOMOTIVES	95	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.477	.136	.119	0.00	0.00	0.00	0.75
T65	0.90	OTHER TUNNELING EQUIPMENT	95	A	B	10,000	0.20	70	.700	.063	.034	13	.130	.012	.006	.477	.136	.127	0.00	0.00	0.00	0.80
W10	0.00	WAGONS, BOTTOM DUMP	90	A	B	12,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.88	0.67	0.98	0.65

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APPENDIX D
EQUIPMENT HOURLY CALCULATION FACTORS

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV	HPF	EQUIPMENT FUEL FACTORS E	G	D	HPF	CARRIER FUEL FACTORS E	G	D	FOG FACTORS E	G	D	TIRE WEAR FACTORS FT	DT	TT	RCF
W10	0.00	WAGONS, BOTTOM DUMP	90	S	B	10,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.25	0.17	0.28	0.75
W15	0.00	WAGONS, REAR DUMP	90	A	B	12,000	0.15	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.136	0.88	0.77	0.98	0.60
W15	0.00	WAGONS, REAR DUMP	90	S	B	10,000	0.15	85	.850	.077	.041	0	.000	.000	.000	.000	.102	.136	0.25	0.19	0.28	0.70
W25	0.00	WATER & CO2 BLASTERS	1																			
W25	0.10	LOW PRESSURE, (< 5,000 PSI)	95	A	B	4,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.424	.102	.119	0.96	0.73	1.07	1.10
W25	0.20	HIGH PRESSURE, (>= 5,000 PSI)	95	A	B	4,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.424	.102	.119	0.96	0.73	1.07	1.20
W25	0.30	STEAM CLEANERS	95	A	B	4,000	0.20	95	.950	.086	.045	0	.000	.000	.000	.424	.102	.119	0.00	0.00	0.73	1.10
W25	0.40	CO2 BLASTERS	95	A	B	6,000	0.20	70	.700	.063	.034	0	.000	.000	.000	.530	.127	.148	0.00	0.00	0.73	1.00
W25	0.50	WET ABRASIVE BLASTING SYSTEM (TORBO)	95	A	B	10,000	0.35	0	.000	.000	.000	0	.000	.000	.000	.000	.000	.000	0.00	0.00	0.73	0.40
W30	0.00	WATER TANKS	1																			
W30	0.10	PORTABLE WITH WHEELS	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.00	0.00	0.73	0.60
W30	0.20	SKID MOUNTED	90	A	B	12,000	0.20	65	.650	.059	.031	0	.000	.000	.000	.000	.102	.119	0.00	0.00	0.00	0.50
W35	0.00	WELDERS	1																			
W35	0.10	ENGINE DRIVEN	95	A	B	8,000	0.25	80	.800	.072	.038	0	.000	.000	.000	.000	.102	.102	0.00	0.00	1.07	0.75
W35	0.20	ELECTRIC DRIVEN	95	A	B	6,000	0.20	30	.300	.027	.014	0	.000	.000	.000	.424	.000	.000	0.00	0.00	0.00	0.50

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APPENDIX E ECONOMIC INDEXES FOR CONSTRUCTION EQUIPMENT

APPENDIX E
ECONOMIC INDEXES FOR CONSTRUCTION EQUIPMENT

KEY		Note: Table 2-1 Equipment Rates are based on equipment purchased new in the year 2004																		
		{--Projected---------}																		
(EK)	EQUIPMENT DIVISIONS	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
5	Air Equipment	2438	2366	2296	2235	2157	2085	2075	2069	2079	2047	2078	2074	2070	2063	2053	2012	2022	2008	1963
10	Asphalt & Concrete Paving Equipment	4510	4377	4247	4116	3950	3758	3763	3769	3766	3717	3638	3589	3490	3390	3323	3248	3189	3092	3106
15	Buckets	9190	8919	8655	8505	8057	7626	7443	7254	6804	6900	6982	6930	6888	6774	6672	6638	6663	6380	5901
20	Cranes, Draglines & Clamshells - Crawler & Truck Mtd	7072	6864	6661	6545	6201	5869	5728	5582	5236	5310	5289	5225	5116	5013	4880	4783	4736	4540	4298
25	Drills	5688	5520	5357	5117	4762	4444	4192	4116	3819	3736	3683	3626	3574	3518	3394	3320	3268	3196	3163
30	Generators	5657	5490	5328	5119	4888	4641	4566	4548	4548	4529	4520	4517	4484	4511	4457	4343	4294	4234	4181
35	Graders, Motor	7402	7183	6971	6827	6578	6318	6117	6049	5979	5952	5853	5682	5544	5466	5186	5088	4946	4655	4509
40	Loaders, Track	7465	7245	7031	6905	6653	6347	6177	6081	6058	6032	5960	5792	5686	5606	5434	5257	5068	4816	4677
45	Loaders, Wheel	6890	6687	6489	6372	6140	5857	5701	5612	5591	5567	5511	5409	5303	5251	5101	4988	4894	4758	4640
50	Pile Driving Equipment	6550	6357	6169	6032	5787	5450	5270	5195	5127	5112	5062	4993	4892	4809	4700	4598	4539	4427	4305
55	Rollers	6697	6500	6308	6136	5872	5646	5406	5285	5225	5130	5204	5092	5001	4950	4851	4719	4484	4460	4668
60	Scrapers & Soil Stabilizers	7402	7183	6971	6827	6578	6318	6117	6049	5979	5952	5853	5682	5544	5466	5186	5088	4946	4655	4509
65	Shovels, Backhoes & Hydraulic Excavators	7072	6864	6661	6545	6201	5869	5728	5582	5236	5310	5289	5225	5116	5013	4880	4783	4736	4540	4298
70	Tractors, Crawlers & Attachments	7465	7245	7031	6905	6653	6347	6177	6081	6058	6032	5960	5792	5686	5606	5434	5257	5068	4816	4677
75	Tractor, Wheel	6405	6216	6032	5867	5616	5400	5170	5055	4997	4906	4833	4695	4624	4540	4527	4484	4342	4270	4186
80	Trenchers	8267	8023	7786	7573	7248	6970	6466	6524	6450	6332	6223	6042	5833	5749	5670	5509	5207	5015	4948
85	Trucks, Highway	5255	5100	4949	4816	4638	4450	4356	4306	4216	4212	4307	4216	4241	4318	4293	4190	4025	3838	3669
90	Trucks & Wagons - Off-Highway	7927	7693	7466	7225	6896	6424	6095	6026	5931	5828	5715	5651	5581	5440	5265	4979	4837	4797	4739
95	All Other Equipment	6550	6357	6169	6032	5787	5450	5270	5195	5127	5112	5062	4993	4892	4809	4700	4598	4539	4427	4305
100	All Tires & Tubes	3247	3151	3058	2929	2759	2614	2487	2430	2401	2373	2371	2400	2431	2475	2559	2517	2525	2524	2506
105	Marine Equipment	7667	7441	7221	6913	6661	6436	6101	5846	5771	5645	5556	5513	5429	5245	5036	4951	4881	4679	4438

EK = Economic Key

APPENDIX E

ECONOMIC INDEXES FOR CONSTRUCTION EQUIPMENT

KEY		Note: Table 2-1 Equipment Rates are based on equipment purchased new in the year 2004																	
(EK)	EQUIPMENT DIVISIONS	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
5	Air Equipment	1956	1888	1801	1730	1720	1733	1683	1695	1668	1563	1630	1521	1354	1295	1186	1165	1028	935
10	Asphalt & Concrete Paving Equipment	2967	2867	2793	2730	2687	2687	2611	2583	2620	2461	2296	2111	1941	1815	1686	1610	1451	1304
15	Buckets	5640	5314	4872	4767	4713	4640	4527	4471	4541	4313	3879	3280	2963	2738	2520	2175	1838	1430
20	Cranes, Draglines & Clamshells - Crawler & Truck Mtd	4152	3967	3688	3595	3485	3395	3339	3282	3213	3009	2782	2512	2301	2138	2010	1843	1522	1305
25	Drills	3069	2969	2807	2792	2786	2832	2803	2836	2810	2602	2265	1993	1858	1699	1638	1559	1373	1249
30	Generators	4116	3998	3773	3575	3514	3510	3400	3314	3236	3160	2817	2390	2301	2128	2053	1839	1456	1316
35	Graders, Motor	4359	4219	4010	3914	3759	3738	3645	3643	3561	3276	2992	2687	2492	2259	2109	1956	1604	1361
40	Loaders, Track	4555	4404	4163	3918	3770	3767	3791	3792	3655	3349	3061	2750	2482	2247	2053	1916	1573	1329
45	Loaders, Wheel	4532	4409	4235	4099	3991	3973	3944	3873	3788	3441	2938	2606	2375	2156	2002	1907	1584	1362
50	Pile Driving Equipment	4182	4029	3845	3745	3668	3626	3570	3519	3439	3208	2894	2562	2329	2135	1989	1852	1523	1307
55	Rollers	4630	4507	4412	4217	4151	4090	3926	3744	3431	3199	2913	2653	2396	2139	1983	1872	1556	1328
60	Scrapers & Soil Stabilizers	4359	4219	4010	3914	3759	3738	3645	3643	3561	3276	2992	2687	2492	2259	2109	1956	1604	1361
65	Shovels, Backhoes & Hydraulic Excavators	4152	3967	3688	3595	3485	3395	3339	3282	3213	3009	2782	2512	2301	2138	2010	1843	1522	1305
70	Tractors, Crawlers & Attachments	4555	4404	4163	3918	3770	3767	3791	3792	3655	3349	3061	2750	2482	2247	2053	1916	1573	1329
75	Tractor, Wheel	4123	4018	3936	3862	3820	3818	3656	3557	3530	3256	2927	2578	2319	2125	1956	1843	1498	1288
80	Trenchers	4886	4753	4679	4600	4586	4488	4431	4360	4097	3618	3153	2772	2580	2300	1894	1633	1527	1384
85	Trucks, Highway	3546	3495	3363	3299	3282	3139	3055	2934	2824	2638	2324	2108	1934	1775	1646	1524	1369	1230
90	Trucks & Wagons - Off-Highway	4617	4405	4094	3915	3840	3822	3786	3744	3662	3363	2964	2588	2364	2196	2081	1965	1568	1315
95	All Other Equipment	4182	4029	3845	3745	3668	3626	3570	3519	3439	3208	2894	2562	2329	2135	1989	1852	1523	1307
100	All Tires & Tubes	2470	2480	2399	2322	2340	2374	2421	2453	2552	2506	2369	2055	1792	1699	1615	1485	1334	1114
105	Marine Equipment	4271	4091	3920	3886	3863	3749	3633	3497	3391	3239	2922	2587	2352	2156	2008	1870	1538	1320

EK = Economic Key

APPENDIX F TIRE DESCRIPTION AND TIRE COST

APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
LT TRUCK/RECREATIONAL VEHICLE, RADIAL						
WORKHORSE EXTRA GRIP RADIAL			*(Life = 5000 hrs)*			
ABAA1		LT235/75R15	9.25 x 15.00	6	TL	$140
ABAA3		LT265/75R16	10.40 x 16.00	10	TL	$197
ABAA2		31-10.50R15LT	10.50 x 15.00	6	TL	$164
SERVICE TRAILER - MARATHON RADIAL			*(Life = 5000 hrs)*			
ABBF1		ST175/80R13	7.00 x 13.00	4	TL	$84
ABBF3		ST185/80R13	7.20 x 13.00	6	TL	$93
ABBF5		ST205/75R14	8.00 x 14.00	6	TL	$108
ABBF8		ST205/75R15	8.00 x 15.00	6	TL	$117
ABBF6		ST215/75R14	8.50 x 14.00	6	TL	$113
ABBF9		ST225/75R15	8.80 x 15.00	6	TL	$131
ABBF10		ST225/75R15	8.80 x 15.00	8	TL	$140
LT TRUCK/RECREATIONAL VEHICLE, BIAS						
WORKHORSE RIB			*(Life = 5000 hrs)*			
ACBA5		800-16.5LT	8.00 x 16.50	8	TL	$187
ACBA2		700-15LT	8.30 x 15.00	8	TL	$143
ACBA7		875-16.5LT	8.80 x 16.50	10	TL	$173
ACBA4		750-16LT	8.90 x 16.00	10	TL	$168
ACBA9		950-16.5LT	9.60 x 16.50	10	TL	$187
TRACTION HI-MILER			*(Life = 5000 hrs)*			
ACBC1		6.70-15LT	7.50 x 15.00	6	TL	$120
ACBC3		8-14.5LT	8.00 x 14.50	12	TL	$204
ACBC4		9-14.5LT	9.50 x 14.50	12	TL	$221
CUSTOM HI-MILER			*(Life = 5000 hrs)*			
ACBD1		12-16.5LT	12.10 x 16.50	12	TL	$424
OVER-THE-ROAD TRUCK, COMMERCIAL, RADIAL						
COMMERICAL RADIAL LT TRUCK			*(Life = 5000 hrs)*			
ADCA2		LT225/75R16	7.50 x 16.00	10	TL	$255
ADCA17		8R19.5	8.00 x 19.50	10	TL	$361
ADCA18		8R195	8.00 x 19.50	12	TL	$288
ADCA4		LT215/85R16	8.50 x 16.00	10	TL	$163
ADCA3		LT215/85R16	8.50 x 16.00	8	TL	$168
ADCA1		750R16LT	8.70 x 16.00	8	TL	$163
ADCA6		LT225/75R16	8.80 x 16.00	10	TL	$159
ADCA19		225/70R195	8.85 x 19.50	12	TL	$327
ADCA8		LT235/85R16	9.25 x 16.00	10	TL	$155

(1) TT = includes tube, TL = no tube, NO = no tube

APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ADCA15		950R16.5LT	9.50 x 16.50	8	TL	$181
ADCA21		245/70R195	9.65 x 19.50	14	TL	$389
ADCA11		LT245/75R16	9.80 x 16.00	10	TL	$168
COMMERCIAL RADIAL TRUCK TL			***(Life = 5000 hrs)***			
ADCB2		9R175	9.00 x 17.50	16	TL	$327
ADCB5		9R22.5	9.00 x 22.50	12	TL	$342
ADCB3		10R175	10.00 x 17.50	16	TL	$328
ADCB7		10R22.5	10.00 x 22.50	14	TL	$461
ADCB4		11R17.5	11.00 x 17.50	16	TL	$449
ADCB8		11R22.5	11.00 x 22.50	16	TL	$595
ADCB13		11R24.5	11.00 x 24.50	16	TL	$642
ADCB10		12R22.5	12.00 x 22.50	16	TL	$697
ADCB14		12R24.5	12.00 x 24.50	16	TL	$716
LOW PROFILE RADIAL TRUCK TL			***(Life = 5000 hrs)***			
ADCC1		215/75R175	8.40 x 17.50	16	TL	$311
ADCC5		245/75R22.5	9.60 x 22.50	14	TL	$353
ADCC3		255/70R22.5	10.00 x 22.50	16	TL	$408
ADCC2		265/70R19.5	10.40 x 19.50	14	TL	$378
ADCC6		265/75R22.5	10.40 x 22.50	14	TL	$430
ADCC4		275/70R22.5	10.80 x 22.50	16	TL	$474
ADCC12		285/75R24.5	11.20 x 24.50	14	TL	$591
ADCC8		295/75R22.5	11.60 x 22.50	16	TL	$635
ADCC10		315/80R22.5	12.40 x 22.50	18	TL	$686
SUPER SINGLE COMMERCIAL RADIAL TRUCK			***(Life = 5000 hrs)***			
ADCD1		385/65R22.5	15.10 x 22.50	18	TL	$790
ADCD2		425/65R22.5	16.70 x 22.50	20	TL	$888
ADCD3		445/65R22.5	17.50 x 22.50	20	TL	$1,002
COMMERCIAL RADIAL TRUCK TT			***(Life = 5000 hrs)***			
ADCE1		825R15	8.25 x 15.00	14	TT	$343
ADCE5		9.00R28	8.25 x 20.00	12	TT	$405
ADCE6		900R20	9.00 x 20.00	12	TT	$425
ADCE3		1000R15	10.00 x 15.00	14	TT	$449
ADCE7		1000R20	10.00 x 20.00	14	TT	$481
ADCE13		10R22.5	10.00 x 22.50	12	TT	$441
ADCE12		365/80R20	10.40 x 20.00	18	TT	$718
ADCE9		1100R20	11.00 x 20.00	16	TT	$559
ADCE10		1100R20	11.00 x 20.00	16	TT	$646
ADCE14		1100R22	11.00 x 22.00	16	TT	$671
ADCE15		1100R24	11.00 x 24.00	16	TT	$663
ADCE11		1200R20	12.00 x 20.00	18	TT	$682
ADCE17		1200R24	12.00 x 24.00	18	TT	$727

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APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ADCE16		1400R20	14.00 x 20.00	20	TT	$135
FARM, FRONT						
DYNA RIB F-2-M			*(Life = 5000 hrs)*			
AFED2	F-2M	1000-16	10.00 x 16.00	8	TL	$223
AFED1	F-2M	11L-15	11.00 x 15.00	6	TL	$270
AFED4	F-2M	1100-16	11.00 x 16.00	8	TL	$293
AFED8	F-2M	1100-24	11.00 x 24.00	12	TL	$814
AFED6	F-2M	14L-161	14.00 x 16.10	10	TL	$526
AFED7	F-2M	165L-161	16.50 x 16.10	8	TL	$754
SINGLE RIB FRONT TRACTOR F-1			*(Life = 5000 hrs)*			
AFEE1	F-1	600-16	6.00 x 16.00	4	TT	$133
AFEE2	F-2	750-16	7.50 x 16.00	6	TL	$195
FARM HIGHWAY SERVICE			*(Life = 5000 hrs)*			
AFEF2	I-1	95L-15FI	9.50 x 15.00	8	TL	$162
AFEF5	I-1	11L-15FI	11.00 x 15.00	12	TL	$245
AFEF7	I-1	125L-15FI	12.50 x 15.00	12	TL	$282
FARM UTILITY			*(Life = 5000 hrs)*			
AFEG7	I-1	750-14	7.50 x 14.00	4	TL	$123
AFEG14	I-1	760-15	7.60 x 15.00	8	TL	$124
AFEG8	I-1	85L-14	8.50 x 14.00	6	TL	$124
AFEG1	I-1	95L-14	9.50 x 14.00	8	TT	$120
AFEG17	I-1	95L-15	9.50 x 15.00	12	TL	$183
AFEG18	I-1	1000-15	10.00 x 15.00	8	TL	$188
AFEG11	I-1	11L-14	11.00 x 14.00	8	TL	$127
AFEG22	I-1	11L-15	11.00 x 15.00	10	TL	$169
AFEG20	I-1	11L-15	11.00 x 15.00	8	TL	$136
AFEG34	I-1	11L-16	11.00 x 16.00	10	TL	$183
AFEG25	I-1	125L-15	12.50 x 15.00	12	TL	$254
AFEG30	I-1	125L-16	12.50 x 16.00	12	TL	$257
AFEG29	I-1	125L-16	12.50 x 16.00	8	TL	$228
AFEG28	I-1	14L-161	14.00 x 16.10	12	TT	$435
AFEG31	I-1	165L-161	16.50 x 16.10	10	TL	$482
AFEG32	I-1	19L-161	19.00 x 16.10	10	TL	$627
AFEG27	I-1	215L-161	21.50 x 16.10	14	TL	$779
FOUR RIB FRONT TRACTOR F-2-M			*(Life = 5000 hrs)*			
AFEH1	F-2M	750-16	7.50 x 16.00	6	TT	$155
AFEH3	F-2M	1000-16	10.00 x 16.00	8	TT	$214
AFEH4	F-2M	1100-16	11.00 x 16.00	8	TT	$240

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APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
IMPLEMENT RIB			***(Life = 5000 hrs)***			
AFEK11	I-1	400-18	4.00 x 18.00	4	TT	$101
AFEK4	I-1	500-15	5.00 x 15.00	4	TT	$92
AFEK16	I-1	590-15	5.90 x 15.00	4	TL	$113
AFEK6	I-1	600-16	6.00 x 16.00	6	TT	$110
AFEK7	I-1	650-16	6.50 x 16.00	6	TT	$123
AFEK5	I-1	670-15	6.70 x 15.00	6	TL	$139
AFEK9	I-1	750-16	7.50 x 16.00	10	TT	$161
AFEK10	I-1	900-16	9.00 x 16.00	10	TL	$212
AFEK13	I-1	900-24	9.00 x 24.00	8	TL	$441
AFEK14	I-1	1125-28	11.25 x 28.00	12	TT	$891
LABORER F-3			***(Life = 5000 hrs)***			
AFEL6	F-3	145/75-161	5.70 x 16.10	10	TL	$630
AFEL2	F-3	11L-15	11.00 x 15.00	10	TL	$182
AFEL4	F-3	11L-16	11.00 x 16.00	10	TL	$210
AFEL5	F-3	11L-16	11.00 x 16.00	12	TL	$265
MULTI-RIB F-3			***(Life = 5000 hrs)***			
AFEM1	F-3	900-10	9.00 x 10.00	10	TT	$195
AFEM2	F-3	1100-16	11.00 x 16.00	12	TL	$457
SMOOTH			***(Life = 5000 hrs)***			
AFEN1	I-1	169-30	16.90 x 30.00	6	TL	$2,064
SMOOTH IMP			***(Life = 5000 hrs)***			
AFEO1		400-8	4.00 x 8.00	4	TL	$67
AFEO3		600-16	6.00 x 16.00	10	TL	$207
AFEO2		11L-15	11.00 x 15.00	10	TL	$200
SOFTRAC II			***(Life = 5000 hrs)***			
AFEP1	I-2	165L-161	16.50 x 16.10	6	TL	$545
AFEP3	I-2	215L-161	21.50 x 16.10	10	TL	$1,076
SUPER RIB F-2			***(Life = 5000 hrs)***			
AFER1	F-2	400-12	4.00 x 12.00	4	TT	$193
COMPACT UTILITY R-1			***(Life = 5000 hrs)***			
AFES2	R-1	5-12	5.00 x 12.00	4	TT	$67
AFES1	R-1	7-16	7.00 x 16.00	4	TT	$145
AFES3	R-1	8-16	8.00 x 16.00	4	TT	$215
SURE GRIP IMPLEMENT			***(Life = 5000 hrs)***			
AFET1	I-3	105/80-18	4.10 x 18.00	10	TL	$491
AFET2	I-3	125/80-18	4.90 x 18.00	10	TL	$582

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APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
SURE GRIP LUG			*(Life = 5000 hrs)*			
AFEU2	I-3	105/80-18	10.50 x 18.00	10	TL	$486
AFEU1	I-3	124-16	12.40 x 16.00	4	TL	$464
AFEU3	I-3	125/80-18	12.50 x 18.00	10	TL	$511
SURE GRIP TRACTION			*(Life = 5000 hrs)*			
AFEV1	I-3	670-15	6.70 x 15.00	4	TT	$118
AFEV5	I-3	750-16	7.50 x 16.00	4	TL	$183
AFEV2	I-3	750-18	7.50 x 18.00	4	TT	$180
AFEV3	I-3	750-20	7.50 x 20.00	4	TT	$258
AFEV4	I-3	760-15	7.60 x 15.00	6	TL	$157
TRACTION IMPLEMENT			*(Life = 5000 hrs)*			
AFEW1	I-3	500-15	5.00 x 15.00	4	TL	$114
AFEW2	I-3	590-15	5.90 x 15.00	4	TL	$122
TRIPLE RIB HD			*(Life = 5000 hrs)*			
AFEX8	F-2	550-16	5.50 x 16.00	6	TT	$118
AFEX10	F-2	600-16	6.00 x 16.00	6	TT	$121
AFEX11	F-2	650-16	6.50 x 16.00	6	TT	$126
AFEX4	F-2	75L-15	7.50 x 15.00	6	TT	$130
AFEX13	F-2	750-16	7.50 x 16.00	8	TT	$158
AFEX14	F-2	750-18	7.50 x 18.00	6	TT	$174
AFEX5	F-2	95L-15	9.50 x 15.00	6	TT	$188
AFEX16	F-2	1000-16	10.00 x 16.00	8	TL	$218
AFEX6	F-2	11L-15	11.00 x 15.00	8	TT	$214
AFEX17	F-2	1100-16	11.00 x 16.00	8	TL	$284
TRIPLE RIB R/S F-2			*(Life = 5000 hrs)*			
AFEY2	F-2	400-15	4.00 x 15.00	4	TT	$95
AFEY1	F-2	500-15	5.00 x 15.00	4	TT	$78
FARM, REAR						
ALL TRACTION R-3			*(Life = 5000 hrs)*			
AGFA1	R-3	750-16	7.50 x 16.00	4	TT	$183
ALL WEATHER R-3			*(Life = 5000 hrs)*			
AGFB2	R-3	95-24	9.50 x 24.00	4	TT	$449
AGFB7	R-3	136-161	13.60 x 16.10	8	TL	$761
AGFB5	R-3	136-28	13.60 x 28.00	6	TT	$880
AGFB3	R-3	149-24	14.90 x 24.00	6	TL	$602
AGFB4	R-3	169-24	16.90 x 24.00	6	TL	$745
AGFB8	R-3	184-161	18.40 x 16.10	8	TL	$908
AGFB10	R-3	184-26	18.40 x 26.00	12	TL	$1,219

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TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFB11	R-3	231-26	23.10 x 26.00	10	TL	$1,726
AGFB12	R-3	231-26	23.10 x 26.00	12	TL	$1,925
AGFB14	R-3	245-32	24.50 x 32.00	12	TL	$2,706
AGFB13	R-3	28L-26	28.00 x 26.00	16	TT	$2,568
AGFB15	R-3	305L-32	30.50 x 32.00	12	TL	$2,950
AGFB16	R-3	305L-32 VA	30.50 x 32.00	24	TL	$5,501
DT 800 RADIAL R-1W			***(Life = 5000 hrs)***			
AGFE1	R-1W	320/90R42	12.60 x 42.00	UK	TL	$1,251
AGFE3	R-1W	320/90R50	12.60 x 50.00	UK	TL	$1,867
AGFE2	R-1W	380/90R46	14.90 x 46.00	UK	TL	$1,434
DT 812 RADIAL R-1W			***(Life = 5000 hrs)***			
AGFF1	R-1W	380/70R24	14.90 x 24.00	UK	TL	$1,001
AGFF2	R-1W	420/70R28	16.50 x 28.00	UK	TL	$1,183
AGFF3	R-1W	480/70R30	18.90 x 30.00	UK	TL	$1,575
DT 820 RADIAL R-1W			***(Life = 5000 hrs)***			
AGFG2	R-1W	600/65R28	23.60 x 28.00	UK	TL	$2,090
AGFG1	R-1W	620/75R26	24.40 x 26.00	UK	TL	$3,324
AGFG5	R-1W	620/70R42	24.40 x 42.00	UK	TL	$2,665
AGFG3	R-1W	650/75R34	25.60 x 34.00	UK	TL	$3,307
AGFG4	R-1W	710/70R38	27.90 x 38.00	UK	TL	$2,772
DYNA TORQUE RADIAL R-1			***(Life = 5000 hrs)***			
AGFH5	R-1	320/85R34	12.60 x 34.00	UK	TL	$1,143
AGFH7	R-1	149R30	14.90 x 30.00	X3	TL	$1,199
AGFH9	R-1	149R34	14.90 x 34.00	X3	TL	$1,363
AGFH15	R-1	149R46	14.90 x 46.00	X3	TL	$1,569
AGFH6	R-1	385/85R34	15.10 x 34.00	UK	TL	$1,275
AGFH16	R-1	420/80R46	16.50 x 46.00	UK	TL	$2,182
AGFH8	R-1	169R30	16.90 x 30.00	X3	TL	$1,294
AGFH2	R-1	184R26	18.40 x 26.00	X2	TL	$1,353
AGFH10	R-1	184R38	18.40 x 38.00	X1	TL	$1,258
AGFH13	R-1	184R42	18.40 x 42.00	X2	TL	$1,567
AGFH17	R-1	184R46	18.40 x 46.00	X3	TL	$1,888
AGFH12	R-1	208R38	20.80 x 38.00	X1	TL	$1,651
AGFH14	R-1	208R42	20.80 x 42.00	X2	TL	$1,748
DYNA TORQUE II R-1			***(Life = 5000 hrs)***			
AGFJ29	R-1	112-16	11.20 x 16.00	4	TL	$277
AGFJ6	R-1	136-24	13.60 x 24.00	8	TT	$651
AGFJ41	R-1	136-28	13.60 x 28.00	10	TL	$753
AGFJ11	R-1	136-28	13.60 x 28.00	10	TT	$753
AGFJ7	R-1	149-24	14.90 x 24.00	6	TL	$636

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APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFJ31	R-1	149-24	14.90 x 24.00	8	TL	$709
AGFJ42	R-1	149-28	14.90 x 28.00	10	TL	$889
AGFJ8	R-1	169-24	16.90 x 24.00	6	TT	$745
AGFJ39	R-1	169-26	16.90 x 26.00	10	TL	$1,545
AGFJ43	R-1	169-28	16.90 x 28.00	10	TL	$1,228
AGFJ37	R-1	169-34	16.90 x 34.00	6	TL	$900
AGFJ23	R-1	169-38	16.90 x 38.00	14	TT	$1,441
AGFJ40	R-1	184-26	18.40 x 26.00	12	TL	$1,258
AGFJ18	R-1	184-34	18.40 x 34.00	8	TT	$1,023
AGFJ24	R-1	184-38	18.40 x 38.00	8	TT	$1,158
AGFJ19	R-1	208-34	20.80 x 34.00	14	TT	$1,596
AGFJ25	R-1	208-38	20.80 x 38.00	8	TT	$1,434
AGFJ27	R-1	208-42	20.80 x 42.00	10	TL	$2,166
AGFJ45	R-1	231-26	23.10 x 26.00	12	TL	$1,779
AGFJ20	R-1	231-34	23.10 x 34.00	8	TT	$1,988
AGFJ35	R-1	245-32	24.50 x 32.00	12	TL	$1,921
AGFJ34	R-1	28L-26	28.00 x 26.00	12	TL	$2,255
AGFJ36	R-1	305L-32	30.50 x 32.00	14	TL	$3,229
INDUSTRIAL SURE GRIP R-4			***(Life = 5000 hrs)***			
AGFK1	R-4	169-30	16.90 x 30.00	10	TT	$1,393
AGFK3	R-4	184-28	18.40 x 28.00	12	TL	$1,200
IT510 RADIAL R4			***(Life = 5000 hrs)***			
AGFL3	R-4	195LR24	19.50 x 24.00	UK	TL	$1,362
IT525 RADIAL R4			***(Life = 5000 hrs)***			
AGFM1	R-4	149-24	14.90 x 24.00	8	TL	$1,362
AGFM4	R-4	169-24	16.90 x 24.00	10	TL	$823
AGFM12	R-4	169-28	16.90 x 28.00	10	TL	$809
AGFM6	R-4	175L-24	17.50 x 24.00	10	TL	$786
AGFM5	R-4	184-24	18.40 x 24.00	12	TL	$1,366
AGFM7	R-4	195L-24	19.50 x 24.00	10	TL	$955
AGFM8	R-4	195L-24	19.50 x 24.00	12	TL	$1,099
AGFM9	R-4	21L-24	21.00 x 24.00	12	TL	$1,327
AGFM11	R-4	21L-24	21.00 x 24.00	16	TL	$1,605
AGFM14	R-4	21L-28	21.00 x 28.00	14	TL	$1,742
POWER TORQUE R-1			***(Life = 5000 hrs)***			
AGFN1	R-1	6-12	6.00 x 12.00	4	TL	$97
SPECIAL SURE GRIP R-2-0			***(Life = 5000 hrs)***			
AGFO2	R-2	149-24	14.90 x 24.00	6	TL	$1,033
AGFO11	R-2	184-26	18.40 x 26.00	10	TL	$1,344
AGFO8	R-2	184-38	18.40 x 38.00	8	TL	$1,252

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EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFO12	R-2	VA500/95D32	19.70 x 32.00	20	TL	$3,044
AGFO10	R-2	208-38	20.80 x 38.00	8	TL	$1,860
AGFO3	R-2	231-26	23.10 x 26.00	10	TL	$1,860
AGFO4	R-2	28L-26	28.00 x 26.00	12	TL	$2,587
AGFO6	R-2	305L-32	30.50 x 32.00	14	TL	$3,282
SPECIAL SURE GRIP RADIAL R-2-0			***(Life = 5000 hrs)***			
AGFP8	R-2	320/90R46	12.60 x 46.00	X3	TL	$1,503
AGFP9	R-2	340/85R46	13.40 x 46.00	UK	TL	$1,624
AGFP1	R-2	169R28	16.90 x 28.00	X2	TL	$1,551
AGFP2	R-2	169R30	16.90 x 30.00	X3	TL	$1,697
AGFP3	R-2	184R38	18.40 x 38.00	X1	TL	$1,475
AGFP5	R-2	184R42	18.40 x 42.00	X2	TL	$2,012
AGFP7	R-2	184R46	18.40 x 46.00	X3	TL	$2,236
AGFP4	R-2	208R38	20.80 x 38.00	X2	TL	$1,971
AGFP6	R-2	208R42	20.80 x 42.00	X2	TL	$2,470
SUPER TRACTION RADIAL R-1W			***(Life = 5000 hrs)***			
AGFQ3	R-1W	260/80R20	10.20 x 20.00	8	TL	$557
AGFQ2	R-1W	112R20	11.20 x 20.00	UK	TL	$593
AGFQ6	R-1W	136R28	13.60 x 28.00	UK	TL	$1,027
AGFQ15	R-1W	136R38	13.60 x 38.00	UK	TL	$1,280
AGFQ20	R-1W	149R24	14.90 x 24.00	X2	TL	$1,032
AGFQ7	R-1W	149R28	14.90 x 28.00	UK	TL	$1,130
AGFQ9	R-1W	149R30	14.90 x 30.00	UK	TL	$750
AGFQ4	R-1W	169R24	16.90 x 24.00	UK	TL	$1,249
AGFQ5	R-1W	169R26	16.90 x 26.00	X2	TL	$1,468
AGFQ8	R-1W	169R28	16.90 x 28.00	UK	TL	$1,339
AGFQ10	R-1W	169R30	16.90 x 30.00	UK	TL	$1,423
AGFQ21	R-1W	169R34	16.90 x 34.00	X2	TL	$1,217
AGFQ22	R-1W	169R38	16.90 x 38.00	X2	TT	$1,351
AGFQ11	R-1W	184R26	18.40 x 26.00	UK	TL	$1,395
AGFQ12	R-1W	184R30	18.40 x 30.00	UK	TL	$1,536
AGFQ14	R-1W	184R34	18.40 x 34.00	UK	TL	$1,281
AGFQ16	R-1W	184R38	18.40 x 38.00	UK	TL	$1,394
AGFQ18	R-1W	184R42	18.40 x 42.00	UK	TL	$1,914
AGFQ17	R-1W	208R38	20.80 x 38.00	UK	TL	$2,025
AGFQ19	R-1W	208R42	20.80 x 42.00	UK	TL	$2,149
AGFQ13	R-1W	800/65R32	31.50 x 32.00	UK	TL	$3,241
DURATORQUE R-1			***(Life = 5000 hrs)***			
AGFU1	R-1	149-28	14.90 x 28.00	6	TT	$647
AGFU2	R-1	169-30	16.90 x 30.00	6	TT	$846
AGFU3	R-1	184-30	18.40 x 30.00	6	TT	$1,012

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APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AGFU5	R-1	184-38	18.40 x 38.00	8	TT	$908
FARM, TERRA - 20" UP						
SFT105			*(Life = 5000 hrs)*			
AHGA2	HF-1	54-3100-26	31.00 x 26.00	10	TL	$4,166
SOF TRAC			*(Life = 5000 hrs)*			
AHGB3	HF-1	38-1400-20	14.00 x 20.00	4	TL	$669
AHGB2	HF-1	41-1400-20	14.00 x 20.00	4	TL	$1,058
AHGB1	HF-1	44-1800-20	18.00 x 20.00	4	TL	$1,272
SUPER TERRA GRIP			*(Life = 5000 hrs)*			
AHGC1	HF-2	38-1400-20	14.00 x 20.00	8	TL	$1,031
AHGC2	HF-2	42-2500-20	25.00 x 20.00	8	TL	$2,692
AHGC7	HF-2	54-3100-26	31.00 x 26.00	10	TL	$5,139
AHGC12	HF-2	67-3400-25	34.00 x 25.00	10	TL	$5,688
AHGC11	HF-2	66-4300-25	43.00 x 25.00	20	TL	$8,788
SUPER TERRA GRIP XT			*(Life = 5000 hrs)*			
AHGD1	HF-3	42-2500-20	25.00 x 20.00	12	TL	$3,114
AHGD5	HF-3	48-3100-20	31.00 x 20.00	12	TL	$3,746
AHGD6	HF-3	66-4300-25	43.00 x 25.00	10	TL	$5,976
AHGD7	HF-3	VA73-4400-32	44.00 x 32.00	12	TL	$9,578
TUNDRA GRIP			*(Life = 5000 hrs)*			
AHGF2	HF-1	66-4400-25	44.00 x 25.00	16	TL	$7,361
AHGF1	HF-1	66-4400-25	44.00 x 25.00	20	TL	$7,723
FARM, SPECIALTY						
SFT105			*(Life = 5000 hrs)*			
AJHA1	HF-1	33-1250-15	12.50 x 15.00	4	TL	$511
SOFTRAC			*(Life = 5000 hrs)*			
AJHB2		18-650-8	6.50 x 8.00	4	TL	$52
AJHB3		18-850-10	8.50 x 10.00	6	TL	$65
AJHB1	HF-1	25-850-14	8.50 x 14.00	6	TL	$195
AJHB5	HF-1	27-850-15	8.50 x 15.00	4	TL	$200
AJHB4	HF-1	25-1050-15	10.50 x 15.00	4	TL	$222
AJHB6	HF-1	27-1050-15	10.50 x 15.00	4	TL	$238
AJHB7	HF-1	29-1250-15	12.50 x 15.00	4	TL	$306
AJHB10	HF-1	31-1250-15	12.50 x 15.00	4	TL	$317
AJHB11	HF-1	33-1250-15	12.50 x 15.00	4	TL	$391
AJHB8	HF-1	31-1350-15	13.50 x 15.00	4	TL	$381
AJHB9	HF-1	31-1550-15	15.50 x 15.00	4	TL	$414

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EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
SUPER TERRA GRIP			*(Life = 5000 hrs)*			
AJHC3	HF-2	29-1250-15	12.50 x 15.00	6	TL	$351
AJHC6	HF-2	31-1550-15	15.50 x 15.00	8	TL	$464
AJHC7	HF-2	38-2000-16.1	20.00 x 16.00	8	TL	$1,330
SURE GRIP LUG			*(Life = 5000 hrs)*			
AJHD9	HF-2	27-850-15	8.50 x 15.00	6	TL	$222
AJHD1		10-165	10.00 x 16.50	6	TL	$212
AJHD10	HF-2	27-1050-15	10.50 x 15.00	6	TL	$263
AJHD4		12-165	12.00 x 16.50	10	TL	$325
AJHD3		12-165	12.00 x 16.50	8	TL	$281
AJHD5		14-175	14.00 x 17.50	10	TL	$417
AJHD7		15-195	15.00 x 19.50	12	TL	$528
AJHD6		15-195	15.00 x 19.50	6	TL	$413
IT 323			*(Life = 5000 hrs)*			
AJHE1		10-165	10.00 x 16.50	8	TL	$267
AJHE3		12-165	12.00 x 16.50	10	TL	$374
AJHE4		31-1550-15	15.50 x 15.00	8	TL	$671
POWER RIB			*(Life = 5000 hrs)*			
AJHJ1		18-850-8	8.50 x 8.00	4	TL	$59
AJHJ2		20-1000-10	10.00 x 10.00	4	TL	$137
RALLY			*(Life = 5000 hrs)*			
AJHK1		480-8	4.80 x 8.00	4	TL	$102
AJHK2		18-950-8	9.50 x 8.00	4	TL	$153
TERRA RIB			*(Life = 5000 hrs)*			
AJHM2	HF-1	25-750-15	7.50 x 15.00	6	TL	$179
AJHM4	HF-1	27-950-15	9.50 x 15.00	10	TL	$295
AJHM6	HF-1	31-1350-15	13.50 x 15.00	8	TL	$383
ATV			*(Life = 5000 hrs)*			
AJHN1		AT21-7-10	7.00 x 10.00	X1	TL	$69
AJHN3		AT23-8-11	8.00 x 11.00	X2	TL	$92
AJHN5		AT24-9-11	9.00 x 11.00	X1	TL	$107
TRACKER ATT			*(Life = 5000 hrs)*			
AJHT1		AT24-8-11	8.00 x 11.00	X2	TL	$113
AJHT2		AT24-10-11	10.00 x 11.00	X2	TL	$108
INDUSTRIAL, MINE SERVICE						
HARD ROCK LUG MINE & INDUSTRIAL			*(Life = 5000 hrs)*			
AKJC1		10.00-20	10.00 x 20.00	18	TT	$820

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APPENDIX F
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XTRA TRACTION LUG			*(Life = 5000 hrs)*			
AKJD2		8.25-15	8.25 x 15.00	16	TT	$217
AKJD3		36-11x15(10.00L15)	10.00 x 15.00	16	TT	$435
AKJD7		24x12x12	12.00 x 12.00	24	TL	$778
AKJD6		35-15x15(14.50L-15)	14.50 x 15.00	32	TL	$1,010
XTRA TRACTION GRIP			*(Life = 5000 hrs)*			
AKJE1		32x12-15	12.00 x 15.00	20	TT	$731
OFF-THE-ROAD, MED & HEAVY COMMERCIAL, RADIAL						
G-2 GRADER SERVICE - RL2F, SG2B			*(Life = 3200 hrs)*			
AMLA1	G2	14.00R24	14.00 x 24.00	X1	TL	$1,203
E-2 HAULAGE SERVICE - RL2F/GP2B RL2+			*(Life = 2800 hrs)*			
AMLB1	E/L/G3	17.5R25	17.50 x 25.00	X1	TL	$1,220
AMLB8	L5	18.00R25	18.00 x 25.00	X2	TL	$4,181
AMLB2	E/L/G3	20.5R25	20.50 x 25.00	X1	TL	$1,724
AMLB9	E/L/G3	20.5R25	20.50 x 25.00	X2	TL	$1,724
AMLB5	E/L/G3+T	20.5R25	20.50 x 25.00	X2	TL	$2,814
AMLB15	E4	21.00R35	21.00 x 35.00	X2	TL	$5,878
AMLB3	E/L/G3	23.5R25	23.50 x 25.00	X1	TL	$2,351
AMLB10	E/L/G3	23.5R25	23.50 x 25.00	X2	TL	$2,513
AMLB21	E/L/G3+T	26.5R25	26.50 x 25.00	X2	TL	$4,218
AMLB22	E/L3	29.5R25	29.50 x 25.00	X2	TL	$5,112
AMLB17	E3	33.25R35	33.25 x 35.00	X2	TL	$8,087
AMLB23	E3+	40.5/75R39	40.50 x 39.00	X2	TL	$12,140
E-3 HAULAGE SERVICE - ROCK DESIGN RL3, RL3J,			*(Life = 2800 hrs)*			
AMLC3	E3+	18.00R33	18.00 x 33.00	X2	TL	$3,693
AMLC5	E3+	24.00R35	24.00 x 35.00	X2	TL	$6,345
AMLC6	E3	29.5R29	29.50 x 29.00	X2	TL	$5,811
AMLC7	E3	33.25R35	33.25 x 25.00	X2	TL	$8,087
AMLC8	E3	37.25R35	37.35 x 35.00	X2	TL	$9,828
AMLC9	E3	37.5R39	37.50 x 39.00	X2	TL	$10,859
E-4 RL4J/RL4 & RL4H/RL4 E4			*(Life = 5000 hrs)*			
AMLD1	E4	12.00R24	12.00 x 24.00	X3	TT	$1,439
AMLD2	E4	14.00R24	14.00 x 24.00	X3	TL	$1,617
AMLD3	E4	14.00R25	14.00 x 25.00	X3	TL	$1,704
AMLD4	E4	18.00R25	18.00 x 25.00	X2	TL	$3,383
AMLD5	E4	18.00R33	18.00 x 33.00	X2	TL	$4,451
AMLD14	E4	21.00R35	21.00 x 35.00	X2	TL	$5,878
AMLD15	E4	24.00R35	24.00 x 25.00	X2	TL	$7,013
AMLD7	E4	27.00R49	27.00 x 49.00	X2	TL	$9,123

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AMLD8	E4	30.00R51	30.00 x 51.00	X2	TL	$11,960
AMLD9	E4	33.00R51	33.00 x 51.00	X2	TL	$14,772
AMLD10	E4	36.00R51	36.00 x 51.00	X2	TL	$16,918
AMLD11	E4	37.00R57	37.00 x 57.00	X2	TL	$30,397
AMLD12	E4	40.00R57	40.00 x 57.00	X2	TL	$30,966
MOBILE CRANE			***(Life = 5000 hrs)***			
AMLF1	E/L/G3	445/80R25 (17.5R25)	17.50 x 25.00	UK	TL	$1,854
AMLF3	E/L/G3	525/80R25(2O.5R25)	20.60 x 25.00	UK	TL	$1,724
L-5 DOZER & LOADER SERVICE RL5K			***(Life = 8000 hrs)***			
AMLG1	L5	20.5R25	20.50 x 25.00	X1	TL	$3,602
AMLG2	L5	23.5R25	23.50 x 25.00	X1	TL	$4,443
SPECIAL SERVICE - AT2A			***(Life = 5000 hrs)***			
AMLH1	E/L/G3	14.00R20	14.00 x 20.00	18	TL	$986
AMLH3	E/L/G3	16.00R20	16.00 x 20.00	22	TL	$1,485
AMLH4	E/L/G3	16.00R21	16.00 x 21.00	22	TL	$1,561
AMLH2	E/L/G3	17.5R25	17.50 x 25.00	X1	TL	$1,220
AMLH6	E/L/G3	22/65R25	22.00 x 25.00	X1	TL	$2,220
OFF-THE-ROAD, MED & HEAVY COMMERCIAL, BIAS						
INDUSTRIAL SURE GRIP MPT			***(Life = 5000 hrs)***			
ANMA1		10.5-20	10.50 x 20.00	10	TL	$397
ANMA2		12.5-20	12.50 x 20.00	10	TL	$508
E-1 HRR 1A			***(Life = 2500 hrs)***			
ANMB1	E3	14.00-25	14.00 x 25.00	20	TL	$1,191
ANMB2	E1	16.00-25	16.00 x 25.00	32	TL	$1,968
E-2 TRACTION EARTHMOVER SURE GRIP			***(Life = 2800 hrs)***			
ANMC3	E7	18.00-25	18.00 x 25.00	16	TL	$1,561
E-3 ROCK SERVICE HARD ROCK LUG/HRL WC			***(Life = 2800 hrs)***			
ANME1	E3	12.00-20	12.00 x 20.00	20	TT	$830
ANME2	E3	12.00-24	12.00 x 24.00	16	TT	$793
ANME3	E3	14.00-24	14.00 x 24.00	28	TT	$1,491
ANME4	E3	14.00-25	14.00 x 25.00	20	TL	$1,191
ANME6	E3	16.00-25	16.00 x 25.00	24	TL	$1,730
E-3 ROCK SERVICE SUPER HARD ROCK LUG			***(Life = 2800 hrs)***			
ANMF1	L5	26.5-25	26.50 x 25.00	24	TL	$4,335
ANMF3	L4	29.5-25	29.50 x 25.00	22	TL	$4,706
ANMF4	L5	29.5-25	29.50 x 25.00	28	TL	$5,845
ANMF5	L4	29.5-29	29.50 x 29.00	28	TL	$5,069

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EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ANMF6	E-3	29.5-29	29.50 x 29.00	34	TL	$4,738
E-3 ROCK SERVICE SHRL8			***(Life = 2800 hrs)***			
ANMG4	E3	29.5-35	29.50 x 35.00	34	TL	$5,053
ANMG1	E-3	33.25-29	33.25 x 29.00	26	TL	$5,542
ANMG6	E-3	33.25-35	33.25 x 35.00	38	TL	$7,176
ANMG7	E-3	37.25-35	37.25 x 35.00	36	TL	$7,471
ANMG9	E3	37.5-39	37.50 x 39.00	44	TL	$8,346
E-3 ROCK SERVICE ELV3A, ELV4B, ELV4/5A			***(Life = 2800 hrs)***			
ANMH4	IND 4	18.00-25	18.00 x 25.00	40	TL	$4,485
ANMH9	IND 3	21.00-25	21.00 x 25.00	32	TL	$3,785
E-3 ROCK SERVICE HRL 3F			***(Life = 2800 hrs)***			
ANMJ2	E3	33.25-35	33.25 x 35.00	32	TL	$5,837
ANMJ5	E3	37.25-35	37.25 x 35.00	36	TL	$7,467
ANMJ6	E3	37.5-39	37.50 x 39.00	44	TL	$8,346
E-3 ROCK SERVICE WRL 3A			***(Life = 2800 hrs)***			
ANML1	E3	14.00-20	14.00 x 20.00	24	TT	$1,180
ANML2	E3	14.00-24	14.00 x 24.00	24	TT	$1,252
E-4 ROCK SERVICE HRL 4B			***(Life = 5000 hrs)***			
ANMN1	E4	16.00-25	16.00 x 25.00	28	TL	$2,021
ANMN3	E4	18.00-33	18.00 x 33.00	32	TL	$3,280
ANMN4	E4	21.00-35	21.00 x 35.00	36	TL	$4,651
ANMN5	E4	24.00-35	24.00 x 35.00	36	TL	$5,875
ANMN9	E4	36.00-51	36.00 x 51.00	58	TL	$16,919
E-7 FLOTATION TYPE PAVER TIRE			***(Life = 3000 hrs)***			
ANMR1	E7	1600-24	16.00 x 24.00	12	TL	$1,202
G-1 RBG 1A			***(Life = 3200 hrs)***			
ANMS1	G1	1400-24	14.00 x 24.00	12	TL	$1,112
G-2 SGG2A			***(Life = 3200 hrs)***			
ANMT1	G2	13.00-20	13.00 x 20.00	10	TT	$437
ANMT10	G2	13.00-24 SG	13.00 x 24.00	12	TL	$361
ANMT6	G2	14.00-24	14.00 x 24.00	12	TL	$396
ANMT8	G2	16.00-24	16.00 x 24.00	12	TL	$1,125
G-2 GRADER SMOOTH			***(Life = 3200 hrs)***			
ANMU1	G1	13.00-24	13.00 x 24.00	10	TL	$463
G-2 SGLDL 2A L2			***(Life = 3200 hrs)***			
ANMV2	L2/G2	15.5-25	15.50 x 25.00	12	TL	$553
ANMV3	L2/G2	17.5-25	17.50 x 25.00	12	TL	$577

(1) TT = includes tube, TL = no tube, NO = no tube

APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
ANMV4	L2/G2	17.5-25	17.50 x 25.00	16	TL	$748
ANMV5	L2/G2	17.5-25	17.50 x 25.00	20	TL	$964
G-2 SGLEL 2A ES/L2/G2			***(Life = 3200 hrs)***			
ANMW1	E/L/G2	20.5-25	20.50 x 25.00	12	TL	$1,091
ANMW2	E/L/G2	20.5-25	20.50 x 25.00	16	TL	$1,178
ANMW4	E/L/G2	23.5-25	23.50 x 25.00	12	TL	$1,661
ANMW5	E/L/G2	23.5-25	23.50 x 25.00	16	TL	$1,742
G-3 RKG 3A			***(Life = 3200 hrs)***			
ANMX1	G3	14.00-24	14.00 x 24.00	16	TL	$898
L-2 DOZER/LOADER SERVICE TRACTION SG LUG DL			***(Life = 3200 hrs)***			
ANNA2	L3	26.5-25	26.50 x 25.00	20	TL	$2,874
L-3 DOZER/LOADER SERVICE ROCK SERVICE E3/L3			***(Life = 3200 hrs)***			
ANNB1	E/L 3	20.5-25	20.50 x 25.00	12	TL	$1,374
ANNB2	E/L 3	20.5-25	20.50 x 25.00	16	TL	$1,456
ANNB5	E/L 3	23.5-25	23.50 x 25.00	16	TL	$1,988
ANNB6	E/L 3	23.5-25	23.50 x 25.00	20	TL	$2,270
L-3 DOZER/LOADER SERVICE ROCK SHRL DL			***(Life = 3200 hrs)***			
ANNC1	L3	26.5-25	26.50 x 25.00	20	TL	$2,874
ANNC2	L4	29.5-25	29.50 x 25.00	22	TL	$4,706
ANNC3	L4	29.5-25	29.50 x 25.00	28	TL	$5,069
L-3 DOZER/LOADER SERVICE ROCK HRL DL 3A & 3F			***(Life = 3200 hrs)***			
ANND2	L/G3	17.5-25	17.50 x 25.00	12	TL	$677
ANND4	L/G3	17.5-25	17.50 x 25.00	20	TL	$1,107
L-4 DOZER/LOADER SERVICE ROCK DEEP TREAD S			***(Life = 5000 hrs)***			
ANNE2	L3	26.5-25	26.50 x 25.00	20	TL	$2,874
ANNE3	L4	29.5-25	29.50 x 25.00	22	TL	$4,706
ANNE4	L4	29.5-25	29.50 x 25.00	28	TL	$5,069
ANNE5	E3	29.5-29	29.50 x 29.00	34	TL	$4,738
L-4 DOZER/LOADER SERVICE ROCK DEEP TREAD N			***(Life = 5000 hrs)***			
ANNG1	L5	35/65-33	35.00 x 33.00	24	TL	$7,746
L-5 DOZER/LOADER SERVICE ROCK SUPER XTRA T			***(Life = 8000 hrs)***			
ANNL2	L5	35/65-33	35.00 x 33.00	30	TL	$8,056
ANNL4	L5	41.25/70-39	41.25 x 39.00	42	TL	$12,889
ANNL7	L5	45/65-45	45.00 x 45.00	58	TL	$18,677
L-5 DOZER/LOADER SERVICE SMOOTH SMO SL5B			***(Life = 8000 hrs)***			
ANNN3	IND 3	18.00-25	18.00 x 25.00	32	TL	$2,725

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APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
L-5 DOZER/LOADER SERVICE SMOOTH SUPER XTR			***(Life = 8000 hrs)***			
ANNO1	L5S	21.00-25	21.00 x 25.00	32	TL	$5,542
ANNO3	L5S	26.5-25	26.50 x 25.00	32	TL	$5,293
ANNO4	L5S	29.5-25	29.50 x 25.00	28	TL	$6,597
L-5 DOZER/LOADER SERVICE SMOOTH NSM DL5B			***(Life = 8000 hrs)***			
ANNP1	L5	35/65-33	35.00 x 33.00	24	TL	$7,746
INDUSTRIAL, SOLID						
SOLID, HIGH PERFORMANCE, OIL RESISTANT/STATI			***(Life = 5000 hrs)***			
EPPO5		10-3-61/4 Grip	3.00 x 10.00		NO	$256
EPPO4		10-31/2-6	3.50 x 10.00		NO	$310
EPPO18		12-31/2-8	3.50 x 12.00		NO	$313
EPPO23		13-31/2-8	3.50 x 13.00		NO	$264
EPPO32		15-31/2-111/4	3.50 x 15.00		NO	$411
EPPO1		81/2-4-4	4.00 x 8.50		NO	$351
EPPO10		10-4-61/2	4.00 x 10.00		NO	$268
EPPO6		10-4-61/4	4.00 x 10.00		NO	$313
EPPO19		12-4-8	4.00 x 12.00		NO	$310
EPPO47		161/4-4-111/4 Lug	4.00 x 16.25		NO	$122
EPPO30		14-41/2-8	4.50 x 14.00		NO	$466
EPPO40		16-41/2-101/2 Lug	4.50 x 16.00		NO	$528
EPPO2		9-5- 5 Grip	5.00 x 9.00		NO	$262
EPPO12		10-5-61/2	5.00 x 10.00		NO	$279
EPPO7		10-5-61/4	5.00 x 10.00		NO	$283
EPPO13		101/2-5-5	5.00 x 10.50		NO	$455
EPPO31		14-5-10	5.00 x 14.00		NO	$427
EPPO33		15-5-111/4	5.00 x 15.00		NO	$394
EPPO38		151/2-5-10	5.00 x 15.50		NO	$326
EPPO41		16-5-101/2	5.00 x 16.00		NO	$593
EPPO48		161/4-5-111/4	5.00 x 16.25		NO	$426
EPPO53		17-5-121/8	5.00 x 17.00		NO	$386
EPPO63		18-5-14	5.00 x 18.00		NO	$465
EPPO58		18-5-121/8	5.00 x 18.00		NO	$516
EPPO68		20-5-16	5.00 x 20.00		NO	$579
EPPO73		21-5-15	5.00 x 21.00		NO	$538
EPPO79		22-5-16	5.00 x 22.00		NO	$643
EPPO8		10-6-61/4	6.00 x 10.00		NO	$343
EPPO14		101/2-6-5 Lug	6.00 x 10.50		NO	$306
EPPO34		15-6-111/4 Grip	6.00 x 15.00		NO	$508
EPPO42		16-6-101/2	6.00 x 16.00		NO	$679
EPPO49		161/4-6-111/4	6.00 x 16.25		NO	$573

(1) TT = includes tube, TL = no tube, NO = no tube

APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
EPPO59		18-6-121/8	6.00 x 18.00		NO	$582
EPPO69		20-6-16	6.00 x 20.00		NO	$615
EPPO74		21-6-15	6.00 x 21.00		NO	$752
EPPO80		22-6-16	6.00 x 22.00		NO	$758
EPPO22		12-61/2-8	6.50 x 12.00		NO	$407
EPPO9		10-7-61/4	7.00 x 10.00		NO	$397
EPPO35		15-7-111/4	7.00 x 15.00		NO	$610
EPPO43		16-7-101/2	7.00 x 16.00		NO	$274
EPPO50		161/4-7-111/4	7.00 x 16.25		NO	$714
EPPO60		18-7-121/8	7.00 x 18.00		NO	$606
EPPO70		20-7-16	7.00 x 20.00		NO	$744
EPPO75		21-7-15	7.00 x 21.00		NO	$773
EPPO81		22-7-16	7.00 x 22.00		NO	$911
EPPO94		26-7-20	7.00 x 26.00		NO	$785
EPPO36		15-8-111/4	8.00 x 15.00		NO	$809
EPPO61		18-8-121/8	8.00 x 18.00		NO	$712
EPPO66		18-8-14	8.00 x 18.00		NO	$742
EPPO71		20-8-16	8.00 x 20.00		NO	$795
EPPO76		21-8-15	8.00 x 21.00		NO	$941
EPPO82		22-8-16	8.00 x 22.00		NO	$982
EPPO37		15-9-111/4	9.00 x 15.00		NO	$478
EPPO67		18-9-14	9.00 x 18.00		NO	$783
EPPO62		18-9-121/8	9.00 x 18.00		NO	$842
EPPO72		20-9-16	9.00 x 20.00		NO	$1,079
EPPO77		21-9-15	9.00 x 21.00		NO	$1,281
EPPO83		22-9-16	9.00 x 22.00		NO	$1,116
EPPO116		22-9-16	9.00 x 22.00		NO	$1,271
EPPO92		22-10-173/4	10.00 x 22.00		NO	$1,350
EPPO84		22-10-16	10.00 x 22.00		NO	$1,510
EPPO95		28-10-22	10.00 x 28.00		NO	$1,814
EPPO99		36-10-30	10.00 x 36.00		NO	$2,688
EPPO78		21-12-15	12.00 x 21.00		NO	$917
EPPO86		22-12-16	12.00 x 22.00		NO	$1,533
EPPO96		28-12-22	12.00 x 28.00		NO	$1,343
EPPO93		22-14-173/4	14.00 x 22.00		NO	$1,415
EPPO87		22-14-16	14.00 x 22.00		NO	$1,773
EPPO88		22-16-16	16.00 x 22.00		NO	$1,348
EPPO98		28-16-22	16.00 x 28.00		NO	$3,234
CONVEYOR/LOADER BELTING						
CONVEYOR BELTING (GOODYEAR WINGFOOT)			***(Life = 5000 hrs)***			
AZZA1		Conveyor Belting	24.00 x 50.00	2	NO	$544
AZZA2		Conveyor Belting	24.00 x 60.00	2	NO	$653

(1) TT = includes tube, TL = no tube, NO = no tube

APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AZZA3		Conveyor Belting	24.00 x 70.00	2	NO	$762
AZZA4		Conveyor Belting	24.00 x 80.00	2	NO	$871
AZZA5		Conveyor Belting	24.00 x 90.00	2	NO	$980
AZZA6		Conveyor Belting	24.00 x 100.00	2	NO	$1,088
AZZA7		Conveyor Belting	24.00 x 110.00	2	NO	$1,197
AZZA8		Conveyor Belting	24.00 x 120.00	2	NO	$1,306
AZZA9		Conveyor Belting	24.00 x 130.00	2	NO	$1,415
AZZA10		Conveyor Belting	24.00 x 140.00	2	NO	$1,524
AZZA11		Conveyor Belting	24.00 x 150.00	2	NO	$1,633
AZZA12		Conveyor Belting	30.00 x 50.00	2	NO	$680
AZZA13		Conveyor Belting	30.00 x 60.00	2	NO	$816
AZZA14		Conveyor Belting	30.00 x 70.00	2	NO	$952
AZZA15		Conveyor Belting	30.00 x 80.00	2	NO	$1,088
AZZA16		Conveyor Belting	30.00 x 90.00	2	NO	$1,225
AZZA17		Conveyor Belting	30.00 x 100.00	2	NO	$1,361
AZZA18		Conveyor Belting	30.00 x 110.00	2	NO	$1,497
AZZA19		Conveyor Belting	30.00 x 120.00	2	NO	$1,633
AZZA20		Conveyor Belting	30.00 x 130.00	2	NO	$1,769
AZZA21		Conveyor Belting	30.00 x 140.00	2	NO	$1,905
AZZA22		Conveyor Belting	30.00 x 150.00	2	NO	$2,041
AZZA23		Conveyor Belting	36.00 x 50.00	2	NO	$816
AZZA24		Conveyor Belting	36.00 x 60.00	2	NO	$980
AZZA25		Conveyor Belting	36.00 x 70.00	2	NO	$1,143
AZZA26		Conveyor Belting	36.00 x 80.00	2	NO	$1,306
AZZA27		Conveyor Belting	36.00 x 90.00	2	NO	$1,469
AZZA28		Conveyor Belting	36.00 x 100.00	2	NO	$1,633
AZZA29		Conveyor Belting	36.00 x 110.00	2	NO	$1,796
AZZA30		Conveyor Belting	36.00 x 120.00	2	NO	$1,959
AZZA31		Conveyor Belting	36.00 x 130.00	2	NO	$2,123
AZZA32		Conveyor Belting	36.00 x 140.00	2	NO	$2,285
AZZA33		Conveyor Belting	36.00 x 150.00	2	NO	$2,449
AZZA34		Conveyor Belting	42.00 x 50.00	2	NO	$952
AZZA35		Conveyor Belting	42.00 x 60.00	2	NO	$1,143
AZZA36		Conveyor Belting	42.00 x 70.00	2	NO	$1,333
AZZA37		Conveyor Belting	42.00 x 80.00	2	NO	$1,524
AZZA38		Conveyor Belting	42.00 x 90.00	2	NO	$1,715
AZZA39		Conveyor Belting	42.00 x 100.00	2	NO	$1,905
AZZA40		Conveyor Belting	42.00 x 110.00	2	NO	$2,095
AZZA41		Conveyor Belting	42.00 x 120.00	2	NO	$2,285
AZZA42		Conveyor Belting	42.00 x 130.00	2	NO	$2,477
AZZA43		Conveyor Belting	42.00 x 140.00	2	NO	$2,667
AZZA44		Conveyor Belting	42.00 x 150.00	2	NO	$2,857
AZZA45		Conveyor Belting	48.00 x 50.00	3	NO	$1,302

(1) TT = includes tube, TL = no tube, NO = no tube

APPENDIX F
TIRE DESCRIPTION AND TIRE COST

EP CODE	INDUSTRY CODE	SIZE DESCRIPTION	SIZE	PLY	TUBE (1)	COST PER EACH
AZZA46		Conveyor Belting	48.00 x 60.00	3	NO	$1,562
AZZA47		Conveyor Belting	48.00 x 70.00	3	NO	$1,823
AZZA48		Conveyor Belting	48.00 x 80.00	3	NO	$2,083
AZZA49		Conveyor Belting	48.00 x 90.00	3	NO	$2,343
AZZA50		Conveyor Belting	48.00 x 100.00	3	NO	$2,604
AZZA51		Conveyor Belting	48.00 x 110.00	3	NO	$2,864
AZZA52		Conveyor Belting	48.00 x 120.00	3	NO	$3,125
AZZA53		Conveyor Belting	48.00 x 130.00	3	NO	$3,385
AZZA54		Conveyor Belting	48.00 x 140.00	3	NO	$3,645
AZZA55		Conveyor Belting	48.00 x 150.00	3	NO	$3,906
AZZA56		Conveyor Belting	60.00 x 50.00	4	NO	$2,574
AZZA57		Conveyor Belting	60.00 x 60.00	4	NO	$3,089
AZZA58		Conveyor Belting	60.00 x 70.00	4	NO	$3,605
AZZA59		Conveyor Belting	60.00 x 80.00	4	NO	$4,120
AZZA60		Conveyor Belting	60.00 x 90.00	4	NO	$4,636
AZZA61		Conveyor Belting	60.00 x 100.00	4	NO	$5,151
AZZA62		Conveyor Belting	60.00 x 110.00	4	NO	$5,665
AZZA63		Conveyor Belting	60.00 x 120.00	4	NO	$6,180
AZZA64		Conveyor Belting	60.00 x 130.00	4	NO	$6,694
AZZA65		Conveyor Belting	60.00 x 140.00	4	NO	$7,210
AZZA66		Conveyor Belting	60.00 x 150.00	4	NO	$7,725

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APPENDIX G TIRE LIFE AND TIRE WEAR FACTORS

APPENDIX G
TIRE LIFE AND TIRE WEAR FACTORS

SECTION I. TIRE WEAR FACTORS

The tire wear factors used in this pamphlet are listed in appendix D. The "useful life" of a new tire is the product of Condition Factors (CF) from I through V, the Wheel Position Factor (WPF), the Grade Factor (GF) (for Drive Tires only) and the Miscellaneous Condition (MC). These factors provide a percentage reduction to the maximum tire life. See chapter 2 for tire cost methodology.

Condition Factors, Wheel Position Factors, Grade Factor, and Miscellaneous Condition are derived from the Caterpillar Performance Handbook.

The factors shown below are examples specifically for a rear dump wagon.

	Condition Factors (CF):		**Average**	**Severe**
I.	Maintenance		0.981	0.763
II.	Speed		0.872	0.763
III.	Curves		0.981	0.872
IV.	Surface Condition		0.981	0.763
V.	Loads		1.090	0.709
CF	***Product of the factors (I x II x III x IV x V)***		**0.897**	**0.275**
VI.	**Wheel Position Factors (WPF):**			
	WPF-FT	Front Tire (FT)	0.981	0.981
	WPF-DTR	Drive Tire (DT) - Rear Dump	0.818	0.709
	WPF-TT	Trailing Tire (TT)	1.090	1.090
VII.	**Grade Factor (GF)** (Drive Tires Only)		0.981	0.763
VIII.	**Miscellaneous Condition (MC)**		1.090	0.981

APPENDIX G
TIRE LIFE AND TIRE WEAR FACTORS (Continued)

SECTION I. TIRE WEAR FACTORS (Continued)

Example: Final Tire Wear Factors for Wagon, Rear Dump
(See Appendix D, Category W15)

	Average	Severe
Front Tire - Average = (CF = 0.897)(WPF-FT = 0.981)(MC = 1.090)	0.96	
Front Tire - Severe = (CF = 0.275)(WPF-FT = 0.981)(MC = 0.927)		0.60
Drive Tire - Average = (CF = 0.897)(WPF-DTR = 0.763)(GF = 0.981)(MC = 1.090)	0.78	
Drive Tire - Severe = (CF = 0.275)(WPF-DTR = 0.732)(GF = 0.763)(MC = 0.927)		0.15
Trailing Tire - Average = (CF = 0.897)(WPF-TT = 1.090)(MC = 1.090)	1.07	
Trailing Tire - Severe = (CF = 0.275)(WPF-TT = 1.090)(MC = 0.927)		0.29

SECTION II. MAXIMUM TIRE LIFE

Maximum tire life is used in the formula to determine tire wear cost and is located in Appendix F by type of tire.

APPENDIX H MANUFACTURER LIST

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
A1	- ALLIED-GATOR, INC.
A2	- ASV INC.
A3	- AMERICAN PILEDRIVING EQUIPMENT, INC.
A4	- ATLAS COPCO WAGNER INC.
AA	- AMERICAN AUGERS, INC.
AB	- ALLMAND BROTHERS INC.
AC	- ACE ENTERPRISES
AD	- ACKER DRILL COMPANY INC.
AE	- AEROIL PRODUCTS COMPANY, INC.
AF	- AIRPLACO EQUIPMENT CO., INC.
AG	- ARROW-MASTER, INC.
AH	- AUTO CRANE CO.
AI	- AMIDA INDUSTRIES, INC.
AJ	- ALLEN ENGINEERING CORP.
AK	- TYLER EQUIPMENT CO.
AL	- ALLENTOWN EQUIPMENT
AM	- AMERICAN CRANE CORPORATION
AN	- ATLANTIC
AO	- ALKOTA CLEANING SYSTEMS, INC.
AP	- PECCO AND WOLFF TOWER CRANES
AQ	- AQUATICS UNLIMITED
AR	- AMERICAN ROAD MACHINERY, INC.
AS	- ATLAS COPCO COOSTRUCTION TOOLS INC.
AT	- ANDERSON MAVOR INC.
AU	- ALLIED CONSTRUCTION PRODUCTS
AV	- ALIVA LTD.
AW	- AIRMAN (HOKUETSU INDUSTRIES CO. LTD.)
AX	- AMERICAN COMPACTION EQUIPMENT, INC.
AY	- KOMLINE-SANDERSON ENGINEERING CO.
AZ	- ALLIS-CHALMERS CORP.
BA	- BADGER EQUIPMENT CO.
BB	- BASCO

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
BC	- BOCK ENGINEERED PRODUCTS, INC.
BD	- BRODERSON MANUFACTURING CORPORATION
BE	- INGERSOLL RAND MATERIAL HANDLING
BF	- BENFORD
BG	- BARBER-GREENE COMPANY
BI	- BOR-IT MANUFACTURING COMPANY INC.
BJ	- BURKEEN MANUFACTURING CO.
BK	- BLAW KNOX CONSTRUCTION EQUIPMENT CORP.
BL	- US FILTER/BLASTRAC
BM	- BROCE MANUFACTURING COMPANY
BN	- BANDIT INDUSTRIES, INC.
BO	- COMPACTION AMERICA
BQ	- BELL EQUIPMENT NORTH AMERICA INC .
BR	- BROOKVILLE MINING EQUIPMENT CORP.
BS	- BALDERSON, INC.
BT	- BREAKER TECHNOLOGY INC.
BU	- BUSH HOG
BW	- BOWIE INDUSTRIES, INC.
BX	- BIL-JAX, INC.
C1	- COYOTE LOADER SALES, INC.
C2	- CARELIFT EQUIPMENT
C3	- TIME CONDOR CORPORATION
C4	- CATERPILLAR LIFT TRUCKS,
CA	- CATERPILLAR INC. (MACHINE DIVISION)
CB	- CONSOLIDATED BALING MACHINE COMPANY, INC
CC	- CEMEN TECH
CD	- CDS GROUP
CE	- ATHEY PRODUCTS CORPORATION
CF	- CGR COMPACTING
CG	- CHEMGROUT, INC.
CH	- CHAMPION ROAD MACHINERY - SUPERPAC CO.
CI	- CHIPMORE MANUFACTURING CO., INC.

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
CJ	- COLD JET
CK	- CHICAGO PNEUMATIC TOOL CO.
CL	- CON-E-CO
CM	- CLEMCO INDUSTRIES CORPORATION
CN	- CEMEN TECH, INC.
CO	- BOMAG AMERICAS
CP	- CRISAFULLI PUMP
CQ	- CUSHION CUT, INC.
CR	- CAMLEVER
CS	- CASE CORPORATION
CT	- CLEVELAND TRENCHER
CU	- CUSCO INDUSTRIES
CV	- CONMACO, INC.
CW	- CMI CORPORATION - BID-WELL DIVISION
CX	- CMC (CONSTRUCTION MACHINERY COMPANY)
CY	- CENTRIC
CZ	- CLYDE IRON WORKS
DA	- ELCO INTERNATIONAL INC.
DD	- DELTA DREDGE & PUMP CORP.
DE	- DEMOLITION TECHNOLOGIES
DF	- DURA FLOAT
DG	- DAINONG HEAVY INDUSTRIES, INC.
DH	- DAEWOO HEAVY INDUSTRIES LTD.
DI	- DICKSON INDUSTRIES INC.
DJ	- CATERPILLAR/DJB
DL	- PILECO, INC.
DO	- DOSCO CORPORATION
DR	- DRESSER MINING EQUIPMENT
DS	- DREDGING SUPPLY COMPANY (DSC)
DT	- DRILTECH, INC.
DW	- DITCH WITCH(The Charles Machine Works)I
DY	- DYNAPAC DIVISION - SVEDALA INDUSTRIES

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
EA	- EAGER BEAVER
EC	- ELGIN SWEEPER COMPANY
ED	- EQUIPMENT DEVELOPMENT CO., INC. (EDCO)
EI	- EIMCO JARVIS CLARK
EJ	- CEDARAPIDS INC., A TEREX COMPANY
EL	- ELLICOTT MACHINE CORPORATION
EM	- EXCEL MACHINERY LTD.
EP	- ENVIRO-PAK
ES	- ESCO CORPORATION
ET	- E. D. ETNYRE & CO.
EU	- EUCLID INDUSTRIES, INC.
EX	- EXCEL INDUSTRIES, INC.
EZ	- E-Z DRILL, INC.
FC	- FERMEC NORTH AMERICA LTD., A TEREX CO.
FE	- FELKER
FG	- FINN CORPORATION
FH	- FRUEHAUF TRAILER CORPORAITON
FI	- FIATALLIS
FK	- FRANKLIN TREEFARMER
FL	- FLETCHER MINING EQUIPMENT
FN	- NEW HOLLAND NORTH AMERICA, INC.
FO	- FORD MOTOR COMPANY
FR	- FERGUSON MANUFACTURING & EQUIPMENT
FS	- FIVE STAR MANUFACTURING CO/ELGIN SWEEPER
FU	- FURUKAWA CO.,LTD.
GA	- GRADALL COMPANY
GB	- GAR-BRO MANUFACTURING COMPANY
GC	- GEHL COMPANY
GD	- GARDNER-DENVER INDUSTRIAL MACHINES
GE	- GENSCO AMERICA CO. LTD.
GF	- GRIFFIN DEWATERING CORP.
GH	- GEITH INC.

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
GI	- GALION DIVISION
GJ	- GENIE INDUSTRIES
GL	- GARLOCK EQUIPMENT CO.
GM	- GMC AND CHEVROLET
GN	- GALION DUMP BODIES, INC.
GO	- GOMACO CORPORATION
GR	- GORMAN-RUPP COMPANY
GT	- GILCREST EQUIPMENT COMPANY
GV	- GROVE CRANES
GW	- GROVE MANLIFT
HA	- HAZCO SERVICES, INC.
HB	- HAWCO MANUFACTURING COMPANY, LLC
HC	- HAMM COMPACTORS, INC.
HD	- HYDRAULIC POWER SYSTEMS, INC.
HE	- HENDRIX MANUFACTURING COMPANY, INC.
HF	- HYDRA-MAC INTERNATIONAL, INC.
HH	- ESG MANUFACTURING H&H PUMP & DREDGE
HI	- HITACHI CONSTRUCTION MACHINERY
HM	- H&M VIBRO, INC.
HN	- HINO DIESEL TRUCKS (U.S.A.) INC.
HO	- HOMELITE, INC. (DEERE & COMPANY)
HP	- COMPACTION AMERICA
HQ	- HYPAC COMPACTION EQUIPMENT
HR	- HYDROCAL INC.
HU	- HYUNDAI CONSTRUCTION EQUIPMENT
HW	- HEWITT-ROBINS
HY	- HYSTER CO.
HZ	- HOFFCO-COMET
IA	- INGERSOLL RAND ROTARY-REC COMPRESSOR DIV
IB	- INGERSOLL RAND ROTARY DRILL DIV
IC	- INTERNATIONAL CONSTRUCTION EQUIPMENT,INC
ID	- KOMATSU DRESSER

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
IE	- IDEAL MANUFACTURING, INC.
IF	- INGERSOLL RAND PORTABLE COMPRESSOR DIV
IG	- INGRAM MANUFACTURING CO.
IH	- NAVISTAR INTERNATIONAL TRANSPORTATION
IM	- INNOVATIVE MATERIAL SYSTEMS, INC. (IMS)
IN	- INGERSOLL RAND CO.
IP	- INGERSOLL RAND ROAD MACHINERY DIV
IR	- INGERSOLL RAND ROCK DRILL DIV
IS	- INSLEY DIVISION
IT	- NAVISTAR INTERNATIONAL CORPORATION
JC	- JCB INC.
JD	- DEERE & COMPANY
JE	- JCL EQUIPMENT CO.
JL	- JLG INDUSTRIES, INC.
JM	- JEFFREY MINING MACHINERY DIVISION
JO	- C. S. JOHNSON COMPANY
JR	- JRB COMPANY INC.
JS	- JOHNSTON SWEEPER COMPANY
JU	- ATI-Bell
KA	- KAWASAKI LOADERS, INC.
KB	- KOLBERG - PIONEER, INC
KC	- KOBELCO AMERICA INC.
KD	- K-D MANITOU, INC.
KE	- KENWORTH TRUCK COMPANY
KF	- KNAPHEIDE MANUFACTURING CO.
KH	- KOHLER COMPANY
KI	- KLEIN PRODUCTS, INC.
KK	- KEENE ENGINEERING INC.
KL	- KOLMAN / ATHEY DIV.
KM	- Komatsu America International Company
KN	- KENT DEMOLITION TOOLS
KO	- KOEHRING CRANES, INC.

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
KP	- KOCH-WATER
KR	- KORI CORPORATION
KU	- KUBOTA TRACTOR CORPORATION
KW	- KERSHAW MFG., CO.
KZ	- KEIZER TECHNOLOGIES AMERICAS, INC
LA	- LAYTON MANUFACTURING COMPANY
LB	- LINK-BELT CONSTRUCTION EQUIPMENT CO.
LC	- LINCOLN ELECTRIC COMPANY
LD	- LEE-BOY
LE	- LELY PACIFIC, INC.
LG	- LITTLE GIANT CRANE & SHOVEL INC.
LH	- MORROW EQUIPMENT COMPANY, LLC
LI	- LINK-BELT CONSTRUCTION EQUIPMENT COMPANY
LK	- LIFTKING INDUSTRIES, INC.
LL	- OMNIQUIP, LULL
LN	- LONDON MACHINERY INC.
LO	- LORAIN CRANES DIVISION
LS	- LAKE SHORE MINING EQUIPMENT INC.
LU	- LABOUNTY MANUFACTURING,
LY	- BOART LONGYEAR COMPANY
LZ	- LIEBHERR CONSTRUCTION EQUIPMENT CO
M1	- MANITEX - MANITOWOC BOOM TRUCKS GROUP
M2	- MAULDIN - CALDER BROTHERS CORP.
M3	- MAYCO PUMP - MULTIQUIP INC.
M4	- MITCHELL INDUSTRIAL TIRE COMPANY (MITCO)
MA	- MANITOWOC ENGINEERING CO.
MB	- M-B COMPANIES, INC.
MC	- VME NORTH AMERICA
MD	- MDI/YUTANI
ME	- MELROE COMPANY/BOBCAT
MF	- MF INDUSTRIAL
MG	- McMASTER-CARR

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
MH	- MITSUBISHI FUSO TRUCK OF AMERICA
MI	- MITSUBISHI CONSTRUCTION EQUIP.
MJ	- MILLER SPREADER CO.
MK	- MKT MANUFACTURING, INC.
ML	- ITT MARLOW PUMPS
MM	- MACO-MUEDON
MN	- MAC CORPORATION
MO	- MORGEN MANUFACTURING CO.
MP	- MIDLAND MACHINERY CO
MQ	- MORBARK, INC.
MR	- FOREMOST MOBILE DRILLING COMPANY, INC.
MS	- MUSTANG UNITS COMPANY
MT	- MACK TRUCKS, INC.
MU	- MULTIQUIP, INC.
MV	- MAYVILLE ENGINEERING CO., INC.
MW	- M-B-W, INC.
MX	- MAXON INDUSTRIES
MY	- MIDLAND MANUFACTURING INC.
MZ	- MARINE INLAND FABRICATORS
NA	- NAGANO - LELY CORP.
NB	- NASCO EQUIPMENT CO. INC.
NC	- NATIONAL CRANE CORPORATION
NE	- NEAL MANUFACTURING COMPANY, INC
NI	- NIFTYLIFT INC. - USA
NL	- NLB CORPORATION
NO	- NORTHWEST ENGINEERING COMPANY
NP	- NPK CONSTRUCTION EQUIPMENT
OE	- OLIN ENGINEERING, INC.
OK	- O & K ORENSTEIN & KOPPEL INC.
OL	- OLYMPYK CHAIN SAWS
ON	- ONAN CORPORATION
PA	- PALFINGER INC.

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
PB	- PETTIBONE MICHIGAN LLC
PC	- GETMAN BROTHERS MFG. COMPANY
PE	- PETERBILT MOTORS COMPANY
PH	- P & H
PI	- PIQUA ENGINEERING
PL	- PRO-LINE / ANVIL ATTACHMENTS
PN	- PEMBERTON, INC.
PO	- PROGRESSIVE DEVELOPMENT INC.
PP	- PACIFIC RUBBER
PR	- USFILTER PERRIN PRODUCTS
PS	- POWER CURBERS, INC.
PT	- PATENT CONSTRUCTION SYSTEMS
PU	- PUTZMEISTER INC.
PW	- POWERSCREEN INTERNATIONAL DISTRIBUTN LTD
PZ	- PACIFIC RUBBER
RA	- METSO MINERALS
RC	- ROSS COMPANY
RD	- REEDRILL, INC.
RE	- NORSTAR PRODUCTS INTERNATIONAL, INC.
RI	- REYNOLDS INTERNATIONAL, L.P.
RK	- RAPID MIX
RM	- ROME PLOW CO.
RN	- ALLIED SYSTEMS COMPANY (RANGER)
RO	- ROBBINS COMPANY
RQ	- REED MANUFACTURING
RR	- RAMMER - GR COSTRUTTORI - SANDVIK
RS	- ROSCO, A LeeBoy COMPANY
RT	- ROADTEC
RX	- RAMMAX MACHINERY CO.
S1	- STANLEY HYDRAULIC TOOLS
S2	- SCHRAMM, INC
S3	- CHAMPION ROAD MACHINERY - SUPERPAC CO.

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
S4	- SUPERIOR INDUSTRIES, AN ASTEC COMPANY
S5	- SOMAT WASTE REDUCTION TECHNOLOGY
S6	- SUPERIOR TIRE & RUBBER CORP.
SA	- SAUERMAN
SB	- SCAT TRAK - OMNIQUIP - TEXTRON INC.
SC	- SCHWING AMERICA INC.
SD	- SIOUX STEAM CLEANER CORPORATION
SE	- SEALMASTER, INC.
SF	- SECO CORPORATION
SG	- STONE CONSTRUCTION EQUIPMENT, INC.
SH	- SHRED-TECH LIMITED
SI	- SAKAI AMERICA, INC.
SJ	- SKYJACK, INC.
SK	- LTV ENERGY PRODUCTS (SKAGIT)
SL	- SHUTTLELIFT, INC.
SM	- SEAARK MARINE
SN	- STEPHENS MANUFACTURING CO., INC.
SO	- SOUTHWEST CONSTRUCTION EQUIPMENT CO.
SP	- SPRAGUE AND HENWOOD
SQ	- SCHAEFF INC.
SR	- SULLAIR CORPORATION
SS	- SAMSUNG CONSTRUCTION EQUIPMENT AMERICA
ST	- STOW MANUFACTURING, INC.
SU	- SULLIVAN INDUSTRIES, INC.
SV	- SOMERO ENTERPRISES, INC.
SW	- SNORKEL
SX	- SELLICK EQUIPMENT LIMITED
SY	- SKY TRAK - OMNIQUIP - TEXTRON INC.
SZ	- STRATO-LIFT INTERNATIONAL CORP.
TA	- TAMPO MANUFACTURING CO., INC.
TB	- TERRAMITE CONSTRUCTION EQUIPMENT
TC	- TCM

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
TD	- TADANO AMERICA CORPORATION
TE	- TEREX CORPORATION
TF	- THOMAS EQUIPMENT LTD.
TG	- TIMBCO HYDRAULICS, INC.
TH	- TEEMARK CORPORATION
TI	- TIMBERJACK, A JOHN DEERE COMPANY
TJ	- TRAMAC
TK	- TAKEUCHI MFG. (U.S.), LTD
TL	- BREAKER TECHNOLOGY, INC. (AN ASTEC CO.)
TM	- TESMEC USA, INC.
TO	- TORO
TR	- TEREX MINING
TS	- TELSMITH INC.
TT	- TRAIL KING INDUSTRIES, INC.
TU	- TITAN INTERNATIONAL, INC.
TV	- TRAVERSE LIFT CO.
UE	- UNDERGROUND EQUIPMENT & SUPPLY
UL	- UNIVERSAL ENGINEERING - SVEDALA - METSO
UN	- UNIT RIG
UP	- UPRIGHT INC.
VA	- VOEST-ALPINE
VB	- VIBROMAX AMERICA INC.
VE	- VERMEER MANUFACTURING CO.
VI	- VINCE HAGAN COMPANY
VO	- VOLVO CONSTRUCTION EQUIPMENT GROUP
VP	- VOGELE AMERICA - PRO-PAV DIV.
VS	- VALLEY SLURRY SEAL / MACROPAVER DIVISION
VT	- VALMET - PARTEK FOREST LLC
VU	- VULCAN FOUNDATION EQUIPMENT, INC
WA	- HAULPAK DIVISION
WB	- WEBER MASCHINENTECHNIK GMBH
WC	- WACKER CORPORATION

APPENDIX H
MANUFACTURER LIST

CODE	MANUFACTURER
WD	- WALDON, INC.
WE	- WEATHERFORD U.S. INC.
WF	- WATSON INC.
WG	- ATLAS COPCO WAGNER
WH	- WIGGINS LIFT CO., INC.
WI	- WILLMAR EQUIPMENT COMPANY
WL	- WALKER MANUFACTURING CO., INC.
WN	- WAIN-ROY, INC.
WO	- WACO SCAFFOLDING & EQUIPMENT
WR	- WARNER FRUEHAUF TRAILER CO., INC.
WS	- WHITEMAN CONSPRAY, INC.
WT	- WIRTGEN AMERICAN, INC.
XX	- NO SPECIFIC MANUFACTURER
YA	- YANMAR DIESEL AMERICA CORP.
YB	- ADVANCED ENVIRONMENTAL SOLUTIONS
ZZ	- GENERIC EQUIPMENT

APPENDIX I FEDERAL COST-OF-MONEY RATE

APPENDIX I

FEDERAL COST-OF-MONEY RATE

(Renegotiation or Prompt Payment Rate)

EFFECTIVE MONTHS	EFFECTIVE DATE	RATE
JULY - DECEMBER	7/1/1992	7.000%
JANUARY - JUNE	1/1/1993	6.500%
JULY - DECEMBER	7/1/1993	5.625%
JANUARY- JUNE	1/1/1994	5.500%
JULY - DECEMBER	7/1/1994	7.000%
JANUARY - JUNE	1/1/1995	8.125%
JULY - DECEMBER	7/1/1995	6.375%
JANUARY - JUNE	1/1/1996	5.875%
JULY - DECEMBER	7/1/1996	7.000%
JANUARY - JUNE	1/1/1997	6.375%
JULY - DECEMBER	7/1/1997	6.750%
JANUARY - JUNE	1/1/1998	6.250%
JULY - DECEMBER	7/1/1998	6.000%
JANUARY - JUNE	1/1/1999	5.000%
JULY - DECEMBER	7/1/1999	6.500%
JANUARY - JUNE	1/1/2000	6.750%
JULY - DECEMBER	7/1/2000	7.250%
JANUARY - JUNE	1/1/2001	6.375%
JULY - DECEMBER	7/1/2001	5.875%
JANUARY - JUNE	1/1/2002	5.500%
JULY - DECEMBER	7/1/2002	5.250%
JANUARY - JUNE	1/1/2003	4.250%
JULY - DECEMBER	7/1/2003	3.125%
JANUARY - JUNE	1/1/2004	4.000%
JULY - DECEMBER	7/1/2004	4.000%
JANUARY - JUNE	1/1/2005	4.000%
JULY - DECEMBER	7/1/2005	4.500%
JANUARY - JUNE	1/1/2006	5.125%
JULY - DECEMBER	7/1/2006	5.750%
JANUARY - JUNE	1/1/2007	5.250%

APPENDIX J EQUIPMENT ACCESSORIES

APPENDIX J
EQUIPMENT ACCESSORIES

The following accessories are listed by category (CAT), subcategory (SUB), and description (including features required for safety). The accessories 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.

CAT SUB	DESCRIPTION
C85.10	**CRANES, DRAGLINE AND CLAMSHELL, CRAWLER MOUNTED**
	Power load lowering
	Independent swing and travel
	Third drum
	Torque converter [machines 1 1/2 cubic yard (cy) or larger]
	Approximately one-half maximum boom length
	Counterweight (standard)
	Fire extinguisher 5-B:C
	Swing and reverse signal (backup) alarm
	Boom angle indicator and a load-indicating device
	Drum rotation indicators
	Anti-two block (upper limit) devices
	Manufacturers' mandatory accessories
C85.20	**CRANES, LIFTING, CRAWLER MOUNTED**
	Power load lowering
	Independent swing and travel
	Third drum
	Torque converter (machines 25 tons or larger)
	One-half maximum boom length (machines less than 60 tons)
	Maximum boom length at 360 degree rating (machines larger than 60 tons)
	Counterweight (standard)
	Fire extinguisher 5-B:C
	Swing and reverse signal (backup) alarm
	Boom angle indicator and a load-indicating device
	Drum rotation indicators
	Anti-two block (upper limit) devices
	Manufacturers' mandatory accessories
	Hook block on machines larger than 100 tons
C90.01	**TRUCK CRANES - LESS THAN 25 TONS**
	Power load lowering
	Third drum
	Mechanical outriggers with screw jacks
	Maximum boom length at 360 degrees rating
C90.01	**TRUCK CRANES - LESS THAN 25 TONS** (Continued)

APPENDIX J
EQUIPMENT ACCESSORIES

CAT SUB	DESCRIPTION
	Counterweight (standard)
	Fire extinguisher 5-B:C
	Swing and reverse signal (backup) alarm
	Boom angle indicator and a load-indicating device
	Drum rotation indicators
	Anti-two block (upper limit) devices
	Manufacturers mandatory accessories
C90.02	**TRUCK CRANE - 25 TONS AND LARGER**
C90.03	Power load lowering
C90.04	Third drum
	Hydraulic outriggers with screw jacks
	Torque converter when available (upper only)
	Maximum boom length at 360 degrees rating
	Counterweight (standard)
	Fire extinguisher 5-B:C
	Reverse signal (backup) alarm
	Boom angle indicator and a load-indicating device
	Drum rotation indicators
	Anti-two block (upper limit) devices
	Hook block on machines larger than 100 tons
G15	**GRADER**
	Rollover protective structures (ROPS) with enclosed cab
	Ripper/scarifier, rear mounted
	Front wheel lean
	Power circle
	Hydraulic shift and tilt moldboard
	End bits
	Standard work lights
	Fire extinguisher 5-B:C
	Reverse signal (backup) alarm
H25	**EXCAVATORS, HYDRAULIC**
H30	Backhoe bucket (standard)
	Backhoe stick (medium length)
	Backhoe boom (one piece)
	Backhoe bucket linkage (with cylinder)
	Guards
	Counterweight
	Standard work lights
	Reverse signal (backup) alarm

APPENDIX J
EQUIPMENT ACCESSORIES

CAT SUB	DESCRIPTION
	ROPS Fire extinguisher 5-B:C
H35	**HYDRAULIC SHOVELS - CRAWLER MOUNTED** Torque converter (machines 1 1/2 cy or larger) Counterweight Reverse signal (backup) alarm ROPS Fire extinguisher 5-B:C
L30	**LOADERS, BELT (CONVEYOR BELTS)** Power unit Head pulley clutch and backstop Belt cleaner and belt installing equipment King pin attachments
L35 **L40**	**LOADERS, 1 1/2 cy AND LARGER** Blower fan Guard, power train Automatic bucket positioner Standard counterweight Machines less than 7 cy: General purpose or excavating bucket with bolt on cutting edge and no teeth Machines 7 cy or larger: Rock bucket with bolt on cutting edge and teeth Standard work lights Reverse signal (backup) alarm ROPS Fire extinguisher 5-B:C
S10 **S15** **S20**	**SCRAPERS** Control single lever Blower fan Standard work light Guards, power train Reverse signal (backup) alarm ROPS Fire extinguisher 5-B:C Supplemental steering
T15	**TRACTOR, CRAWLER** Hydraulic controls for ripper and blade

APPENDIX J
EQUIPMENT ACCESSORIES

CAT SUB	DESCRIPTION
	Guards
	Blower fan
	Standard work lights
	Hook, front pull
	Track grousers (severe service for units over 200 hp)
	Counterweights where required
	Reverse signal (backup) alarm
	ROPS
	Universal blade
T20	**TRACTOR, WHEEL**
	Hydraulic controls for ripper and blade
	Guards
	Blower fan
	Standard work lights
	Blade
	Fire extinguisher 5-B:C
	Counterweights when required
T25	**TRACTOR, AGRICULTURAL**
	Independent power take off (PTO)
	Standard work lights
	Fire extinguisher 5-B:C
	Counterweights when required
	3-point hitch
	ROPS
	Hydraulic system with controls
T55	**TRUCKS, OFF-HIGHWAY**
	No spin differential
	Tachograph
	Engine and transmission guards
	Body liners

APPENDIX K ACRONYMS

APPENDIX K

ACRONYMS

AVF	average value factor
bhp	brake horsepower
CAT	category
CENWW	U.S. Army Corps of Engineers, Walla Walla District
CMR	cost of money rate
cwt	hundredweight
D	diesel
DC	discount code
DEPR	depreciation
DT	drive tire
E	electricity
EAF	economic adjustment factor
EK	economic key
EP	Engineer Pamphlet
ER	Engineer Regulation
FAR	Federal Acquisition Regulation
EFAR	Engineer Federal Acquisition Regulation
FCCM	facilities capital cost of money
FOG	filters, oil, and grease
FT	front tire
G	gas
G&A	general and administrative
gal	gallon
GCW	gross combined weight
GVW	gross vehicle weight
hp	horsepower
HPF	horsepower factor
hr	hour
ID No.	identification number
IGE	Independent Government Estimate
kW	kilowatt
LAF	labor adjustment factor
lbs	pounds
LIFE	Chapter 1 economic life (probably should take this out)
N	number of years
PDF	portable document format
PTO	power take off
RCF	repair cost factor
RF	repair factor
ROPS	Rollover protective structures
RPR	repairs
SLV	salvage value

SUB	subcategory
TCI	tire cost index
TEV	total equipment value
TT	trailing tire
WHPY	working hours per year
wk	week
WLS	water, lube, and supplies
yr	year

APPENDIX L GROUND ENGAGING COMPONENT COSTS INCLUDED IN REPAIRS (RCF)

APPENDIX L

Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV		Blade cutting edges, wear plates, hard facing, and end plates		Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
B15	0.00	BROOMS, STREET SWEEPERS & FLUSHERS	95	A	B	8,000	0.10		☐		☐	☐	☑	0.80
B25	0.00	BUCKETS, CLAMSHELL	15	A	B	8,000	0.10		☐		☑	☐	☐	0.70
B25	0.00	BUCKETS, CLAMSHELL	15	S	B	6,500	0.10		☐		☑	☐	☐	0.80
B35	0.00	BUCKETS, DRAGLINE	1						☐		☑	☐	☐	
B35	0.10	LIGHT WEIGHT	15	A	B	8,000	0.10		☐		☑	☐	☐	0.70
B35	0.10	LIGHT WEIGHT	15	S	B	6,500	0.10		☐		☑	☐	☐	0.80
B35	0.20	MEDIUM WEIGHT	15	A	B	9,000	0.10		☐		☑	☐	☐	0.70
B35	0.20	MEDIUM WEIGHT	15	S	B	7,000	0.10		☐		☑	☐	☐	0.80
B35	0.30	HEAVY WEIGHT	15	A	B	10,000	0.10		☐		☑	☐	☐	0.70
B35	0.30	HEAVY WEIGHT	15	S	B	8,000	0.10		☐		☑	☐	☐	0.80
G15	0.00	GRADERS, MOTOR	35	A	B	14,500	0.25		☑		☐	☑	☐	0.75
G15	0.00	GRADERS, MOTOR	35	S	B	13,500	0.25		☑		☐	☑	☐	0.85
H25	0.00	HYDRAULIC EXCAVATORS, CRAWLER MOUNTED	1						☐		☑	☐	☐	
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	A	B	8,000	0.25		☐		☑	☐	☐	0.70
H25	0.10	0 LBS THRU 12,500 LBS (COMPACT EXCAVATORS)	65	S	B	7,000	0.25		☐		☑	☐	☐	0.80
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	65	A	B	8,500	0.25		☐		☑	☐	☐	0.70
H25	0.11	OVER 12,500 LBS THRU 40,000 LBS	65	S	B	7,000	0.25		☐		☑	☐	☐	0.85
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	65	A	B	12,000	0.25		☐		☑	☐	☐	0.80
H25	0.12	OVER 40,000 LBS THRU 100,000 LBS	65	S	B	10,000	0.25		☐		☑	☐	☐	0.95
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	65	A	B	16,000	0.25		☐		☑	☐	☐	1.00
H25	0.13	OVER 100,000 LBS THRU 160,000 LBS	65	S	B	13,500	0.25		☐		☑	☐	☐	1.10
H25	0.14	OVER 160,000 LBS	65	A	B	19,000	0.25		☐		☑	☐	☐	1.10
H25	0.14	OVER 160,000 LBS	65	S	B	15,000	0.25		☐		☑	☐	☐	1.25
H30	0.00	HYDRAULIC EXCAVATORS, WHEEL MOUNTED	1						☐		☑	☐	☐	

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APPENDIX L

Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV		Blade cutting edges, wear plates, hard facing, and end plates		Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
H30	0.01	0 THRU 1.0 CY	65	A	B	8,000	0.25		☐		☑	☐	☐	0.50
H30	0.01	0 THRU 1.0 CY	65	S	B	6,500	0.25		☐		☑	☐	☐	0.55
H30	0.02	OVER 1.0 CY	65	A	B	10,000	0.25		☐		☑	☐	☐	0.60
H30	0.02	OVER 1.0 CY	65	S	B	8,000	0.25		☐		☑	☐	☐	0.65
H35	0.00	HYDRAULIC SHOVELS, CRAWLER MOUNTED	1						☐		☑	☐	☐	
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	65	A	B	14,000	0.20		☐		☑	☐	☐	1.00
H35	0.11	DIESEL, 0 CY THRU 5.0 CY	65	S	B	12,000	0.20		☐		☑	☐	☐	1.10
H35	0.12	DIESEL, OVER 5.0 CY	65	A	B	16,000	0.20		☐		☑	☐	☐	1.20
H35	0.12	DIESEL, OVER 5.0 CY	65	S	B	14,000	0.20		☐		☑	☐	☐	1.30
H35	0.21	ELECTRIC, OVER 2.5 CY	65	A	B	18,000	0.20		☐		☑	☐	☐	0.80
H35	0.21	ELECTRIC, OVER 2.5 CY	65	S	B	16,000	0.20		☐		☑	☐	☐	0.90
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	40	A	B	10,000	0.20		☐		☑	☐	☐	1.10
L35	0.00	LOADERS, FRONT END, CRAWLER TYPE	40	S	B	8,000	0.20		☐		☑	☐	☐	1.25
L40	0.00	LOADERS, FRONT END, WHEEL TYPE	1						☐		☑	☐	☐	
L40	0.11	ARTICULATED, 0 THRU 225 HP	45	A	B	9,250	0.25		☐		☑	☐	☐	0.70
L40	0.11	ARTICULATED, 0 THRU 225 HP	45	S	B	8,750	0.25		☐		☑	☐	☐	0.80
L40	0.12	ARTICULATED, OVER 225 HP	45	A	B	13,500	0.20		☐		☑	☐	☐	0.70
L40	0.12	ARTICULATED, OVER 225 HP	45	S	B	12,000	0.20		☐		☑	☐	☐	0.75
L40	0.20	SKID STEER	45	A	B	8,000	0.20		☐		☑	☐	☐	0.80
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	A	B	10,000	0.25		☐		☐	☐	☑	0.85
L40	0.31	TOOL CARRIER & TELESCOPIC HANDLERS, 0 THRU 225 HP	45	S	B	9,250	0.25		☐		☐	☐	☑	0.90
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	A	B	12,000	0.15		☐		☐	☐	☑	0.85
L40	0.32	TOOL CARRIER & TELESCOPIC HANDLERS, OVER 225 HP	45	S	B	10,000	0.15		☐		☐	☐	☑	0.90
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	A	B	8,000	0.20		☐		☑	☐	☐	1.35

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APPENDIX L

Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV		Blade cutting edges, wear plates, hard facing, and end plates		Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
L45	0.00	LOADERS / BACKHOE, CRAWLER TYPE	40	S	B	6,000	0.20		☐		☑	☐	☐	1.40
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	45	A	B	10,000	0.25		☐		☑	☐	☐	0.80
L50	0.00	LOADERS / BACKHOE, WHEEL TYPE	45	S	B	6,000	0.25		☐		☑	☐	☐	0.85
L60	0.00	LOG SKIDDERS	75	A	B	10,000	0.15		☑		☐	☐	☑	0.70
L60	0.00	LOG SKIDDERS	75	S	B	8,000	0.15		☑		☐	☐	☑	0.80
P35	0.00	PIPELAYERS	70	A	B	14,000	0.20		☐		☐	☐	☑	0.95
P35	0.00	PIPELAYERS	70	S	B	11,500	0.20		☐		☐	☐	☑	1.10
R30	0.00	ROLLERS, STATIC, SELF-PROPELLED	1						☐		☐	☐	☑	
R30	0.03	TAMPING FOOT, LANDFILL & SOIL COMPACTORS	55	A	B	12,000	0.20		☐		☐	☐	☑	0.80
S10	0.00	SCRAPERS, ELEVATING	1						☐		☐	☐	☑	
S10	0.01	0 THRU 200 HP	60	A	B	10,000	0.20		☐		☐	☐	☑	0.90
S10	0.01	0 THRU 200 HP	60	S	B	8,000	0.20		☐		☐	☐	☑	1.00
S10	0.02	OVER 200 HP	60	A	B	13,000	0.25		☐		☐	☐	☑	0.95
S10	0.02	OVER 200 HP	60	S	B	11,500	0.25		☐		☐	☐	☑	1.00
S15	0.00	SCRAPERS, CONVENTIONAL	60	A	B	15,000	0.20		☐		☐	☐	☑	0.80
S15	0.00	SCRAPERS, CONVENTIONAL	60	S	B	12,500	0.20		☐		☐	☐	☑	0.85
S20	0.00	SCRAPERS, TANDEM POWERED	60	A	B	15,000	0.20		☐		☐	☐	☑	0.85
S20	0.00	SCRAPERS, TANDEM POWERED	60	S	B	13,500	0.20		☐		☐	☐	☑	0.90
S25	0.00	SCRAPERS, TRACTOR DRAWN	60	A	B	12,000	0.20		☐		☐	☐	☑	0.70
S25	0.00	SCRAPERS, TRACTOR DRAWN	60	S	B	10,000	0.20		☐		☐	☐	☑	0.75
T15	0.00	TRACTORS, CRAWLER (DOZER) (includes blade)	1						☑		☐	☐	☐	
T15	0.01	0 THRU 225 HP	70	A	B	10,000	0.30		☑		☐	☐	☐	1.10
T15	0.01	0 THRU 225 HP	70	S	B	8,000	0.30		☑		☐	☐	☐	1.25
T15	0.02	226 HP THRU 425 HP	70	A	B	12,500	0.25		☑		☐	☐	☐	1.20

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APPENDIX L

Ground Engaging Component Costs Included in Repairs (RCF)

CATEGORY	SUB	DESCRIPTION	EK	C	DC	LIFE	SLV		Blade cutting edges, wear plates, hard facing, and end plates		Bucket teeth, cutting edges, side cutters, and wear plates	Ripper tips and shank protection	Equipment Specific Wear Items	RCF
T15	0.02	226 HP THRU 425 HP	70	S	B	10,500	0.25		☑		☐	☐	☐	1.25
T15	0.03	OVER 425 HP	70	A	B	15,000	0.20		☑		☐	☐	☐	1.20
T15	0.03	OVER 425 HP	70	S	B	12,500	0.20		☑		☐	☐	☐	1.35
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	75	A	B	14,000	0.15		☑		☐	☐	☐	0.60
T20	0.00	TRACTORS, WHEEL TYPE (DOZER)	75	S	B	13,000	0.15		☑		☐	☐	☐	0.65

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APPENDIX M GUIDE FOR ESTIMATING DRILL STEEL AND DRILL BIT COSTS

Guide for Estimating Drill Steel and Drill Bit Costs

Prepared for the
US Army Corps of Engineers, Walla Walla District
By Western Mine Engineering, Inc in cooperation
with Aventurine Engineering, Inc. 2003

October 2003

Ingersoll-Rand LM100A - percussion

Bit Life (feet/bit)

	Hole Diameter (inches)								
	1.75			2.00			2.50		
Granite	1,506	-	2,037	1,449	-	1,960	1,359	-	1,838
Basalt	674	-	912	649	-	878	608	-	823
Gabbro	1,002	-	1,356	964	-	1,305	904	-	1,223
Shale	1,427	-	1,931	1,373	-	1,858	1,287	-	1,742
Sandstone	524	-	709	504	-	682	473	-	639
Siltstone	3,779	-	5,112	3,636	-	4,919	3,409	-	4,612
Conglomer	292	-	395	281	-	380	263	-	356
Breccia	2,181	-	2,951	2,099	-	2,839	1,968	-	2,662
Limestone	1,835	-	2,483	1,766	-	2,389	1,656	-	2,240
Schist	3,414	-	4,619	3,285	-	4,444	3,080	-	4,167
Slate	1,710	-	2,313	1,645	-	2,226	1,542	-	2,087
Gneiss	735	-	995	707	-	957	663	-	897

Steel Life (feet/rod)

	Hole Diameter (inches)								
	1.75			2.00			2.50		
Granite	2,720	-	3,680	2,617	-	3,541	2,454	-	3,320
Basalt	1,417	-	1,918	1,364	-	1,845	1,279	-	1,730
Gabbro	1,600	-	2,164	1,539	-	2,083	1,443	-	1,953
Shale	2,855	-	3,863	2,747	-	3,717	2,576	-	3,485
Sandstone	2,978	-	4,029	2,865	-	3,877	2,687	-	3,635
Siltstone	2,964	-	4,011	2,852	-	3,859	2,674	-	3,618
Conglomer	3,425	-	4,633	3,295	-	4,458	3,090	-	4,180
Breccia	4,739	-	6,412	4,560	-	6,170	4,276	-	5,785
Limestone	3,931	-	5,318	3,782	-	5,117	3,546	-	4,798
Schist	4,828	-	6,532	4,646	-	6,285	4,356	-	5,893
Slate	3,133	-	4,239	3,015	-	4,079	2,827	-	3,824
Gneiss	2,849	-	3,855	2,742	-	3,709	2,571	-	3,478

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	1.75			2.00			2.50		
Granite	98	-	132	83	-	113	64	-	86
Basalt	57	-	77	48	-	65	37	-	50
Gabbro	63	-	85	53	-	72	41	-	55
Shale	102	-	138	87	-	117	66	-	90
Sandstone	105	-	142	90	-	121	69	-	93
Siltstone	105	-	142	89	-	121	68	-	92
Conglomer	118	-	160	101	-	136	77	-	104
Breccia	155	-	210	132	-	179	101	-	137
Limestone	133	-	180	113	-	153	86	-	117
Schist	158	-	213	134	-	181	103	-	139
Slate	110	-	149	94	-	127	72	-	97
Gneiss	102	-	137	86	-	117	66	-	89

	1.75 inch	2.00 inch	2.50 inch
3,000 lbs.	1,247 psi	955 psi	611 psi

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand LM100A - percussion

Bit Cost ($/foot)

	Hole Diameter (inches)								
	1.75			2.00			2.50		
Granite	$0.04	-	$0.03	$0.05	-	$0.03	$0.07	-	$0.05
Basalt	$0.09	-	$0.07	$0.10	-	$0.08	$0.15	-	$0.11
Gabbro	$0.06	-	$0.04	$0.07	-	$0.05	$0.10	-	$0.08
Shale	$0.04	-	$0.03	$0.05	-	$0.04	$0.07	-	$0.05
Sandstone	$0.11	-	$0.08	$0.13	-	$0.10	$0.20	-	$0.15
Siltstone	$0.02	-	$0.01	$0.02	-	$0.01	$0.03	-	$0.02
Conglomer	$0.21	-	$0.15	$0.24	-	$0.17	$0.36	-	$0.26
Breccia	$0.03	-	$0.02	$0.03	-	$0.02	$0.05	-	$0.04
Limestone	$0.03	-	$0.02	$0.04	-	$0.03	$0.06	-	$0.04
Schist	$0.02	-	$0.01	$0.02	-	$0.01	$0.03	-	$0.02
Slate	$0.04	-	$0.03	$0.04	-	$0.03	$0.06	-	$0.05
Gneiss	$0.08	-	$0.06	$0.09	-	$0.07	$0.14	-	$0.10

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	1.75			2.00			2.50		
Granite	$0.056	-	$0.042	$0.058	-	$0.043	$0.062	-	$0.046
Basalt	$0.108	-	$0.080	$0.112	-	$0.083	$0.120	-	$0.088
Gabbro	$0.096	-	$0.071	$0.099	-	$0.073	$0.106	-	$0.078
Shale	$0.054	-	$0.040	$0.056	-	$0.041	$0.059	-	$0.044
Sandstone	$0.051	-	$0.038	$0.053	-	$0.039	$0.057	-	$0.042
Siltstone	$0.052	-	$0.038	$0.054	-	$0.040	$0.057	-	$0.042
Conglomer	$0.045	-	$0.033	$0.046	-	$0.034	$0.050	-	$0.037
Breccia	$0.032	-	$0.024	$0.034	-	$0.025	$0.036	-	$0.026
Limestone	$0.039	-	$0.029	$0.040	-	$0.030	$0.043	-	$0.032
Schist	$0.032	-	$0.023	$0.033	-	$0.024	$0.035	-	$0.026
Slate	$0.049	-	$0.036	$0.051	-	$0.038	$0.054	-	$0.040
Gneiss	$0.054	-	$0.040	$0.056	-	$0.041	$0.060	-	$0.044

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	1.75 inch	2.00 inch	2.50
3,000 lbs.	1,247 psi	955 psi	611

Ingersoll-Rand ECM350 - percussion

Bit Life (feet/bit)

	Hole Diameter (inches)								
	2.50			3.00			4.00		
Granite	1,203	-	1,628	1,115	-	1,509	1,050	-	1,421
Basalt	539	-	729	499	-	676	470	-	636
Gabbro	801	-	1,083	742	-	1,004	699	-	946
Shale	1,140	-	1,542	1,057	-	1,430	995	-	1,347
Sandstone	418	-	566	388	-	525	365	-	494
Siltstone	3,019	-	4,084	2,798	-	3,786	2,636	-	3,566
Conglomer	233	-	315	216	-	292	204	-	275
Breccia	1,742	-	2,357	1,615	-	2,186	1,521	-	2,058
Limestone	1,466	-	1,983	1,359	-	1,839	1,280	-	1,732
Schist	2,727	-	3,690	2,528	-	3,421	2,381	-	3,222
Slate	1,366	-	1,848	1,266	-	1,713	1,193	-	1,613
Gneiss	587	-	795	544	-	737	513	-	694

Steel Life (feet/rod)

	Hole Diameter (inches)								
	2.50			3.00			4.00		
Granite	2,173	-	2,940	2,014	-	2,725	1,897	-	2,567
Basalt	1,132	-	1,532	1,050	-	1,420	989	-	1,338
Gabbro	1,278	-	1,729	1,185	-	1,603	1,116	-	1,510
Shale	2,281	-	3,086	2,115	-	2,861	1,992	-	2,695
Sandstone	2,379	-	3,218	2,205	-	2,984	2,077	-	2,810
Siltstone	2,368	-	3,204	2,195	-	2,970	2,068	-	2,798
Conglomer	2,736	-	3,701	2,536	-	3,431	2,389	-	3,232
Breccia	3,786	-	5,122	3,510	-	4,749	3,306	-	4,473
Limestone	3,140	-	4,249	2,911	-	3,939	2,742	-	3,710
Schist	3,857	-	5,218	3,576	-	4,838	3,368	-	4,556
Slate	2,503	-	3,386	2,320	-	3,139	2,185	-	2,957
Gneiss	2,276	-	3,080	2,110	-	2,855	1,987	-	2,689

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	2.50			3.00			4.00		
Granite	87	-	117	63	-	85	49	-	67
Basalt	50	-	68	37	-	50	29	-	39
Gabbro	56	-	75	41	-	55	32	-	43
Shale	90	-	122	66	-	89	51	-	69
Sandstone	93	-	126	68	-	92	53	-	72
Siltstone	93	-	126	68	-	92	53	-	71
Conglomer	105	-	142	76	-	103	60	-	81
Breccia	137	-	186	100	-	136	78	-	106
Limestone	118	-	159	86	-	116	67	-	90
Schist	140	-	189	102	-	138	79	-	107
Slate	97	-	132	71	-	96	55	-	75
Gneiss	90	-	122	66	-	89	51	-	69

	2.50 inch	3.25 inch	4.00 inch
6,000 lbs.	1,222 psi	723 psi	477 psi

Ingersoll-Rand ECM350 - percussion

Bit Cost ($/foot)

	Hole Diameter (inches)								
	2.50			3.00			4.00		
Granite	$0.08	-	$0.06	$0.11	-	$0.08	$0.20	-	$0.15
Basalt	$0.17	-	$0.13	$0.25	-	$0.19	$0.46	-	$0.34
Gabbro	$0.12	-	$0.09	$0.17	-	$0.13	$0.31	-	$0.23
Shale	$0.08	-	$0.06	$0.12	-	$0.09	$0.21	-	$0.16
Sandstone	$0.22	-	$0.17	$0.32	-	$0.24	$0.59	-	$0.43
Siltstone	$0.03	-	$0.02	$0.05	-	$0.03	$0.08	-	$0.06
Conglomer	$0.40	-	$0.30	$0.58	-	$0.43	$1.05	-	$0.78
Breccia	$0.05	-	$0.04	$0.08	-	$0.06	$0.14	-	$0.10
Limestone	$0.06	-	$0.05	$0.09	-	$0.07	$0.17	-	$0.12
Schist	$0.03	-	$0.03	$0.05	-	$0.04	$0.09	-	$0.07
Slate	$0.07	-	$0.05	$0.10	-	$0.07	$0.18	-	$0.13
Gneiss	$0.16	-	$0.12	$0.23	-	$0.17	$0.42	-	$0.31

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	2.50			3.00			4.00		
Granite	$0.092	-	$0.068	$0.099	-	$0.073	$0.105	-	$0.078
Basalt	$0.176	-	$0.130	$0.190	-	$0.140	$0.201	-	$0.149
Gabbro	$0.156	-	$0.115	$0.168	-	$0.124	$0.178	-	$0.132
Shale	$0.087	-	$0.064	$0.094	-	$0.070	$0.100	-	$0.074
Sandstone	$0.084	-	$0.062	$0.090	-	$0.067	$0.096	-	$0.071
Siltstone	$0.084	-	$0.062	$0.091	-	$0.067	$0.096	-	$0.071
Conglomer	$0.073	-	$0.054	$0.078	-	$0.058	$0.083	-	$0.062
Breccia	$0.053	-	$0.039	$0.057	-	$0.042	$0.060	-	$0.044
Limestone	$0.063	-	$0.047	$0.068	-	$0.051	$0.073	-	$0.054
Schist	$0.052	-	$0.038	$0.056	-	$0.041	$0.059	-	$0.044
Slate	$0.080	-	$0.059	$0.086	-	$0.063	$0.091	-	$0.067
Gneiss	$0.087	-	$0.065	$0.094	-	$0.070	$0.100	-	$0.074

(Based on12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	2.50 inch	3.00 inch	4.00
6,000 lbs.	1,222 psi	849 psi	477

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand ECM590 - percussion

Bit Life (feet/bit)

	Hole Diameter (inches)								
	2.50			3.50			4.50		
Granite	1,168	-	1,580	1,060	-	1,434	986	-	1,334
Basalt	523	-	708	475	-	642	441	-	597
Gabbro	778	-	1,052	706	-	955	656	-	888
Shale	1,107	-	1,498	1,005	-	1,359	934	-	1,264
Sandstone	406	-	550	369	-	499	343	-	464
Siltstone	2,931	-	3,966	2,660	-	3,599	2,474	-	3,347
Conglomer	226	-	306	205	-	278	191	-	259
Breccia	1,692	-	2,289	1,535	-	2,077	1,428	-	1,932
Limestone	1,424	-	1,926	1,292	-	1,748	1,201	-	1,626
Schist	2,648	-	3,583	2,403	-	3,251	2,235	-	3,024
Slate	1,326	-	1,794	1,203	-	1,628	1,119	-	1,514
Gneiss	570	-	771	517	-	700	481	-	651

Steel Life (feet/rod)

	Hole Diameter (inches)								
	2.50			3.50			4.50		
Granite	2,110	-	2,855	1,915	-	2,590	1,781	-	2,409
Basalt	1,100	-	1,488	998	-	1,350	928	-	1,255
Gabbro	1,241	-	1,679	1,126	-	1,524	1,047	-	1,417
Shale	2,215	-	2,997	2,010	-	2,719	1,869	-	2,529
Sandstone	2,310	-	3,125	2,096	-	2,836	1,950	-	2,638
Siltstone	2,300	-	3,111	2,087	-	2,823	1,941	-	2,626
Conglomer	2,657	-	3,594	2,411	-	3,262	2,242	-	3,033
Breccia	3,676	-	4,974	3,336	-	4,514	3,103	-	4,198
Limestone	3,049	-	4,125	2,767	-	3,744	2,573	-	3,482
Schist	3,745	-	5,067	3,399	-	4,598	3,161	-	4,277
Slate	2,430	-	3,288	2,205	-	2,984	2,051	-	2,775
Gneiss	2,210	-	2,990	2,006	-	2,714	1,865	-	2,524

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	2.50			3.50			4.50		
Granite	99	-	134	66	-	89	49	-	66
Basalt	57	-	78	38	-	52	28	-	38
Gabbro	63	-	86	42	-	57	31	-	42
Shale	103	-	139	69	-	93	51	-	69
Sandstone	107	-	144	71	-	96	52	-	71
Siltstone	106	-	144	71	-	96	52	-	71
Conglomer	120	-	162	80	-	108	59	-	80
Breccia	157	-	212	105	-	142	77	-	105
Limestone	134	-	182	90	-	121	66	-	90
Schist	159	-	216	106	-	144	79	-	106
Slate	111	-	150	74	-	100	55	-	74
Gneiss	103	-	139	68	-	93	51	-	68

	2.50 inch	3.50 inch	4.50 inch
5,500 lbs.	1,120 psi	572 psi	346 psi

Ingersoll-Rand ECM590 - percussion

Bit Cost ($/foot)

	Hole Diameter (inches)								
	2.50			3.50			4.50		
Granite	$0.08	-	$0.06	$0.14	-	$0.11	$0.26	-	$0.19
Basalt	$0.18	-	$0.13	$0.32	-	$0.24	$0.58	-	$0.43
Gabbro	$0.12	-	$0.09	$0.22	-	$0.16	$0.39	-	$0.29
Shale	$0.08	-	$0.06	$0.15	-	$0.11	$0.28	-	$0.20
Sandstone	$0.23	-	$0.17	$0.41	-	$0.31	$0.75	-	$0.56
Siltstone	$0.03	-	$0.02	$0.06	-	$0.04	$0.10	-	$0.08
Conglomer	$0.42	-	$0.31	$0.74	-	$0.55	$1.35	-	$1.00
Breccia	$0.06	-	$0.04	$0.10	-	$0.07	$0.18	-	$0.13
Limestone	$0.07	-	$0.05	$0.12	-	$0.09	$0.21	-	$0.16
Schist	$0.04	-	$0.03	$0.06	-	$0.05	$0.12	-	$0.09
Slate	$0.07	-	$0.05	$0.13	-	$0.09	$0.23	-	$0.17
Gneiss	$0.16	-	$0.12	$0.30	-	$0.22	$0.54	-	$0.40

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	2.50			3.50			4.50		
Granite	$0.094	-	$0.070	$0.104	-	$0.077	$0.112	-	$0.083
Basalt	$0.181	-	$0.134	$0.199	-	$0.147	$0.214	-	$0.159
Gabbro	$0.160	-	$0.119	$0.177	-	$0.131	$0.190	-	$0.140
Shale	$0.090	-	$0.066	$0.099	-	$0.073	$0.106	-	$0.079
Sandstone	$0.086	-	$0.064	$0.095	-	$0.070	$0.102	-	$0.075
Siltstone	$0.087	-	$0.064	$0.095	-	$0.070	$0.103	-	$0.076
Conglomer	$0.075	-	$0.055	$0.083	-	$0.061	$0.089	-	$0.066
Breccia	$0.054	-	$0.040	$0.060	-	$0.044	$0.064	-	$0.047
Limestone	$0.065	-	$0.048	$0.072	-	$0.053	$0.077	-	$0.057
Schist	$0.053	-	$0.039	$0.059	-	$0.043	$0.063	-	$0.047
Slate	$0.082	-	$0.061	$0.090	-	$0.067	$0.097	-	$0.072
Gneiss	$0.090	-	$0.067	$0.099	-	$0.073	$0.107	-	$0.079

(Based pm 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	2.50 inch	3.50 inch	4.50
5,500 lbs.	1,120 psi	572 psi	346

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand ECM720 - percussion

Bit Life (feet/bit)

	Hole Diameter (inches)								
	4.00			4.50			5.00		
Granite	2,305	-	3,118	2,228	-	3,014	2,161	-	2,924
Basalt	1,032	-	1,396	997	-	1,349	967	-	1,309
Gabbro	1,534	-	2,075	1,483	-	2,006	1,438	-	1,946
Shale	2,184	-	2,955	2,111	-	2,856	2,048	-	2,771
Sandstone	802	-	1,085	775	-	1,048	752	-	1,017
Siltstone	5,783	-	7,824	5,589	-	7,562	5,422	-	7,336
Conglomer	447	-	604	432	-	584	419	-	567
Breccia	3,338	-	4,516	3,227	-	4,365	3,130	-	4,235
Limestone	2,809	-	3,800	2,715	-	3,673	2,633	-	3,563
Schist	5,225	-	7,069	5,050	-	6,833	4,899	-	6,628
Slate	2,617	-	3,540	2,529	-	3,422	2,453	-	3,319
Gneiss	1,125	-	1,522	1,087	-	1,471	1,055	-	1,427

Steel Life (feet/rod)

	Hole Diameter (inches)								
	4.00			4.50			5.00		
Granite	4,163	-	5,632	4,024	-	5,444	3,903	-	5,281
Basalt	2,169	-	2,935	2,097	-	2,837	2,034	-	2,752
Gabbro	2,448	-	3,313	2,367	-	3,202	2,296	-	3,106
Shale	4,370	-	5,912	4,224	-	5,715	4,097	-	5,544
Sandstone	4,557	-	6,166	4,405	-	5,960	4,273	-	5,781
Siltstone	4,537	-	6,138	4,385	-	5,933	4,254	-	5,755
Conglomer	5,241	-	7,091	5,066	-	6,854	4,914	-	6,649
Breccia	7,253	-	9,813	7,011	-	9,485	6,801	-	9,201
Limestone	6,016	-	8,139	5,815	-	7,867	5,641	-	7,631
Schist	7,389	-	9,997	7,142	-	9,663	6,928	-	9,374
Slate	4,795	-	6,487	4,635	-	6,270	4,496	-	6,083
Gneiss	4,361	-	5,900	4,215	-	5,702	4,089	-	5,532

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	4.00			4.50			5.00		
Granite	100	-	135	87	-	117	76	-	103
Basalt	58	-	78	50	-	68	44	-	60
Gabbro	64	-	87	56	-	75	49	-	66
Shale	104	-	141	90	-	122	79	-	107
Sandstone	108	-	146	93	-	126	82	-	111
Siltstone	107	-	145	93	-	126	82	-	111
Conglomer	121	-	163	105	-	142	92	-	125
Breccia	158	-	214	137	-	186	121	-	164
Limestone	136	-	183	118	-	159	104	-	140
Schist	161	-	218	140	-	189	123	-	166
Slate	112	-	152	97	-	132	86	-	116
Gneiss	104	-	140	90	-	122	79	-	107

	4 inch	5 inch	5 inch
20,000 lbs.	1,592 psi	1,258 psi	1,019 psi

Ingersoll-Rand ECM720 - percussion

Bit Cost ($/foot)

	Hole Diameter (inches)								
	4.00			4.50			5.00		
Granite	$0.09	-	$0.07	$0.12	-	$0.09	$0.14	-	$0.11
Basalt	$0.21	-	$0.15	$0.26	-	$0.19	$0.32	-	$0.24
Gabbro	$0.14	-	$0.10	$0.17	-	$0.13	$0.21	-	$0.16
Shale	$0.10	-	$0.07	$0.12	-	$0.09	$0.15	-	$0.11
Sandstone	$0.27	-	$0.20	$0.33	-	$0.25	$0.41	-	$0.30
Siltstone	$0.04	-	$0.03	$0.05	-	$0.03	$0.06	-	$0.04
Conglomer	$0.48	-	$0.35	$0.60	-	$0.44	$0.74	-	$0.55
Breccia	$0.06	-	$0.05	$0.08	-	$0.06	$0.10	-	$0.07
Limestone	$0.08	-	$0.06	$0.10	-	$0.07	$0.12	-	$0.09
Schist	$0.04	-	$0.03	$0.05	-	$0.04	$0.06	-	$0.05
Slate	$0.08	-	$0.06	$0.10	-	$0.08	$0.13	-	$0.09
Gneiss	$0.19	-	$0.14	$0.24	-	$0.18	$0.29	-	$0.22

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	4.00			4.50			5.00		
Granite	$0.067	-	$0.050	$0.070	-	$0.051	$0.072	-	$0.053
Basalt	$0.129	-	$0.095	$0.134	-	$0.099	$0.138	-	$0.102
Gabbro	$0.114	-	$0.085	$0.118	-	$0.087	$0.122	-	$0.090
Shale	$0.064	-	$0.047	$0.066	-	$0.049	$0.068	-	$0.051
Sandstone	$0.061	-	$0.045	$0.064	-	$0.047	$0.066	-	$0.048
Siltstone	$0.062	-	$0.046	$0.064	-	$0.047	$0.066	-	$0.049
Conglomer	$0.053	-	$0.039	$0.055	-	$0.041	$0.057	-	$0.042
Breccia	$0.039	-	$0.029	$0.040	-	$0.030	$0.041	-	$0.030
Limestone	$0.047	-	$0.034	$0.048	-	$0.036	$0.050	-	$0.037
Schist	$0.038	-	$0.028	$0.039	-	$0.029	$0.040	-	$0.030
Slate	$0.058	-	$0.043	$0.060	-	$0.045	$0.062	-	$0.046
Gneiss	$0.064	-	$0.047	$0.066	-	$0.049	$0.068	-	$0.051

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	4 inch	4.5 inch	5
20,000 lbs.	1,592 psi	1,258 psi	1,019

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM25SP - DTH

Bit Life (feet/bit)

	Hole Diameter (inches)								
	3.50			5.00			6.50		
Granite	2,498	-	3,380	2,254	-	3,049	2,089	-	2,827
Basalt	1,118	-	1,513	1,009	-	1,365	935	-	1,266
Gabbro	1,663	-	2,250	1,500	-	2,030	1,391	-	1,882
Shale	2,367	-	3,203	2,136	-	2,890	1,980	-	2,679
Sandstone	869	-	1,176	784	-	1,061	727	-	983
Siltstone	6,268	-	8,481	5,655	-	7,651	5,243	-	7,093
Conglome	484	-	655	437	-	591	405	-	548
Breccia	3,618	-	4,896	3,265	-	4,417	3,026	-	4,095
Limestone	3,044	-	4,119	2,747	-	3,716	2,546	-	3,445
Schist	5,664	-	7,663	5,110	-	6,913	4,737	-	6,409
Slate	2,836	-	3,837	2,559	-	3,462	2,372	-	3,209
Gneiss	1,219	-	1,650	1,100	-	1,489	1,020	-	1,380

Steel Life (feet/rod)

	Hole Diameter (inches)								
	3.50			5.00			6.50		
Granite	28,996	-	39,229	26,159	-	35,392	24,252	-	32,811
Basalt	16,978	-	22,970	15,317	-	20,723	14,200	-	19,212
Gabbro	18,752	-	25,371	16,918	-	22,889	15,684	-	21,220
Shale	30,177	-	40,827	27,225	-	36,834	25,240	-	34,148
Sandstone	31,235	-	42,259	28,180	-	38,125	26,125	-	35,345
Siltstone	31,120	-	42,103	28,076	-	37,985	26,028	-	35,215
Conglome	35,035	-	47,400	31,608	-	42,764	29,303	-	39,645
Breccia	45,750	-	61,896	41,275	-	55,842	38,265	-	51,770
Limestone	39,235	-	53,082	35,397	-	47,890	32,816	-	44,398
Schist	46,452	-	62,847	41,908	-	56,699	38,852	-	52,565
Slate	32,566	-	44,060	29,381	-	39,750	27,238	-	36,852
Gneiss	30,123	-	40,755	27,177	-	36,768	25,195	-	34,087

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	3.50			5.00			6.50		
Granite	129	-	175	84	-	114	61	-	83
Basalt	75	-	102	49	-	66	36	-	48
Gabbro	83	-	113	54	-	73	39	-	53
Shale	135	-	182	88	-	119	64	-	87
Sandstone	140	-	189	91	-	123	66	-	90
Siltstone	139	-	188	90	-	122	66	-	89
Conglome	157	-	212	102	-	138	74	-	101
Breccia	205	-	278	134	-	181	98	-	132
Limestone	176	-	238	114	-	155	83	-	113
Schist	209	-	282	136	-	184	99	-	134
Slate	146	-	197	95	-	128	69	-	93
Gneiss	134	-	182	88	-	118	64	-	86

	3.50 inch	5.00 inch	6.50 inch
25,000 lbs.	2,598 psi	1,273 psi	753 psi

Ingersoll-Rand DM25SP - DTH

Bit Cost ($/foot)

	Hole Diameter (inches)								
	3.50			5.00			6.50		
Granite	$0.16	-	$0.12	$0.24	-	$0.18	$0.32	-	$0.24
Basalt	$0.37	-	$0.27	$0.55	-	$0.40	$0.72	-	$0.53
Gabbro	$0.25	-	$0.18	$0.37	-	$0.27	$0.49	-	$0.36
Shale	$0.17	-	$0.13	$0.26	-	$0.19	$0.34	-	$0.25
Sandstone	$0.47	-	$0.35	$0.70	-	$0.52	$0.93	-	$0.69
Siltstone	$0.07	-	$0.05	$0.10	-	$0.07	$0.13	-	$0.10
Conglome	$0.85	-	$0.63	$1.26	-	$0.93	$1.67	-	$1.23
Breccia	$0.11	-	$0.08	$0.17	-	$0.12	$0.22	-	$0.16
Limestone	$0.13	-	$0.10	$0.20	-	$0.15	$0.27	-	$0.20
Schist	$0.07	-	$0.05	$0.11	-	$0.08	$0.14	-	$0.11
Slate	$0.14	-	$0.11	$0.21	-	$0.16	$0.28	-	$0.21
Gneiss	$0.34	-	$0.25	$0.50	-	$0.37	$0.66	-	$0.49

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	3.50			5.00			6.50		
Granite	$0.009	-	$0.007	$0.011	-	$0.008	$0.024	-	$0.018
Basalt	$0.016	-	$0.012	$0.018	-	$0.014	$0.041	-	$0.031
Gabbro	$0.014	-	$0.011	$0.017	-	$0.012	$0.037	-	$0.028
Shale	$0.009	-	$0.007	$0.010	-	$0.008	$0.023	-	$0.017
Sandstone	$0.009	-	$0.006	$0.010	-	$0.007	$0.022	-	$0.017
Siltstone	$0.009	-	$0.006	$0.010	-	$0.007	$0.023	-	$0.017
Conglome	$0.008	-	$0.006	$0.009	-	$0.007	$0.020	-	$0.015
Breccia	$0.006	-	$0.004	$0.007	-	$0.005	$0.015	-	$0.011
Limestone	$0.007	-	$0.005	$0.008	-	$0.006	$0.018	-	$0.013
Schist	$0.006	-	$0.004	$0.007	-	$0.005	$0.015	-	$0.011
Slate	$0.008	-	$0.006	$0.010	-	$0.007	$0.022	-	$0.016
Gneiss	$0.009	-	$0.007	$0.010	-	$0.008	$0.023	-	$0.017

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	3.50 inch	5.00 inch	6.50
25,000 lbs.	2,598 psi	1,273 psi	753

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM30 -DTH

Bit Life (feet/bit)

	Hole Diameter (inches)								
	5.50			6.00			6.50		
Granite	1,946	-	2,633	1,898	-	2,568	1,855	-	2,509
Basalt	871	-	1,179	850	-	1,150	830	-	1,124
Gabbro	1,296	-	1,753	1,263	-	1,709	1,235	-	1,670
Shale	1,845	-	2,496	1,799	-	2,434	1,758	-	2,378
Sandstone	677	-	916	660	-	893	645	-	873
Siltstone	4,884	-	6,608	4,763	-	6,444	4,654	-	6,297
Conglome	377	-	510	368	-	498	360	-	486
Breccia	2,819	-	3,814	2,749	-	3,720	2,687	-	3,635
Limestone	2,372	-	3,209	2,313	-	3,130	2,260	-	3,058
Schist	4,413	-	5,970	4,303	-	5,822	4,205	-	5,689
Slate	2,210	-	2,990	2,155	-	2,916	2,106	-	2,849
Gneiss	950	-	1,285	927	-	1,254	905	-	1,225

Steel Life (feet/rod)

	Hole Diameter (inches)								
	5.50			6.00			6.50		
Granite	26,110	-	35,326	25,463	-	34,450	24,881	-	33,663
Basalt	15,288	-	20,684	14,909	-	20,171	14,569	-	19,711
Gabbro	16,886	-	22,846	16,468	-	22,280	16,092	-	21,771
Shale	27,174	-	36,765	26,500	-	35,853	25,895	-	35,034
Sandstone	28,127	-	38,054	27,429	-	37,110	26,803	-	36,263
Siltstone	28,023	-	37,914	27,328	-	36,974	26,704	-	36,129
Conglome	31,549	-	42,684	30,766	-	41,625	30,064	-	40,675
Breccia	41,197	-	55,738	40,176	-	54,355	39,258	-	53,114
Limestone	35,331	-	47,800	34,455	-	46,615	33,668	-	45,551
Schist	41,830	-	56,593	40,792	-	55,190	39,861	-	53,929
Slate	29,326	-	39,676	28,599	-	38,692	27,945	-	37,809
Gneiss	27,126	-	36,700	26,453	-	35,790	25,849	-	34,972

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	5.50			6.00			6.50		
Granite	81	-	110	73	-	99	67	-	90
Basalt	47	-	64	43	-	58	39	-	52
Gabbro	52	-	71	47	-	64	43	-	58
Shale	85	-	115	76	-	103	69	-	94
Sandstone	88	-	119	79	-	107	72	-	97
Siltstone	87	-	118	79	-	107	72	-	97
Conglome	99	-	133	89	-	120	81	-	109
Breccia	129	-	175	116	-	158	106	-	143
Limestone	111	-	150	100	-	135	91	-	122
Schist	131	-	178	118	-	160	107	-	145
Slate	92	-	124	83	-	112	75	-	101
Gneiss	85	-	115	76	-	103	69	-	94

	5.50 inch	6.00 inch	6.50 inch
30,000 lbs.	1,263 psi	1,061 psi	904 psi

Ingersoll-Rand DM30 -DTH

Bit Cost ($/foot)

	Hole Diameter (inches)								
	5.50			6.00			6.50		
Granite	$0.30	-	$0.22	$0.33	-	$0.25	$0.36	-	$0.27
Basalt	$0.66	-	$0.49	$0.74	-	$0.55	$0.81	-	$0.60
Gabbro	$0.44	-	$0.33	$0.50	-	$0.37	$0.55	-	$0.40
Shale	$0.31	-	$0.23	$0.35	-	$0.26	$0.38	-	$0.28
Sandstone	$0.85	-	$0.63	$0.95	-	$0.71	$1.05	-	$0.77
Siltstone	$0.12	-	$0.09	$0.13	-	$0.10	$0.15	-	$0.11
Conglome	$1.52	-	$1.13	$1.71	-	$1.27	$1.88	-	$1.39
Breccia	$0.20	-	$0.15	$0.23	-	$0.17	$0.25	-	$0.19
Limestone	$0.24	-	$0.18	$0.27	-	$0.20	$0.30	-	$0.22
Schist	$0.13	-	$0.10	$0.15	-	$0.11	$0.16	-	$0.12
Slate	$0.26	-	$0.19	$0.29	-	$0.22	$0.32	-	$0.24
Gneiss	$0.61	-	$0.45	$0.68	-	$0.50	$0.75	-	$0.55

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	5.50			6.00			6.50		
Granite	$0.022	-	$0.017	$0.023	-	$0.017	$0.024	-	$0.017
Basalt	$0.038	-	$0.028	$0.039	-	$0.029	$0.040	-	$0.030
Gabbro	$0.035	-	$0.026	$0.036	-	$0.026	$0.036	-	$0.027
Shale	$0.022	-	$0.016	$0.022	-	$0.016	$0.023	-	$0.017
Sandstone	$0.021	-	$0.015	$0.021	-	$0.016	$0.022	-	$0.016
Siltstone	$0.021	-	$0.015	$0.021	-	$0.016	$0.022	-	$0.016
Conglome	$0.019	-	$0.014	$0.019	-	$0.014	$0.019	-	$0.014
Breccia	$0.014	-	$0.011	$0.015	-	$0.011	$0.015	-	$0.011
Limestone	$0.017	-	$0.012	$0.017	-	$0.013	$0.017	-	$0.013
Schist	$0.014	-	$0.010	$0.014	-	$0.011	$0.015	-	$0.011
Slate	$0.020	-	$0.015	$0.020	-	$0.015	$0.021	-	$0.015
Gneiss	$0.022	-	$0.016	$0.022	-	$0.016	$0.023	-	$0.017

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	5.50 inch	6.00 inch	6.50
30,000 lbs.	1,263 psi	1,061 psi	904

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM45 -DTH

Bit Life (feet/bit)

	Hole Diameter (inches)								
	5.00			6.50			8.00		
Granite	2,580	-	3,490	2,392	-	3,236	2,253	-	3,048
Basalt	1,155	-	1,563	1,071	-	1,449	1,009	-	1,364
Gabbro	1,717	-	2,323	1,592	-	2,154	1,499	-	2,029
Shale	2,445	-	3,308	2,267	-	3,067	2,135	-	2,888
Sandstone	897	-	1,214	832	-	1,126	784	-	1,060
Siltstone	6,473	-	8,758	6,001	-	8,120	5,652	-	7,647
Conglomer	500	-	677	464	-	627	437	-	591
Breccia	3,737	-	5,056	3,464	-	4,687	3,263	-	4,414
Limestone	3,144	-	4,254	2,915	-	3,944	2,745	-	3,714
Schist	5,849	-	7,913	5,422	-	7,336	5,107	-	6,910
Slate	2,929	-	3,963	2,715	-	3,674	2,557	-	3,460
Gneiss	1,259	-	1,704	1,168	-	1,580	1,100	-	1,488

Steel Life (feet/rod)

	Hole Diameter (inches)								
	5.00			6.50			8.00		
Granite	28,482	-	38,534	26,405	-	35,724	24,869	-	33,646
Basalt	16,677	-	22,563	15,461	-	20,917	14,561	-	19,701
Gabbro	18,420	-	24,921	17,077	-	23,104	16,083	-	21,760
Shale	29,642	-	40,104	27,480	-	37,179	25,882	-	35,017
Sandstone	30,681	-	41,510	28,444	-	38,483	26,789	-	36,245
Siltstone	30,568	-	41,357	28,339	-	38,341	26,691	-	36,111
Conglomer	34,414	-	46,560	31,904	-	43,165	30,049	-	40,654
Breccia	44,939	-	60,799	41,662	-	56,366	39,238	-	53,087
Limestone	38,539	-	52,141	35,729	-	48,339	33,651	-	45,527
Schist	45,628	-	61,733	42,301	-	57,231	39,841	-	53,902
Slate	31,989	-	43,279	29,656	-	40,123	27,931	-	37,789
Gneiss	29,589	-	40,032	27,432	-	37,113	25,836	-	34,955

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	5.00			6.50			8.00		
Granite	109	-	148	80	-	108	62	-	84
Basalt	64	-	86	46	-	63	36	-	49
Gabbro	70	-	95	51	-	69	40	-	54
Shale	114	-	154	83	-	112	65	-	88
Sandstone	118	-	160	86	-	116	67	-	91
Siltstone	118	-	159	86	-	116	67	-	90
Conglomer	133	-	179	97	-	131	75	-	102
Breccia	174	-	235	127	-	171	99	-	134
Limestone	149	-	201	108	-	147	84	-	114
Schist	177	-	239	129	-	174	100	-	136
Slate	123	-	167	90	-	121	70	-	95
Gneiss	114	-	154	83	-	112	65	-	87

	5.00 inch	6.50 inch	8.00 inch
45,000 lbs.	2,292 psi	1,356 psi	895 psi

Ingersoll-Rand DM45 -DTH

Bit Cost ($/foot)

	Hole Diameter (inches)								
	5.00			6.50			8.00		
Granite	$0.21	-	$0.16	$0.28	-	$0.21	$0.47	-	$0.35
Basalt	$0.48	-	$0.35	$0.63	-	$0.47	$1.04	-	$0.77
Gabbro	$0.32	-	$0.24	$0.42	-	$0.31	$0.70	-	$0.52
Shale	$0.22	-	$0.17	$0.30	-	$0.22	$0.49	-	$0.36
Sandstone	$0.61	-	$0.45	$0.81	-	$0.60	$1.34	-	$0.99
Siltstone	$0.08	-	$0.06	$0.11	-	$0.08	$0.19	-	$0.14
Conglomer	$1.10	-	$0.81	$1.46	-	$1.08	$2.41	-	$1.78
Breccia	$0.15	-	$0.11	$0.19	-	$0.14	$0.32	-	$0.24
Limestone	$0.17	-	$0.13	$0.23	-	$0.17	$0.38	-	$0.28
Schist	$0.09	-	$0.07	$0.12	-	$0.09	$0.21	-	$0.15
Slate	$0.19	-	$0.14	$0.25	-	$0.18	$0.41	-	$0.30
Gneiss	$0.44	-	$0.32	$0.58	-	$0.43	$0.96	-	$0.71

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	5.00			6.50			8.00		
Granite	$0.021	-	$0.015	$0.023	-	$0.017	$0.029	-	$0.021
Basalt	$0.035	-	$0.026	$0.039	-	$0.029	$0.049	-	$0.037
Gabbro	$0.032	-	$0.024	$0.036	-	$0.026	$0.045	-	$0.033
Shale	$0.020	-	$0.015	$0.022	-	$0.016	$0.028	-	$0.021
Sandstone	$0.019	-	$0.014	$0.021	-	$0.016	$0.027	-	$0.020
Siltstone	$0.019	-	$0.014	$0.022	-	$0.016	$0.027	-	$0.020
Conglomer	$0.017	-	$0.013	$0.019	-	$0.014	$0.024	-	$0.018
Breccia	$0.013	-	$0.010	$0.015	-	$0.011	$0.018	-	$0.014
Limestone	$0.015	-	$0.011	$0.017	-	$0.013	$0.021	-	$0.016
Schist	$0.013	-	$0.009	$0.014	-	$0.011	$0.018	-	$0.013
Slate	$0.018	-	$0.014	$0.021	-	$0.015	$0.026	-	$0.019
Gneiss	$0.020	-	$0.015	$0.022	-	$0.016	$0.028	-	$0.021

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	5.00 inch	6.50 inch	8.00
45,000 lbs.	2,292 psi	1,356 psi	895

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM M2 -DTH

Bit Life (feet/bit)

	Hole Diameter (inches)								
	8.88			10.00			11.875		
Granite	1,779	-	2,407	1,719	-	2,325	1,636	-	2,213
Basalt	796	-	1,078	770	-	1,041	732	-	991
Gabbro	1,184	-	1,602	1,144	-	1,548	1,089	-	1,473
Shale	1,686	-	2,281	1,629	-	2,204	1,550	-	2,097
Sandstone	619	-	837	598	-	809	569	-	770
Siltstone	4,464	-	6,039	4,313	-	5,835	4,104	-	5,553
Conglomer	345	-	467	333	-	451	317	-	429
Breccia	2,577	-	3,486	2,490	-	3,368	2,369	-	3,205
Limestone	2,168	-	2,933	2,095	-	2,834	1,993	-	2,697
Schist	4,033	-	5,457	3,897	-	5,272	3,708	-	5,017
Slate	2,020	-	2,733	1,951	-	2,640	1,857	-	2,512
Gneiss	868	-	1,175	839	-	1,135	798	-	1,080

Steel Life (feet/rod)

	Hole Diameter (inches)								
	8.88			10.00			11.875		
Granite	25,947	-	35,105	25,069	-	33,917	23,856	-	32,276
Basalt	15,193	-	20,555	14,679	-	19,859	13,968	-	18,898
Gabbro	16,781	-	22,704	16,213	-	21,935	15,428	-	20,874
Shale	27,004	-	36,535	26,090	-	35,298	24,828	-	33,590
Sandstone	27,951	-	37,817	27,005	-	36,536	25,698	-	34,768
Siltstone	27,848	-	37,677	26,905	-	36,401	25,604	-	34,640
Conglomer	31,352	-	42,417	30,290	-	40,981	28,825	-	38,998
Breccia	40,940	-	55,390	39,554	-	53,514	37,640	-	50,925
Limestone	35,110	-	47,502	33,921	-	45,894	32,280	-	43,673
Schist	41,569	-	56,240	40,161	-	54,336	38,218	-	51,707
Slate	29,143	-	39,428	28,156	-	38,093	26,794	-	36,250
Gneiss	26,957	-	36,471	26,044	-	35,236	24,784	-	33,531

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	8.88			10.00			11.875		
Granite	69	-	93	60	-	81	48	-	66
Basalt	40	-	54	35	-	47	28	-	38
Gabbro	44	-	60	38	-	52	31	-	42
Shale	72	-	97	62	-	84	50	-	68
Sandstone	74	-	100	64	-	87	52	-	71
Siltstone	74	-	100	64	-	87	52	-	70
Conglomer	83	-	113	72	-	98	59	-	79
Breccia	109	-	148	95	-	128	77	-	104
Limestone	94	-	127	81	-	110	66	-	89
Schist	111	-	150	96	-	130	78	-	106
Slate	77	-	105	67	-	91	55	-	74
Gneiss	72	-	97	62	-	84	50	-	68

	8.88 inch	10.00 inch	11.88 inch
75,000 lbs.	1,212 psi	955 psi	677 psi

Ingersoll-Rand DM M2 -DTH

Bit Cost ($/foot)

	Hole Diameter (inches)								
	8.88			10.00			11.875		
Granite	$0.31	-	$0.23	$0.39	-	$0.29	$0.64	-	$0.48
Basalt	$0.69	-	$0.51	$0.88	-	$0.65	$1.44	-	$1.06
Gabbro	$0.46	-	$0.34	$0.59	-	$0.44	$0.97	-	$0.71
Shale	$0.33	-	$0.24	$0.41	-	$0.31	$0.68	-	$0.50
Sandstone	$0.89	-	$0.66	$1.13	-	$0.83	$1.85	-	$1.37
Siltstone	$0.12	-	$0.09	$0.16	-	$0.12	$0.26	-	$0.19
Conglomer	$1.60	-	$1.18	$2.03	-	$1.50	$3.32	-	$2.46
Breccia	$0.21	-	$0.16	$0.27	-	$0.20	$0.44	-	$0.33
Limestone	$0.25	-	$0.19	$0.32	-	$0.24	$0.53	-	$0.39
Schist	$0.14	-	$0.10	$0.17	-	$0.13	$0.28	-	$0.21
Slate	$0.27	-	$0.20	$0.35	-	$0.26	$0.57	-	$0.42
Gneiss	$0.63	-	$0.47	$0.80	-	$0.59	$1.32	-	$0.97

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	8.88			10.00			11.875		
Granite	$0.024	-	$0.017	$0.029	-	$0.021	$0.048	-	$0.035
Basalt	$0.040	-	$0.030	$0.049	-	$0.036	$0.082	-	$0.060
Gabbro	$0.036	-	$0.027	$0.044	-	$0.033	$0.074	-	$0.055
Shale	$0.023	-	$0.017	$0.028	-	$0.020	$0.046	-	$0.034
Sandstone	$0.022	-	$0.016	$0.027	-	$0.020	$0.044	-	$0.033
Siltstone	$0.022	-	$0.016	$0.027	-	$0.020	$0.045	-	$0.033
Conglomer	$0.019	-	$0.014	$0.024	-	$0.018	$0.040	-	$0.029
Breccia	$0.015	-	$0.011	$0.018	-	$0.013	$0.030	-	$0.022
Limestone	$0.017	-	$0.013	$0.021	-	$0.016	$0.035	-	$0.026
Schist	$0.015	-	$0.011	$0.018	-	$0.013	$0.030	-	$0.022
Slate	$0.021	-	$0.015	$0.026	-	$0.019	$0.043	-	$0.031
Gneiss	$0.023	-	$0.017	$0.028	-	$0.020	$0.046	-	$0.034

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	8.88 inch	10.00 inch	11.88
75,000 lbs.	1,212 psi	955 psi	677

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM25SP - Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)								
	3.88			5.00			6.25		
Granite	3,585	-	4,851	3,364	-	4,552	3,182	-	4,305
Basalt	1,878	-	2,541	1,762	-	2,384	1,667	-	2,255
Gabbro	2,118	-	2,865	1,987	-	2,689	1,880	-	2,543
Shale	3,762	-	5,090	3,531	-	4,777	3,339	-	4,518
Sandstone	3,922	-	5,307	3,681	-	4,980	3,481	-	4,710
Siltstone	3,905	-	5,283	3,664	-	4,957	3,466	-	4,689
Conglomer	4,506	-	6,096	4,228	-	5,720	3,999	-	5,411
Breccia	6,220	-	8,415	5,836	-	7,896	5,520	-	7,468
Limestone	5,166	-	6,990	4,848	-	6,559	4,585	-	6,203
Schist	6,335	-	8,571	5,945	-	8,043	5,623	-	7,607
Slate	4,125	-	5,581	3,871	-	5,237	3,661	-	4,953
Gneiss	3,754	-	5,079	3,523	-	4,766	3,332	-	4,508

Steel Life (feet/rod)

	Hole Diameter (inches)								
	3.88			5.00			6.25		
Granite	44,519	-	60,232	41,775	-	56,519	39,512	-	53,457
Basalt	26,067	-	35,267	24,460	-	33,093	23,135	-	31,301
Gabbro	28,792	-	38,954	27,017	-	36,552	25,553	-	34,572
Shale	46,333	-	62,685	43,477	-	58,821	41,121	-	55,635
Sandstone	47,957	-	64,883	45,001	-	60,884	42,563	-	57,586
Siltstone	47,780	-	64,644	44,835	-	60,659	42,406	-	57,373
Conglomer	53,792	-	72,777	50,476	-	68,291	47,741	-	64,591
Breccia	70,243	-	95,034	65,913	-	89,176	62,342	-	84,345
Limestone	60,240	-	81,501	56,527	-	76,478	53,465	-	72,334
Schist	71,321	-	96,493	66,925	-	90,545	63,299	-	85,640
Slate	50,001	-	67,649	46,919	-	63,479	44,377	-	60,040
Gneiss	46,250	-	62,574	43,400	-	58,717	41,048	-	55,536

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	3.88			5.00			6.25		
Granite	57	-	77	34	-	46	22	-	29
Basalt	33	-	45	20	-	27	13	-	17
Gabbro	37	-	50	22	-	30	14	-	19
Shale	60	-	81	36	-	48	23	-	31
Sandstone	62	-	83	37	-	50	23	-	32
Siltstone	61	-	83	37	-	50	23	-	32
Conglomer	69	-	94	41	-	56	26	-	36
Breccia	91	-	123	54	-	73	34	-	47
Limestone	78	-	105	46	-	63	29	-	40
Schist	92	-	125	55	-	74	35	-	47
Slate	64	-	87	38	-	52	24	-	33
Gneiss	59	-	80	35	-	48	23	-	31

	3.88 inch	5.00 inch	6.25 inch
25,000 lbs.	2,120 psi	1,273 psi	815 psi

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM25SP - Rotary

Bit Cost ($/foot)

	Hole Diameter (inches)								
	3.88			5.00			6.25		
Granite	$0.28	-	$0.20	$0.42	-	$0.31	$0.60	-	$0.44
Basalt	$0.53	-	$0.39	$0.80	-	$0.59	$1.14	-	$0.85
Gabbro	$0.47	-	$0.35	$0.71	-	$0.52	$1.01	-	$0.75
Shale	$0.26	-	$0.20	$0.40	-	$0.29	$0.57	-	$0.42
Sandstone	$0.25	-	$0.19	$0.38	-	$0.28	$0.55	-	$0.40
Siltstone	$0.25	-	$0.19	$0.38	-	$0.28	$0.55	-	$0.41
Conglomer	$0.22	-	$0.16	$0.33	-	$0.25	$0.48	-	$0.35
Breccia	$0.16	-	$0.12	$0.24	-	$0.18	$0.35	-	$0.26
Limestone	$0.19	-	$0.14	$0.29	-	$0.21	$0.42	-	$0.31
Schist	$0.16	-	$0.12	$0.24	-	$0.17	$0.34	-	$0.25
Slate	$0.24	-	$0.18	$0.36	-	$0.27	$0.52	-	$0.38
Gneiss	$0.26	-	$0.20	$0.40	-	$0.30	$0.57	-	$0.42

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	3.88			5.00			6.25		
Granite	$0.006	-	$0.004	$0.007	-	$0.005	$0.015	-	$0.011
Basalt	$0.010	-	$0.008	$0.011	-	$0.008	$0.025	-	$0.019
Gabbro	$0.009	-	$0.007	$0.010	-	$0.008	$0.023	-	$0.017
Shale	$0.006	-	$0.004	$0.006	-	$0.005	$0.014	-	$0.011
Sandstone	$0.006	-	$0.004	$0.006	-	$0.005	$0.014	-	$0.010
Siltstone	$0.006	-	$0.004	$0.006	-	$0.005	$0.014	-	$0.010
Conglomer	$0.005	-	$0.004	$0.006	-	$0.004	$0.012	-	$0.009
Breccia	$0.004	-	$0.003	$0.004	-	$0.003	$0.009	-	$0.007
Limestone	$0.004	-	$0.003	$0.005	-	$0.004	$0.011	-	$0.008
Schist	$0.004	-	$0.003	$0.004	-	$0.003	$0.009	-	$0.007
Slate	$0.005	-	$0.004	$0.006	-	$0.004	$0.013	-	$0.010
Gneiss	$0.006	-	$0.004	$0.006	-	$0.005	$0.014	-	$0.011

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	3.88 inch	5.00 inch	6.25
25,000 lbs.	2,120 psi	1,273 psi	815

Ingersoll-Rand DM30 -Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)								
	5.50			6.00			6.75		
Granite	3,347	-	4,528	3,275	-	4,431	3,180	-	4,302
Basalt	1,753	-	2,372	1,716	-	2,321	1,666	-	2,254
Gabbro	1,977	-	2,675	1,934	-	2,617	1,878	-	2,541
Shale	3,512	-	4,752	3,437	-	4,649	3,337	-	4,515
Sandstone	3,661	-	4,954	3,583	-	4,847	3,479	-	4,707
Siltstone	3,645	-	4,931	3,567	-	4,826	3,463	-	4,686
Conglomer	4,206	-	5,690	4,116	-	5,568	3,996	-	5,407
Breccia	5,806	-	7,855	5,681	-	7,686	5,516	-	7,463
Limestone	4,822	-	6,524	4,719	-	6,384	4,582	-	6,199
Schist	5,913	-	8,000	5,786	-	7,829	5,619	-	7,602
Slate	3,851	-	5,210	3,768	-	5,098	3,659	-	4,950
Gneiss	3,504	-	4,741	3,429	-	4,639	3,330	-	4,505

Steel Life (feet/rod)

	Hole Diameter (inches)								
	5.50			6.00			6.75		
Granite	41,556	-	56,222	40,663	-	55,014	39,485	-	53,421
Basalt	24,332	-	32,920	23,809	-	32,212	23,119	-	31,279
Gabbro	26,875	-	36,360	26,298	-	35,579	25,536	-	34,549
Shale	43,248	-	58,513	42,319	-	57,255	41,093	-	55,597
Sandstone	44,765	-	60,564	43,803	-	59,263	42,534	-	57,546
Siltstone	44,600	-	60,341	43,642	-	59,045	42,377	-	57,334
Conglomer	50,211	-	67,932	49,132	-	66,473	47,709	-	64,547
Breccia	65,567	-	88,708	64,158	-	86,802	62,299	-	84,288
Limestone	56,230	-	76,076	55,022	-	74,441	53,428	-	72,285
Schist	66,573	-	90,070	65,143	-	88,135	63,256	-	85,582
Slate	46,673	-	63,146	45,670	-	61,789	44,347	-	59,999
Gneiss	43,172	-	58,409	42,244	-	57,154	41,020	-	55,498

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	5.50			6.00			6.75		
Granite	32	-	43	27	-	36	21	-	28
Basalt	18	-	25	15	-	21	12	-	16
Gabbro	20	-	28	17	-	23	13	-	18
Shale	33	-	45	28	-	37	22	-	29
Sandstone	34	-	46	29	-	39	23	-	31
Siltstone	34	-	46	29	-	39	22	-	30
Conglomer	38	-	52	32	-	44	25	-	34
Breccia	50	-	68	42	-	57	33	-	45
Limestone	43	-	58	36	-	49	28	-	38
Schist	51	-	69	43	-	58	34	-	46
Slate	36	-	48	30	-	40	24	-	32
Gneiss	33	-	45	28	-	37	22	-	29

	5.50 inch	6 inch	6.75 inch
30,000 lbs.	1,263 psi	1,061 psi	838 psi

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM30 -Rotary

Bit Cost ($/foot)

	Hole Diameter (inches)								
	5.50			6.00			6.75		
Granite	$0.51	-	$0.38	$0.56	-	$0.42	$0.67	-	$0.49
Basalt	$0.97	-	$0.72	$1.07	-	$0.79	$1.28	-	$0.94
Gabbro	$0.86	-	$0.64	$0.95	-	$0.70	$1.13	-	$0.84
Shale	$0.48	-	$0.36	$0.54	-	$0.40	$0.64	-	$0.47
Sandstone	$0.47	-	$0.34	$0.51	-	$0.38	$0.61	-	$0.45
Siltstone	$0.47	-	$0.35	$0.52	-	$0.38	$0.61	-	$0.45
Conglomer	$0.40	-	$0.30	$0.45	-	$0.33	$0.53	-	$0.39
Breccia	$0.29	-	$0.22	$0.32	-	$0.24	$0.39	-	$0.29
Limestone	$0.35	-	$0.26	$0.39	-	$0.29	$0.46	-	$0.34
Schist	$0.29	-	$0.21	$0.32	-	$0.24	$0.38	-	$0.28
Slate	$0.44	-	$0.33	$0.49	-	$0.36	$0.58	-	$0.43
Gneiss	$0.49	-	$0.36	$0.54	-	$0.40	$0.64	-	$0.47

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	5.50			6.00			6.75		
Granite	$0.014	-	$0.010	$0.014	-	$0.011	$0.015	-	$0.011
Basalt	$0.024	-	$0.018	$0.025	-	$0.018	$0.025	-	$0.019
Gabbro	$0.022	-	$0.016	$0.022	-	$0.016	$0.023	-	$0.017
Shale	$0.014	-	$0.010	$0.014	-	$0.010	$0.014	-	$0.011
Sandstone	$0.013	-	$0.010	$0.013	-	$0.010	$0.014	-	$0.010
Siltstone	$0.013	-	$0.010	$0.013	-	$0.010	$0.014	-	$0.010
Conglomer	$0.012	-	$0.009	$0.012	-	$0.009	$0.012	-	$0.009
Breccia	$0.009	-	$0.007	$0.009	-	$0.007	$0.009	-	$0.007
Limestone	$0.010	-	$0.008	$0.011	-	$0.008	$0.011	-	$0.008
Schist	$0.009	-	$0.007	$0.009	-	$0.007	$0.009	-	$0.007
Slate	$0.013	-	$0.009	$0.013	-	$0.009	$0.013	-	$0.010
Gneiss	$0.014	-	$0.010	$0.014	-	$0.010	$0.014	-	$0.011

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	5.50 inch	6 inch	6.75
30,000 lbs.	1,263 psi	1,061 psi	838

Ingersoll-Rand DM45 -Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)								
	5.00			6.75			7.875		
Granite	3,619	-	4,897	3,358	-	4,543	3,231	-	4,372
Basalt	1,896	-	2,565	1,759	-	2,380	1,693	-	2,290
Gabbro	2,138	-	2,893	1,984	-	2,684	1,909	-	2,582
Shale	3,798	-	5,139	3,524	-	4,768	3,391	-	4,588
Sandstone	3,960	-	5,357	3,674	-	4,971	3,535	-	4,783
Siltstone	3,942	-	5,333	3,658	-	4,948	3,519	-	4,762
Conglomer	4,549	-	6,154	4,220	-	5,710	4,061	-	5,494
Breccia	6,279	-	8,495	5,825	-	7,881	5,606	-	7,584
Limestone	5,215	-	7,056	4,839	-	6,547	4,656	-	6,300
Schist	6,395	-	8,652	5,934	-	8,028	5,710	-	7,725
Slate	4,164	-	5,634	3,864	-	5,228	3,718	-	5,030
Gneiss	3,790	-	5,128	3,517	-	4,758	3,384	-	4,578

Steel Life (feet/rod)

	Hole Diameter (inches)								
	5.00			6.75			7.875		
Granite	44,942	-	60,803	41,698	-	56,415	40,124	-	54,286
Basalt	26,314	-	35,602	24,415	-	33,033	23,494	-	31,786
Gabbro	29,065	-	39,323	26,967	-	36,485	25,950	-	35,108
Shale	46,772	-	63,280	43,397	-	58,713	41,759	-	56,497
Sandstone	48,412	-	65,499	44,919	-	60,772	43,223	-	58,478
Siltstone	48,234	-	65,258	44,753	-	60,548	43,064	-	58,263
Conglomer	54,302	-	73,468	50,383	-	68,166	48,482	-	65,593
Breccia	70,909	-	95,936	65,792	-	89,013	63,309	-	85,653
Limestone	60,812	-	82,275	56,423	-	76,337	54,293	-	73,456
Schist	71,998	-	97,409	66,802	-	90,379	64,280	-	86,968
Slate	50,476	-	68,291	46,833	-	63,362	45,065	-	60,971
Gneiss	46,689	-	63,168	43,320	-	58,609	41,685	-	56,397

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	5.00			6.75			7.875		
Granite	50	-	68	27	-	37	20	-	27
Basalt	29	-	39	16	-	21	12	-	16
Gabbro	32	-	44	17	-	24	13	-	17
Shale	52	-	71	28	-	38	21	-	28
Sandstone	54	-	73	29	-	40	21	-	29
Siltstone	54	-	73	29	-	40	21	-	29
Conglomer	61	-	82	33	-	45	24	-	33
Breccia	80	-	108	43	-	59	32	-	43
Limestone	68	-	92	37	-	50	27	-	37
Schist	81	-	109	44	-	59	32	-	44
Slate	56	-	76	31	-	41	22	-	30
Gneiss	52	-	70	28	-	38	21	-	28

	5.00 inch	7 inch	7.88 inch
45,000 lbs.	2,292 psi	1,258 psi	924 psi

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand DM45 -Rotary

Bit Cost ($/foot)

	Hole Diameter (inches)								
	5.00			6.75			7.875		
Granite	$0.51	-	$0.38	$0.63	-	$0.47	$0.81	-	$0.60
Basalt	$0.97	-	$0.72	$1.21	-	$0.89	$1.54	-	$1.14
Gabbro	$0.86	-	$0.64	$1.07	-	$0.79	$1.37	-	$1.01
Shale	$0.48	-	$0.36	$0.60	-	$0.45	$0.77	-	$0.57
Sandstone	$0.46	-	$0.34	$0.58	-	$0.43	$0.74	-	$0.55
Siltstone	$0.47	-	$0.35	$0.58	-	$0.43	$0.74	-	$0.55
Conglomer	$0.40	-	$0.30	$0.50	-	$0.37	$0.64	-	$0.48
Breccia	$0.29	-	$0.22	$0.37	-	$0.27	$0.47	-	$0.34
Limestone	$0.35	-	$0.26	$0.44	-	$0.33	$0.56	-	$0.41
Schist	$0.29	-	$0.21	$0.36	-	$0.27	$0.46	-	$0.34
Slate	$0.44	-	$0.33	$0.55	-	$0.41	$0.70	-	$0.52
Gneiss	$0.49	-	$0.36	$0.61	-	$0.45	$0.77	-	$0.57

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	5.00			6.75			7.875		
Granite	$0.006	-	$0.005	$0.015	-	$0.011	$0.018	-	$0.013
Basalt	$0.011	-	$0.008	$0.025	-	$0.019	$0.030	-	$0.022
Gabbro	$0.010	-	$0.007	$0.023	-	$0.017	$0.027	-	$0.020
Shale	$0.006	-	$0.004	$0.014	-	$0.011	$0.017	-	$0.013
Sandstone	$0.006	-	$0.004	$0.014	-	$0.010	$0.016	-	$0.012
Siltstone	$0.006	-	$0.004	$0.014	-	$0.010	$0.016	-	$0.012
Conglomer	$0.005	-	$0.004	$0.012	-	$0.009	$0.015	-	$0.011
Breccia	$0.004	-	$0.003	$0.009	-	$0.007	$0.011	-	$0.008
Limestone	$0.005	-	$0.003	$0.011	-	$0.008	$0.013	-	$0.010
Schist	$0.004	-	$0.003	$0.009	-	$0.007	$0.011	-	$0.008
Slate	$0.006	-	$0.004	$0.013	-	$0.010	$0.016	-	$0.012
Gneiss	$0.006	-	$0.004	$0.014	-	$0.011	$0.017	-	$0.013

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	5.00 inch	6.75 inch	7.88
45,000 lbs.	2,292 psi	1,258 psi	924

Ingersoll-Rand DM M2 -Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)								
	9.00			9.875			11.00		
Granite	3,312	-	4,481	3,236	-	4,378	3,150	-	4,262
Basalt	1,735	-	2,347	1,695	-	2,294	1,650	-	2,233
Gabbro	1,956	-	2,647	1,912	-	2,586	1,861	-	2,518
Shale	3,476	-	4,702	3,396	-	4,595	3,306	-	4,473
Sandstone	3,623	-	4,902	3,540	-	4,790	3,446	-	4,663
Siltstone	3,607	-	4,880	3,525	-	4,769	3,431	-	4,642
Conglomer	4,162	-	5,631	4,067	-	5,502	3,959	-	5,356
Breccia	5,745	-	7,773	5,614	-	7,595	5,465	-	7,393
Limestone	4,772	-	6,457	4,663	-	6,309	4,539	-	6,141
Schist	5,852	-	7,917	5,718	-	7,736	5,566	-	7,531
Slate	3,811	-	5,156	3,723	-	5,038	3,624	-	4,904
Gneiss	3,468	-	4,692	3,389	-	4,585	3,299	-	4,463

Steel Life (feet/rod)

	Hole Diameter (inches)								
	9.00			9.875			11.00		
Granite	41,124	-	55,639	40,183	-	54,365	39,115	-	52,921
Basalt	24,079	-	32,578	23,528	-	31,832	22,903	-	30,986
Gabbro	26,596	-	35,983	25,987	-	35,159	25,297	-	34,225
Shale	42,800	-	57,905	41,820	-	56,580	40,709	-	55,077
Sandstone	44,300	-	59,936	43,286	-	58,564	42,136	-	57,008
Siltstone	44,137	-	59,715	43,127	-	58,348	41,981	-	56,798
Conglomer	49,690	-	67,228	48,552	-	65,689	47,262	-	63,943
Breccia	64,887	-	87,788	63,401	-	85,778	61,717	-	83,499
Limestone	55,647	-	75,287	54,373	-	73,563	52,928	-	71,609
Schist	65,883	-	89,135	64,374	-	87,095	62,664	-	84,781
Slate	46,189	-	62,490	45,131	-	61,060	43,932	-	59,438
Gneiss	42,724	-	57,803	41,746	-	56,479	40,637	-	54,979

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	9.00			9.875			11.00		
Granite	21	-	29	18	-	24	14	-	19
Basalt	12	-	17	10	-	14	8	-	11
Gabbro	14	-	18	11	-	15	9	-	12
Shale	22	-	30	18	-	25	15	-	20
Sandstone	23	-	31	19	-	26	15	-	21
Siltstone	23	-	31	19	-	26	15	-	21
Conglomer	26	-	35	21	-	29	17	-	23
Breccia	34	-	46	28	-	38	22	-	30
Limestone	29	-	39	24	-	32	19	-	26
Schist	34	-	46	28	-	38	23	-	31
Slate	24	-	32	20	-	27	16	-	22
Gneiss	22	-	30	18	-	25	15	-	20

	9 inch	10 inch	11 inch
75,000 lbs.	1,179 psi	979 psi	789 psi

Ingersoll-Rand DM M2 -Rotary

Bit Cost ($/foot)

	Hole Diameter (inches)								
	9.00			9.875			11.00		
Granite	$0.94	-	$0.69	$1.28	-	$0.94	$1.55	-	$1.14
Basalt	$1.79	-	$1.32	$2.44	-	$1.80	$2.95	-	$2.18
Gabbro	$1.59	-	$1.17	$2.16	-	$1.60	$2.62	-	$1.94
Shale	$0.89	-	$0.66	$1.22	-	$0.90	$1.47	-	$1.09
Sandstone	$0.86	-	$0.63	$1.17	-	$0.86	$1.41	-	$1.05
Siltstone	$0.86	-	$0.64	$1.17	-	$0.87	$1.42	-	$1.05
Conglomer	$0.75	-	$0.55	$1.02	-	$0.75	$1.23	-	$0.91
Breccia	$0.54	-	$0.40	$0.74	-	$0.54	$0.89	-	$0.66
Limestone	$0.65	-	$0.48	$0.89	-	$0.66	$1.07	-	$0.79
Schist	$0.53	-	$0.39	$0.72	-	$0.53	$0.88	-	$0.65
Slate	$0.81	-	$0.60	$1.11	-	$0.82	$1.34	-	$0.99
Gneiss	$0.89	-	$0.66	$1.22	-	$0.90	$1.48	-	$1.09

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	9.00			9.875			11.00		
Granite	$0.015	-	$0.011	$0.018	-	$0.013	$0.029	-	$0.022
Basalt	$0.025	-	$0.019	$0.031	-	$0.023	$0.050	-	$0.037
Gabbro	$0.023	-	$0.017	$0.028	-	$0.020	$0.045	-	$0.033
Shale	$0.014	-	$0.011	$0.017	-	$0.013	$0.028	-	$0.021
Sandstone	$0.014	-	$0.010	$0.017	-	$0.012	$0.027	-	$0.020
Siltstone	$0.014	-	$0.010	$0.017	-	$0.012	$0.027	-	$0.020
Conglomer	$0.012	-	$0.009	$0.015	-	$0.011	$0.024	-	$0.018
Breccia	$0.009	-	$0.007	$0.011	-	$0.008	$0.018	-	$0.014
Limestone	$0.011	-	$0.008	$0.013	-	$0.010	$0.022	-	$0.016
Schist	$0.009	-	$0.007	$0.011	-	$0.008	$0.018	-	$0.013
Slate	$0.013	-	$0.010	$0.016	-	$0.012	$0.026	-	$0.019
Gneiss	$0.014	-	$0.011	$0.017	-	$0.013	$0.028	-	$0.021

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	9 inch	9.875 inch	11
75,000 lbs.	1,179 psi	979 psi	789

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Bucyrus International 59R -Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)								
	12.25			15.00			16.00		
Granite	3379.984	-	4572.919	3213.372	-	4347.504	3162.023	-	4278.031
Basalt	1770.653	-	2395.589	1683.371	-	2277.502	1656.471	-	2241.108
Gabbro	1996.573	-	2701.246	1898.155	-	2568.092	1867.823	-	2527.054
Shale	3546.993	-	4798.873	3372.149	-	4562.319	3318.263	-	4489.414
Sandstone	3697.769	-	5002.863	3515.492	-	4756.254	3459.315	-	4680.25
Siltstone	3681.304	-	4980.588	3499.839	-	4735.076	3443.912	-	4659.411
Conglomer	4247.818	-	5747.048	4038.427	-	5463.755	3973.894	-	5376.445
Breccia	5863.339	-	7932.753	5574.314	-	7541.719	5485.238	-	7421.204
Limestone	4870.335	-	6589.277	4630.259	-	6264.468	4556.268	-	6164.363
Schist	5972.24	-	8080.09	5677.846	-	7681.792	5587.116	-	7559.039
Slate	3888.976	-	5261.555	3697.274	-	5002.194	3638.192	-	4922.26
Gneiss	3539.394	-	4788.591	3364.924	-	4552.544	#REF!	-	4479.796

Steel Life (feet/rod)

	Hole Diameter (inches)								
	12.25			15.00			16.00		
Granite	41969.55	-	56782.33	39900.72	-	53983.32	39263.11	-	53120.68
Basalt	24574.25	-	33247.51	23362.89	-	31608.62	22989.56	-	31103.52
Gabbro	27142.87	-	36722.71	25804.9	-	34912.52	25392.55	-	34354.62
Shale	43679.22	-	59095.42	41526.11	-	56182.39	40862.54	-	55284.61
Sandstone	45210.83	-	61167.6	42982.23	-	58152.42	42295.38	-	57223.16
Siltstone	45044.11	-	60942.03	42823.72	-	57937.98	42139.41	-	57012.14
Conglomer	50711.07	-	68609.09	48211.33	-	65227.1	47440.93	-	64184.78
Breccia	66219.99	-	89591.75	62955.76	-	85175.45	61949.75	-	83814.36
Limestone	56790.17	-	76833.76	53990.78	-	73046.35	53128.02	-	71879.08
Schist	67236.6	-	90967.16	63922.26	-	86483.06	62900.8	-	85101.08
Slate	47137.81	-	63774.69	44814.22	-	60631	44098.1	-	59662.13
Gneiss	43601.73	-	58990.58	41452.44	-	56082.72	40790.04	-	55186.53

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	12.25			15.00			16.00		
Granite	19.00236	-	25.70907	12.60139	-	17.04894	11.05531	-	14.95719
Basalt	11.03265	-	14.92652	7.316286	-	9.898504	6.418644	-	8.684048
Gabbro	12.205	-	16.51264	8.093728	-	10.95034	7.100701	-	9.606831
Shale	19.78892	-	26.77325	13.123	-	17.75464	11.51293	-	15.57631
Sandstone	20.49398	-	27.72715	13.59055	-	18.38722	11.92312	-	16.13128
Siltstone	20.41721	-	27.62329	13.53965	-	18.31835	11.87846	-	16.07085
Conglomer	23.02897	-	31.15684	15.27163	-	20.66162	13.39794	-	18.12663
Breccia	30.19898	-	40.85745	20.02642	-	27.09456	17.56936	-	23.77031
Limestone	25.83581	-	34.95433	17.13298	-	23.17992	15.03092	-	20.33595
Schist	30.66998	-	41.49468	20.33876	-	27.51714	17.84338	-	24.14104
Slate	21.38157	-	28.92801	14.17916	-	19.18357	12.43951	-	16.82992
Gneiss	19.75326	-	26.725	13.09935	-	17.72265	11.49218	-	15.54824

	12.25 inch	15 inch	16 inch
165,000 lbs.	1,400 psi	934 psi	821 psi

Bucyrus International 59R -Rotary

Bit Cost ($/foot)

	Hole Diameter (inches)								
	12.25			15.00			16.00		
Granite	$1.69	-	$1.25	$2.79	-	$2.06	$3.01	-	$2.22
Basalt	$3.22	-	$2.38	$5.32	-	$3.93	$5.75	-	$4.25
Gabbro	$2.86	-	$2.11	$4.72	-	$3.49	$5.10	-	$3.77
Shale	$1.61	-	$1.19	$2.66	-	$1.96	$2.87	-	$2.12
Sandstone	$1.54	-	$1.14	$2.55	-	$1.88	$2.75	-	$2.03
Siltstone	$1.55	-	$1.15	$2.56	-	$1.89	$2.76	-	$2.04
Conglomer	$1.34	-	$0.99	$2.22	-	$1.64	$2.39	-	$1.77
Breccia	$0.97	-	$0.72	$1.61	-	$1.19	$1.74	-	$1.28
Limestone	$1.17	-	$0.87	$1.93	-	$1.43	$2.09	-	$1.54
Schist	$0.96	-	$0.71	$1.58	-	$1.17	$1.70	-	$1.26
Slate	$1.47	-	$1.08	$2.42	-	$1.79	$2.62	-	$1.93
Gneiss	$1.61	-	$1.19	$2.66	-	$1.97	#REF!	-	$2.12

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	12.25			15.00			16.00		
Granite	$0.027	-	$0.020	$0.040	-	$0.030	$0.041	-	$0.030
Basalt	$0.046	-	$0.034	$0.068	-	$0.051	$0.070	-	$0.051
Gabbro	$0.042	-	$0.031	$0.062	-	$0.046	$0.063	-	$0.047
Shale	$0.026	-	$0.019	$0.039	-	$0.028	$0.039	-	$0.029
Sandstone	$0.025	-	$0.019	$0.037	-	$0.028	$0.038	-	$0.028
Siltstone	$0.025	-	$0.019	$0.037	-	$0.028	$0.038	-	$0.028
Conglomer	$0.022	-	$0.017	$0.033	-	$0.025	$0.034	-	$0.025
Breccia	$0.017	-	$0.013	$0.025	-	$0.019	$0.026	-	$0.019
Limestone	$0.020	-	$0.015	$0.030	-	$0.022	$0.030	-	$0.022
Schist	$0.017	-	$0.013	$0.025	-	$0.019	$0.025	-	$0.019
Slate	$0.024	-	$0.018	$0.036	-	$0.026	$0.036	-	$0.027
Gneiss	$0.026	-	$0.019	$0.039	-	$0.029	$0.039	-	$0.029

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	12.25 inch	15 inch	16
165,000 lbs.	1,400 psi	934 psi	821

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

Ingersoll-Rand TBH4 - Rotary

Bit Life (feet/bit)

	Hole Diameter (inches)								
	5.00			6.750			7.875		
Granite	3,526	-	4,770	3,271	-	4,426	3,148	-	4,259
Basalt	1,847	-	2,499	1,714	-	2,319	1,649	-	2,231
Gabbro	2,083	-	2,818	1,932	-	2,614	1,859	-	2,516
Shale	3,700	-	5,006	3,433	-	4,645	3,303	-	4,469
Sandstone	3,857	-	5,219	3,579	-	4,842	3,444	-	4,659
Siltstone	3,840	-	5,195	3,563	-	4,820	3,428	-	4,638
Conglomera	4,431	-	5,995	4,111	-	5,562	3,956	-	5,352
Breccia	6,116	-	8,275	5,675	-	7,678	5,461	-	7,388
Limestone	5,080	-	6,873	4,714	-	6,377	4,536	-	6,137
Schist	6,230	-	8,429	5,780	-	7,820	5,562	-	7,525
Slate	4,057	-	5,488	3,764	-	5,092	3,622	-	4,900
Gneiss	3,692	-	4,995	3,426	-	4,635	3,296	-	4,460

Steel Life (feet/rod)

	Hole Diameter (inches)								
	5.00			6.750			7.875		
Granite	43,780	-	59,231	40,620	-	54,957	39,087	-	52,882
Basalt	25,634	-	34,681	23,784	-	32,178	22,886	-	30,964
Gabbro	28,313	-	38,306	26,270	-	35,542	25,279	-	34,200
Shale	45,563	-	61,644	42,275	-	57,195	40,679	-	55,036
Sandstone	47,161	-	63,806	43,757	-	59,201	42,106	-	56,966
Siltstone	46,987	-	63,570	43,596	-	58,983	41,950	-	56,756
Conglomera	52,898	-	71,568	49,081	-	66,403	47,228	-	63,897
Breccia	69,076	-	93,456	64,091	-	86,711	61,672	-	83,438
Limestone	59,239	-	80,147	54,964	-	74,363	52,890	-	71,556
Schist	70,136	-	94,890	65,075	-	88,042	62,618	-	84,719
Slate	49,171	-	66,525	45,622	-	61,724	43,900	-	59,394
Gneiss	45,482	-	61,535	42,200	-	57,094	40,607	-	54,939

Penetration Rate (feet/hour)

	Hole Diameter (inches)								
	5.00			6.750			7.875		
Granite	45	-	60	24	-	33	18	-	24
Basalt	26	-	35	14	-	19	10	-	14
Gabbro	29	-	39	16	-	21	11	-	15
Shale	46	-	63	25	-	34	18	-	25
Sandstone	48	-	65	26	-	35	19	-	26
Siltstone	48	-	65	26	-	35	19	-	26
Conglomera	54	-	73	29	-	40	22	-	29
Breccia	71	-	96	39	-	52	28	-	38
Limestone	61	-	82	33	-	45	24	-	33
Schist	72	-	97	39	-	53	29	-	39
Slate	50	-	68	27	-	37	20	-	27
Gneiss	46	-	63	25	-	34	18	-	25

	5.000 inch	6.750 inch	7.875 inch
37,700 lbs.	1,920 psi	1,054 psi	774 psi

Ingersoll-Rand TBH4 - Rotary

Bit Cost ($/foot)

	Hole Diameter (inches)								
	5.00			6.750			7.875		
Granite	$0.40	-	$0.29	$0.65	-	$0.48	$0.83	-	$0.61
Basalt	$0.76	-	$0.56	$1.24	-	$0.92	$1.58	-	$1.17
Gabbro	$0.68	-	$0.50	$1.10	-	$0.81	$1.40	-	$1.04
Shale	$0.38	-	$0.28	$0.62	-	$0.46	$0.79	-	$0.58
Sandstone	$0.36	-	$0.27	$0.59	-	$0.44	$0.76	-	$0.56
Siltstone	$0.37	-	$0.27	$0.60	-	$0.44	$0.76	-	$0.56
Conglomer	$0.32	-	$0.23	$0.52	-	$0.38	$0.66	-	$0.49
Breccia	$0.23	-	$0.17	$0.38	-	$0.28	$0.48	-	$0.35
Limestone	$0.28	-	$0.20	$0.45	-	$0.33	$0.58	-	$0.43
Schist	$0.23	-	$0.17	$0.37	-	$0.27	$0.47	-	$0.35
Slate	$0.35	-	$0.26	$0.57	-	$0.42	$0.72	-	$0.53
Gneiss	$0.38	-	$0.28	$0.62	-	$0.46	$0.79	-	$0.59

Steel Cost ($/foot per rod)

	Hole Diameter (inches)								
	5.00			6.750			7.875		
Granite	$0.013	-	$0.010	$0.015	-	$0.011	$0.018	-	$0.014
Basalt	$0.023	-	$0.017	$0.026	-	$0.019	$0.031	-	$0.023
Gabbro	$0.021	-	$0.015	$0.023	-	$0.017	$0.028	-	$0.021
Shale	$0.013	-	$0.010	$0.014	-	$0.011	$0.018	-	$0.013
Sandstone	$0.012	-	$0.009	$0.014	-	$0.010	$0.017	-	$0.013
Siltstone	$0.012	-	$0.009	$0.014	-	$0.010	$0.017	-	$0.013
Conglomer	$0.011	-	$0.008	$0.012	-	$0.009	$0.015	-	$0.011
Breccia	$0.008	-	$0.006	$0.010	-	$0.007	$0.012	-	$0.009
Limestone	$0.010	-	$0.007	$0.011	-	$0.008	$0.014	-	$0.010
Schist	$0.008	-	$0.006	$0.009	-	$0.007	$0.011	-	$0.008
Slate	$0.012	-	$0.009	$0.013	-	$0.010	$0.016	-	$0.012
Gneiss	$0.013	-	$0.010	$0.014	-	$0.011	$0.018	-	$0.013

(Based on 12 foot drilling rod length.)

Steel Cost Adjustment Factor

Number of rods	Factor
1	1.0
2	1.5
3	2.0
4	2.5
5	3.0
6	3.5
7	4.0
8	4.5
9	5.0
10	5.5

The total steel cost per foot of hole drilled depends upon the length of the rods to be used and the number of rods needed to drill the hole. To adjust the steel cost per foot per rod as listed above for these two variables, first divide the rod length to be used (in feet) by 12 (the base case rod length). Then multiply the resulting quotient by the appropriate steel cost per foot per rod from the table above. Then multiply that result by the appropriate factor from the table at left for the number of rods needed to drill the hole. The result is the total steel cost per foot of hole drilled.

	5.000 inch	6.750 inch	7.875
37,700 lbs.	1,920 psi	1,054 psi	774

Prepared by Western Mine Engineering, Inc. in cooperation with Aventurine Engineering, Inc. 2003

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59R

Max. hole size: 444 mm (17-1/2 in)
Max. bit loading: 74,830 kg (165,000 lbs)
Working weight: 183,673 kg (405,000 lbs)

49RIII

Max. hole size: 406 mm (16 in)
Max. bit loading: 63,975 kg (141,000 lbs)
Working weight: 154,224 kg (340,000 lbs)

39HR

Max. hole size: 349 mm (13-3/4 in)
Max. bit loading: 55,000 kg (122,000 lbs)
Working weight: 122,500 kg (270,000 lbs)

35HR Series

Max. hole size: 270 mm (10-5/8 in)
Max. bit loading: 34,000 kg (75,000 lbs)
Working weight: 54,432 kg (120,000 lbs)

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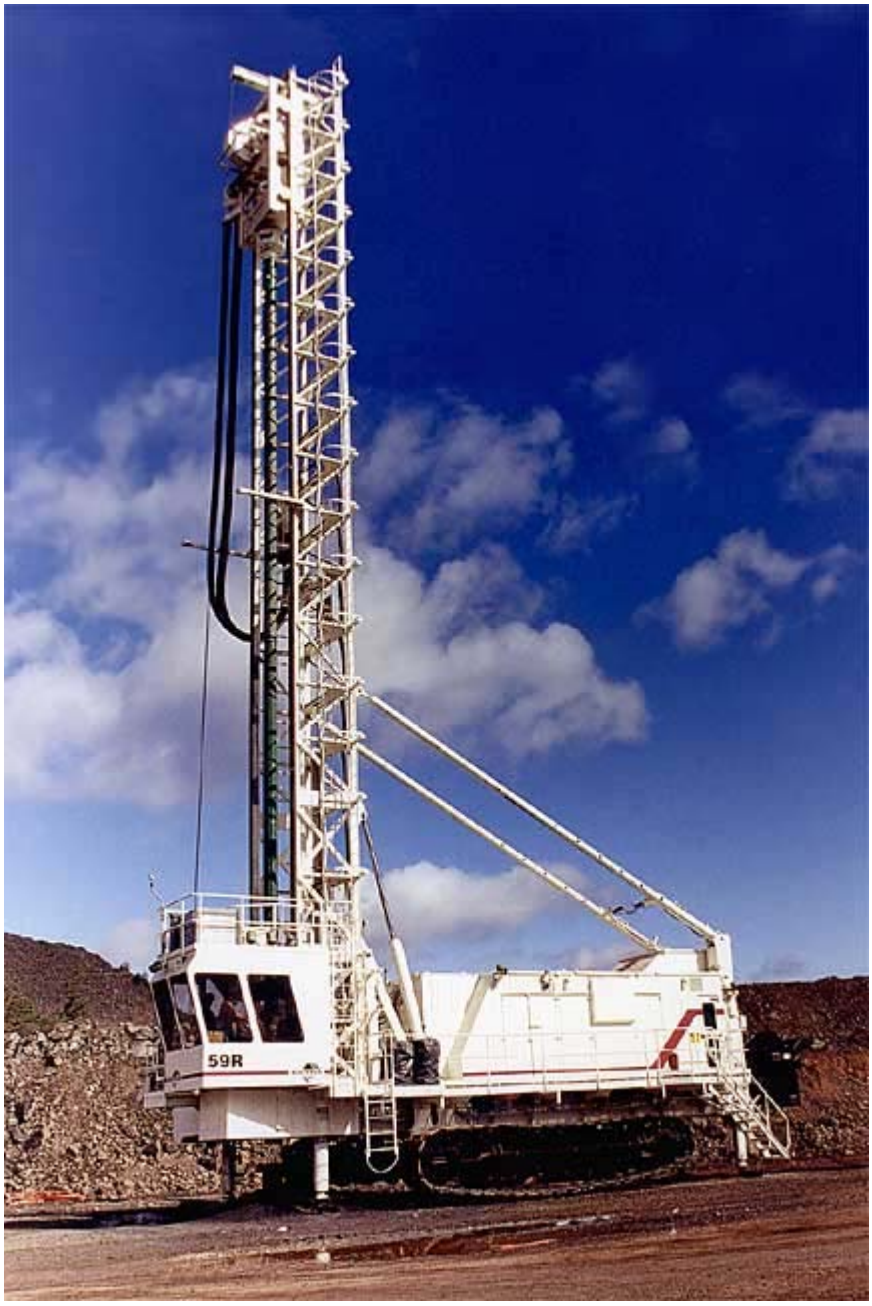
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Infrastructure - Drilling Solutions

Rotary - DM45/LP

Select Model:

- T4BH
- DM25/SP
- DM30
- DM45/LP
- DM50/LP
- DM-L/LP
- DM45/SP
- DM-LSP
- DM-M2
- DM-M3
- DM-H2
- 351

The DM45/LP is a hydraulic rotary head drive, multi-pass, crawler-mounted drill rig with a 45,000 lb. (20,400 kg) bit load capacity. The standard two-motor spur gear rotary head is rated from 9,000 ft-lb. (12,204 N-m) at 0-100 RPM and 5,400 ft-lb. (732 N-m) at 0-160 RPM. The DM45/LP can drill from 5-1/8 to 7-7/8 in. (130 to 200 mm) diameter blastholes to depths of 180 ft. (55 m) with a 30 ft. (9.1 m) drill pipe change. Two low-pressure Ingersoll-Rand compressor options are available with your choice of Caterpillar or Cummins engines.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	6-8 in.
Power Pack	
Engine #1	Cummins QSX15 (425 HP @ 1800 rpm)
Compressor #1	900 @ 110 CFM @ PSI / 25.5 @ 758 m3/min@kPA
Engine #2	CAT C15 (425 HP @ 1800 RPM)
Compressor #2	900 @ 110 CFM @ PSI / 25.5 @ 758 m3/min@kPA
Engine #3	Cummins QSX15 (475 HP @ 1800 RPM)
Compressor #3	1050 @ 110 CFM @ PSI / 29.7 @ 758 m3/min@kPA
Engine #4	Cat C15 (475 HP @ 1800 RPM)
Compressor #4	1050 @ 110 CFM @ PSI / 29.7 @ 758 m3/min@kPA
Rotation	
Type	2-motor variable displacement, high torque/high speed
Head Torque	High torque: 9,000 ft-lb @ 100 rpm
Speed	High speed: 5,400 ft-lb @ 160 rpm rpm
Feed System	
Type	Hydraulic cyls. w/cable pulldown & chain pullback
Bit Load	45,000 lb / 20,411 kg
Tower	
Pipe Length	30 ft. / 9.1 m.
Fabrication	4-member open front w/rectangular hollow steel tubing/double cut lacing
Undercarriage	
Model	Caterpillar 325L or equivalent

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Length	15.3 ft. / 4.66 m
Carousel	
Capacity	Capable of 180 ft.
Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	43 ft. / 13.11 m
Approx. Working Weight	77,000 - 85,000 lbs. / 34,900 - 38,600 kg.
Material To Be Drilled	
Soft	Yes
Drill Application	
Mining	Yes
Quarry	Yes
Drilling Method	
Rotary	Yes

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Infrastructure - Drilling Solutions

Rotary - DM30

Select Model:

- T4BH
- DM25/SP
- DM30
- DM45/LP
- DM50/LP
- DM-L/LP
- DM45/SP
- DM-LSP
- DM-M2
- DM-M3
- DM-H2
- 351

The DM30 is a hydraulic tophead drive, multi-pass, crawler-mounted drill rig designed for blastholes ranging from 5-1/8 to 6-3/4 in. (130 to 171 mm) in diameter. On-board depth capability is up to 150 ft. (45.7 m). For rotary drilling, the DM30 can assert a bit load force up to 30,000 lb. (13,608 kg) and rotation speeds of 0-130 RPM. This rig can also be used with downhole drills when equipped with a high-pressure air compressor option.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	5-6 in.
Power Pack	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Floating Sub Base	Isolates components from drilling and propel shock loads/maintains alignment
Rotation	
Type	Rotary Tophead
Head Torque	5,400 ft-lb. / 7,322 N-m
Speed	0-100 rpm
Feed System	
Type	Single cylinder, cable feed
Bit Load	30,000 lb / (13,608) kg
Tower	
Pipe Length	30 ft. / 9.1 m.
Construction	4 member open front with hollow steel tubing.

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Undercarriage	
Manufacturer	Caterpillar
Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	44.3 ft. / 13.4 m
Approx. Working Weight	68,000 lbs. / 30,844 kg.
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Quarry	Yes
Drilling Method	
Rotary	Yes
DHD	Yes

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Rotary - DM25/SP

Select Model:

- T4BH
- DM25/SP
- DM30
- DM45/LP
- DM50/LP
- DM-L/LP
- DM45/SP
- DM-LSP
- DM-M2
- DM-M3
- DM-H2
- 351

The DM25SP is a crawler-mounted rotary table drill rig designed for single-pass blasthole drilling to depths of up to 50 ft. (15.2 m) and diameters of 3-1/2 to 6-3/4 in. (89 to 171 mm). This drill is capable of rotary drilling with 25,000 lb. (11,340 kg) of bit load at 0-200 rpm. The DM25SP can also be used with downhole drills when equipped with a high-pressure air compressor option.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	5-6 in.
Power Pack	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Rotation	
Type	Rotary Table Drive
Speed	0-170 rpm
Torque	3,500 / (4,746 N-m)
Feed System	
Type	Heavy-duty chains through cluster sprocket
Pulldown	25,000 lbs. / 11,340 kg.
Tower	
Construction	4 main member, open front, rectangular steel tubing
#1 Single pass depth	40 ft. / 12.2 m.
#2 Single pass depth	50 ft. / 15.2 m.
Undercarriage	

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Type	Excavator
Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Weight	Varies according to drill pipe: 60,000 - 62,000 lb / 27,216-28,123 kg
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Quarry	Yes
Drilling Method	
Rotary	Yes
DHD	Yes

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Rotary - DM-M2

Select Model:

- T4BH
- DM25/SP
- DM30
- DM45/LP
- DM50/LP
- DM-L/LP
- DM45/SP
- DM-LSP
- DM-M2
- DM-M3
- DM-H2
- 351

Designed for rotary or downhole drilling of up to 10-5/8 in. (270 mm) diameter blastholes, the DM-M2 provides 75,000 lb. (34,000 kg) of bit load and a 35 ft. (10 m) drill pipe change. Advanced frame and tower design and a unique, patented carriage feed system allow on-board drill depths to 175 ft. (53 m). Compressor/engine packages in both low-pressure, [1900 CFM @ 110 PSI (51 m3/min. @ 758 kPa)] for rotary drilling and high pressure [1250 CFM @ 350 PSI (35.4 m3/min. @ 2,413 kPa)], for downhole drilling, are available.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	9-11 in.
Power Pack	
Engine #1	Caterpillar 3412E / EPA certified
Compressor #1	1900 @ 100 CFM @ PSI / 53.8 @ 690 m3/min@kPA
Engine #2	Cummins QSK19 / EPA certified
Compressor #2	1900 @ 100 CFM @ PSI / 53.8 @ 690 m3/min@kPA
Engine #3	Caterpillar 3412E / EPA certified
Compressor #3	1250 @ 350 CFM @ PSI / 35.4 @ 2413 m3/min@kPA
Rotation	
Type	Two-motor, variable displacement
Speed Range	0-150 rpm, variable
Head Torque	0-8,640 ft-lbs (0-11,714 Nm) (forward)
Feed System	
Type	Patented carriage feed
Weight on Bit	0 to 75,000 lb. / 0 to 34,019 kg
Tower	
Pipe Length	35 ft. / 10.7 m.
Construction	4 member open front with hollow steel tubing.
Undercarriage	
Model	Caterpillar 330EL or equivalent
Carousel	
Size	Holds 2 to 4 drill pipe depending on pipe diameter

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Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	56.2 ft. / 17.1 m
Approx. Working Weight	120,000 - 133,500 lbs. / 54,400 - 60,555 kg.
Material To Be Drilled	
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Drilling Method	
Rotary	Yes
DHD	Yes

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Rotary - T4BH

Select Model:

- T4BH
- DM25/SP
- DM30
- DM45/LP
- DM50/LP
- DM-L/LP
- DM45/SP
- DM-LSP
- DM-M2
- DM-M3
- DM-H2
- 351

The T4BH is a truck-mounted, hydraulic tophead drive multipass rotary drill specificaly designed for production blasthole drilling to depths of 150 ft. (45.7 m) with a 25 ft. (7.6 m) drill pipe change. Nominal hole size is 5-1/8 to 7-7/8 in. (130 to 200 mm) for rotary or DHD drilling methods. Feed pressure generates a bit load force of up to 30,000 lb. (12,610 kg). An angle drilling option is available. All drill functions are controlled from the newly designed operator cab.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	6-9 in.
Carrier	
Chassis (Standard)	Crane Carrier, Custom, 3 axle, 6X4
Engine	CAT C10 (305 HP)
Power Pack	
Engine #1	Cummins QSX19 (525 HP @ 1800 RPM)
Compressor #1	IR HR2-900/350 CFM @ PSI / 25.5/2413 m3/min@kPA
Engine #2	Cummins QSX19 (600 HP @ 1800 RPM)
Compressor #2	1050 @ 350 CFM @ PSI / 129.7 @ 2413 m3/min@kPA
Engine #3	Cummins QSK-19C (700 HP @ 2100 RPM)
Compressor #3	IR HR2.5 - 1250/350 CFM @ PSI / (35.39 @ 2413) m3/min@kPA
Floating Sub Base	Isolates components from drilling and propel shock loads/maintains alignment
Rotation	
Type	Rotary Tophead
Speed Range	0-160 RPM (std.)
Head Torque	6,500 ft-lb. / (8,814 N-m)
Option	7,165 ft-lb @ 0-130 RPM / 9,716 N-m @ 0-130 RPM
Feed System	
Type	Hydraulic cylinders w/cable and chain
Pulldown	0-37,700 lbs. / 17,108 kg.

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Tower	
Pipe Length	25 ft. / 7.6 m.
Construction	4 member open front with ASTM A500 GRB steel tubing.
Cab & Controls	
Operator Cab	New cab designed to optimize operator comfort and safety
Controls	All operational functions controlled from driller console in cab
Options	
Option #1	Contact your local distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	28-3/4 ft. / 8.7 m
Approx. Working Weight	58,000 lbs. / 26,309 kg.
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Quarry	Yes
Drilling Method	
Rotary	Yes

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DHD - DM-M2

Select Model:

- CM695D
- DM25/SP
- DM30
- DM45/HP
- DM45/SP
- DM-L/HP
- DM-M2

Designed for rotary or downhole drilling of up to 10-5/8 in. (270 mm) diameter blastholes, the DM-M2 provides 75,000 lb. (34,000 kg) of bit load and a 35 ft. (10 m) drill pipe change. Advanced frame and tower design and a unique, patented carriage feed system allow on-board drill depths to 175 ft. (53 m). Compressor/engine packages in both low-pressure, [1900 CFM @ 110 PSI (51 m3/min. @ 758 kPa)] for rotary drilling and high pressure [1250 CFM @ 350 PSI (35.4 m3/min. @ 2,413 kPa)], for downhole drilling, are available.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	9-11 in.
Power Pack	
Engine #1	Caterpillar 3412E / EPA certified
Compressor #1	1900 @ 100 CFM @ PSI / 53.8 @ 690 m3/min@kPA
Engine #2	Cummins QSK19 / EPA certified
Compressor #2	1900 @ 100 CFM @ PSI / 53.8 @ 690 m3/min@kPA
Engine #3	Caterpillar 3412E / EPA certified
Compressor #3	1250 @ 350 CFM @ PSI / 35.4 @ 2413 m3/min@kPA
Rotation	
Type	Two-motor, variable displacement
Speed Range	0-150 rpm, variable
Head Torque	0-8,640 ft-lbs (0-11,714 Nm) (forward)
Feed System	
Type	Patented carriage feed
Weight on Bit	0 to 75,000 lb. / 0 to 34,019 kg
Tower	
Pipe Length	35 ft. / 10.7 m.
Construction	4 member open front with hollow steel tubing.
Undercarriage	
Model	Caterpillar 330EL or equivalent
Carousel	
Size	Holds 2 to 4 drill pipe depending on pipe diameter

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Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	56.2 ft. / 17.1 m
Approx. Working Weight	120,000 - 133,500 lbs. / 54,400 - 60,555 kg.
Material To Be Drilled	
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Drilling Method	
Rotary	Yes
DHD	Yes

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DHD - DM30

Select Model:

- CM695D
- DM25/SP
- DM30
- DM45/HP
- DM45/SP
- DM-L/HP
- DM-M2

The DM30 is a hydraulic tophead drive, multi-pass, crawler-mounted drill rig designed for blastholes ranging from 5-1/8 to 6-3/4 in. (130 to 171 mm) in diameter. On-board depth capability is up to 150 ft. (45.7 m). For rotary drilling, the DM30 can assert a bit load force up to 30,000 lb. (13,608 kg) and rotation speeds of 0-130 RPM. This rig can also be used with downhole drills when equipped with a high-pressure air compressor option.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	5-6 in.
Power Pack	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	IR HR2 900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	IR WW226 900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Floating Sub Base	Isolates components from drilling and propel shock loads/maintains alignment
Rotation	
Type	Rotary Tophead
Head Torque	5,400 ft-lb. / 7,322 N-m
Speed	0-100 rpm
Feed System	
Type	Single cylinder, cable feed
Bit Load	30,000 lb / (13,608) kg
Tower	
Pipe Length	30 ft. / 9.1 m.
Construction	4 member open front with hollow steel tubing.

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Undercarriage	
Manufacturer	Caterpillar
Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	44.3 ft. / 13.4 m
Approx. Working Weight	68,000 lbs. / 30,844 kg.
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Quarry	Yes
Drilling Method	
Rotary	Yes
DHD	Yes

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DHD - DM25/SP

Select Model:

- CM695D
- DM25/SP
- DM30
- DM45/HP
- DM45/SP
- DM-L/HP
- DM-M2

The DM25SP is a crawler-mounted rotary table drill rig designed for single-pass blasthole drilling to depths of up to 50 ft. (15.2 m) and diameters of 3-1/2 to 6-3/4 in. (89 to 171 mm). This drill is capable of rotary drilling with 25,000 lb. (11,340 kg) of bit load at 0-200 rpm. The DM25SP can also be used with downhole drills when equipped with a high-pressure air compressor option.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	5-6 in.
Power Pack	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	900/350 CFM @ PSI / 25.5/2,413 m3/min@kPA
Engine #3	Cummins QSX15 (425 HP @ 1800 RPM)
Compressor #3	900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Engine #4	CAT C15 (425 HP @ 1800 RPM)
Compressor #4	900/110 CFM @ PSI / 25.5/758 m3/min@kPA
Rotation	
Type	Rotary Table Drive
Speed	0-170 rpm
Torque	3,500 / (4,746 N-m)
Feed System	
Type	Heavy-duty chains through cluster sprocket
Pulldown	25,000 lbs. / 11,340 kg.
Tower	
Construction	4 main member, open front, rectangular steel tubing
#1 Single pass depth	40 ft. / 12.2 m.
#2 Single pass depth	50 ft. / 15.2 m.
Undercarriage	

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Type	Excavator
Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Weight	Varies according to drill pipe: 60,000 - 62,000 lb / 27,216-28,123 kg
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Quarry	Yes
Drilling Method	
Rotary	Yes
DHD	Yes

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DHD - DM45/SP

Select Model:

- CM695D
- DM25/SP
- DM30
- DM45/HP
- DM45/SP
- DM-L/HP
- DM-M2

The DM45/SP is a crawler-mounted hydraulic rotary table drive, drill rig designed to produce 50 ft. (15.2 m) of clean hole in a single pass. Hole diameter capability is 5-1/2 to 6-3/4 in. (139.7 to 171.5 mm) to a depth of up to 50 ft. (15.2 m) with a downhole hammer (high-pressure air package). Feed pressure generates a bit load force of up to 25,000 lb. (11,340 kg). An optional angle drilling system is available.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	5-7 in.
Power Pack	
Engine #1	Cummins QSX15 (525 HP @ 1800 RPM)
Compressor #1	900/350 CFM @ PSI / 25.5/2413 m3/min@kPA
Engine #2	CAT C15 (525 HP @ 1800 RPM)
Compressor #2	900/350 CFM @ PSI / 25.5/2413 m3/min@kPA
Engine #3	Cummins QSX15 (600 HP @ 1800 RPM)
Compressor #3	1070/350 CFM @ PSI / 30.30/2,413 m3/min@kPA
Engine #4	CAT C16 (600 HP @ 1800 RPM)
Compressor #4	1070/350 CFM @ PSI / 30.30/2413 m3/min@kPA
Rotation	
Type	Rotary table w/kelly drive
Speed	0-200 rpm
Torque	4,000 ft-lb / (5,424 N-m)
Feed System	
Type	Chain and cable
Pulldown	25,000 lbs. / 11,340 kg.
Tower	
Type	Single Pass
Pipe Length	50 ft. / 15.2 m.
	4 member open front with rectangular steel

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Construction	tubing
Undercarriage	
Type	Excavator-type
Options	
Option #1	Contact your local IR distributor for a complete list of options.
Weight & Dimensions	
Height (Tower Up)	76-1/2 ft. / 23.3 m
Approx. Working Weight	75,000 - 78,000 lbs. / 34,020 - 35,400 kg.
Material To Be Drilled	
Hard	Yes
Medium	Yes
Drill Application	
Mining	Yes
Quarry	Yes
Drilling Method	
DHD	Yes

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Infrastructure - Drilling Solutions

Pneumatic Crawler - ECM350

Select Model:

- LM100A
- CM348
- ECM350

This agile, powerfull drill climbs steep grades over roughest ground, and takes the punishment. You have seen thousands of them on construction jobs of all kinds around the world. The basic ECM350 design has seen many improvements in its years of service ? but every drill produced has set the world standard for reliability and perfomance in its time. The ECM350 is also a fine quarry drill when teamed with an Ingersoll-Rand air compressor. This high-performance team gets more work done faster, more efficiently, and keeps doing it longer than anything else in its class.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	2-1/2 - 5-1/2 in.
Drifter	
Drifter #1	VL140
Hole Diameter #1	2.5-4 " / 64-102 mm
Rotation Speed #1	0 - 72 rpm
Frequency #1	2100 BPM
Air Consumption #1	750 SCFM @ 100 PSI / 21.2 m3/min @ 7 kg/cm2
Stroke #1	5-1/2 in. / 140 mm.
Bore #1	5-1/2 in. / 140 mm.
Weight #1	421 lb. / 191 kg.
Guide	
Guide Dump #1	180 °
Guide Swing (L/R)	50 deg / 35 deg
Boom	
Boom Swing (L/R) #1	40 ° / 35 °
Boom Lift (Up/Down) #1	45 ° / 15 °
Air Rotary Head	
Weight	554 lb. / 252 kg.
Torque Max.	1492 Nm @ 8.4 kg/cm? / (1100 lb-ft @ 120 PSI)
Rotation	0 - 72
Air Consumption	120 CFM @ 50 RPM & 90 PSI / 3.4 m3/min @ 50 RPM & 6.3 kg/cm2
Gear Ratio	33:1
Horse Power	2.23 kw @ 6.3 kg/cm? (3.0 hp @ 90 psig) / 3.13 kw @ 8.4 kg/cm? (4.2 hp @ 120 psig)
General	
Feed/Pullback Force	3,000 lb / 1,361 kg

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Downhole Drills	
O.D. #1	3.62 in. / 92 mm.
Length (bit ext.) #1	45.7 in. / 1161 mm.
Air Consumption @ 10.5 kg/cm? (150 PSIG) #1	5.1 m?/min / (180 SCFM)
Air Consumption @ 17.6 kg/cm? (250 PSIG) #1	9.9 m?/min / (350 SCFM)
Drill #2	DHD350R
Hole Diameter #2	5-1/8 - 5-1/2 in. / 130-140 mm.
Weight (less bit) #2	151 lb. / 68.5 kg.
O.D. #2	4.5 in. / 114 mm.
Length (bit ext.) #2	54.6 in. / 1388 mm.
Air Consumption @ 10.5 kg/cm? (150 PSIG) #2	7.9 m?/min / (280 SCFM)
Air Consumption @ 17.6 kg/cm? (250 PSIG) #2	14.7 m?/min / (520 SCFM)
Crawlair Drill Specifications	
Net weight	12,900 lb. / 5851 kg.
Overall shipping length	12 ft. 0 in. / 3645 mm.
Width	8 ft 0 in. / 2438 mm.
Height (vertical guide)	18 ft. 10 in. / 5753 mm.
Steel change	12 ft. / 3645 mm.
Drill travel	14 ft. 3 in. / 4356 mm.
Max. horizontal boom swing	40? left, 35? right
Max. vertical boom movement	45? above, 15? below
Max. guide swing	50? left, 35? right
Max guide dump	180?
Ground clearance	12 in. / 292 mm.
Grouser width	10 in. / 254 mm.
Weight & Dimensions	
Ground Clearance	12 " / 292 mm
Shipping Width	96 " / 2438 mm
Shipping Length	144 " / 3645 mm
Approx. Working Weight	12,900 lbs. / 5851 kg.
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Construction	Yes
Quarry	Yes
Drilling Method	
Drifter	Yes

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Hydraulic Crawler - ECM-720

Select Model:

- ECM470
- ECM580
- ECM590
- ECM660II
- ECM-720

They said it couldn't be done...they were wrong. The new ECM-720 crawler drill delivers a perfect balance of productivity and cost efficiency. Hole straightness, faster penetration rates, long accessory life, and increased profitability are just a few of the results you can expect with the ECM-720.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	4-1/2 - 5-1/2 in.
Drifter	
Type	Montabert HC-200A
Boom & Guide	
Boom Swing	45 deg right / 20 deg left maximum
Vertical Boom Movement	50 deg up / 20 deg down maximum
Guide Swing	20 deg right / 90 deg left maximum
Guide Dump	135 deg maximum
Boom Extension	36 in. / 914 mm
Guide Extension	5 ft / 1,524 mm
Overall Guide Length	27 ft 6 in / 8.4 m
Drifter Travel	16 ft. 11 in. / 5.15 m
Engine	
Type	CAT 3176 C-10
Rated Power	365 HP / 272 kW
Operating Speed	1,800 rpm
Compressor	
Type	Ingersoll-Rand Rotary Screw
Volume	480 CFM / 13.6 m3/min
Pressure	150 PSI / 10.3 BAR
Cab & Controls	
Operator Cab	ROPS/FOPS
Noise level	80 dBA
General	
Gradeability	35 deg (70 percent) °
Tramming Speed	2.0 mph / 3.3 km/hr
Ground clearance	17 in. / 432 mm.
Grouser Width	13-3/4 in. / 349 mm mm.
Rod Changer Capacity	(6) 12 ft (3.66 m) / (6) 14 ft (4.27 m) opt.
Shipping Information	
Weight	45,900 lb / 20,820 kg

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Width	8 ft 3 in / 2.5 m
Length	35 ft 8 in / 10.9 m
Height	10 ft 8 in / 3.3 m
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Construction	Yes
Quarry	Yes
Drilling Method	
Drifter	Yes

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Hydraulic Crawler - ECM590

Select Model:

- ECM470
- ECM580
- ECM590
- ECM660II
- ECM-720

The ECM-590 is a self-contained, cabless hydraulic crawler drill capable of drilling up to 4 in. (102 mm) holes. It is available in either a YH70 drifter and rod rack configuration for smaller hole work, or with a YH80 and rod changer for higher production requirements. An extended guide option for 20 ft. (6.1 m) starter steel is available.

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	2-1/2 - 4-1/2 in.
Drifter	
Drifter #1	YH70
Hole Diameter #1	2.5-4 " / 64-102 mm
Rotation Speed #1	0-200 rpm
Frequency #1	2800 BPM
Weight #1	419 lb. / 190 kg.
Steel Size #1	T45/T38
Drifter #2	YH80A
Hole Diameter #2	2.5-4.5 in. / 64-114 mm.
Rotation Speed #2	0-200 rpm
Frequency #2	2600 BPM
Weight #2	462 lb. / 210 kg.
Steel Size #2	T51/T45
Hydraulic Pressure	2130 psi / 150 kg/cm?
Boom & Guide	
Horizontal Boom Swing	30 deg R / 34.6 deg L
Vertical Boom Movement	51 deg up / 15 deg down
Guide Swing	48 deg R / 40 deg L
Guide Dump	180 deg
Boom Extension - YH70 (YH80A)	48 in (30 in) / 1,219 mm (762 mm)
Drifter Travel - YH70 (YH80A)	15 ft 4 in (14 ft) / 3,099 mm (4,267 mm)
Guide Extension	4 ft / 1,219 mm
Overall Guide Length	23 ft 8 in / 7,214 mm
Engine	
Type	Cummins 6CT8.3
Rated Power	215 HP / 159 kW
Operating Speed	2350 rpm

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IR Rotary Screw Compressor	
Compressor pressure(max)	140 psig / 9.8 kg/cm2
Compressor volume	250 cfm / 7 m?/min
General	
Gradeability	35 °
Tramming Speed	2 mph / 3.3 km/hr
Grouser Width	12 in. / 305 mm.
Steel length	starter rod 14 ft. / 4.27 m.
Weight & Dimensions	
Length	232.9 " / 5918 mm
Weight #2	24,500 lb. / 11,150 kg.
Ground Clearance	18 " / 457 mm
Shipping Width	95.98 " / 2438 mm
Shipping Height	112 " / 2845 mm
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Construction	Yes
Drilling Method	
Drifter	Yes

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Pneumatic Crawler - LM100A

Select Model:

- LM100A
- CM348
- ECM350

The LM100A is a small class pneumatic Crawlair?, capable of drilling 1-3/4" to 4- 1/2" (44 - 114 mm) diameter holes. It can be equipped with either of two drifters or a BRH rotary head for downhole drilling. The LM100A is ideal for applications in confined areas where hand-held tools are not enough, and is light enough to transport by helicopter. Like all Ingersoll-Rand crawler drills, the LM100A is "Abuse Resistant". It keeps coming back for more!

[SPECS] | [FEATURES] | [LITERATURE]

Nominal Hole Diameter	
Diameter	1-3/4 - 2-1/2 in.
Carrier	
Overall Track Length	72 " / 1845 mm
Ground Clearance	9 " / 230 mm
Oscillation	20 °
Air Motors	4.5 HP
Gradeability	30 °
Tramming Speed	0-2 mph / 0-3.2 km/hr
Drifter	
Type	Ingersoll-Rand YD90
Hole Diameter #1	1.75-2.5 " / 44-64 mm
Frequency #1	1600 BPM
Air Consumption #1	375 scfm @ 100 psi & 50 rpm / 10.6 m3/min @ 7 kg/cm2 & 50 rpm
Stroke #1	3.4 in. / 85 mm.
Bore #1	3.5 in. / 90 mm.
Steel Size #1	10 ft / 3048 mm
Drifter #2	VL120
Hole Diameter #2	2 - 3.5 in. / 51 - 89 mm.
Frequency #2	1900 BPM
Air Consumption #2	600 SCFM @ 50 RPM & 100 psi / 17.0 m3/min @ 50 RPM & 7 kg/cm2
Stroke #2	3.62 in. / 92 mm.
Bore #2	4.75 in. / 120 mm.
Steel Size #2	10 ft / 3048 mm
Guide	
Guide Dump #1	75 °
Guide Swing (L/R)	45 deg/45 deg

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Guide Extension #1	29 " / 750 mm
Drill Rod Length	10 ft. / 3 m
Feed Motor Pull	3000 lbs. / 1360 kg.
Boom	
Boom Swing (L/R) #1	30/35 °
Boom Lift (Up/Down) #1	45/30 °
Coverage Length	107 " / 2720 mm
Max. Drill Height (Horizontal)	99 " / 2510 mm
BRH Rotary Head	
Weight	304 lbs. / 138 kg.
Torque Maximum	700 lb.-ft. / 96.7 kg.-m
Rotation Range	0 - 50 RPM
Air Consumption	120 SCFM @ 50 RPM & 100 psi / 3.39 m3/min @ 50 RPM & 7 kg/cm2
Gear Ratio	20:1
Horse Power @ 100 psi (7 kg/cm)	4.5 HP / 3.35 kW
Weight & Dimensions	
Width	75 " / 1905 mm
Length (Boom @45°)	195 " / 4950 mm
Minimum Height	44 " / 1120 mm
Height (Boom @45°)	188 " / 4775 mm
Hole Size	1.75-4.5 " / 44-114 mm
Weight Less Drifter	5400 lbs. / 2450 kg.
Material To Be Drilled	
Hard	Yes
Medium	Yes
Soft	Yes
Drill Application	
Mining	Yes
Construction	Yes
Quarry	Yes
Drilling Method	
Drifter	Yes

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