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EBMCH1, EBCRP1 AND EBGEN1
ENTERPRISE BUDGETING WORKSHEETS

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EBMCH1, EBCRP1 AND EBGEN1
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Jeffrey Apland

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EBMCH1, EBCRP1 AND EBGEN1 ENTERPRISE BUDGETING WORKSHEETS

Jeffrey Apland

INTRODUCTION

EBMCH1, EBCRP1 and EBGEN1 are Lotus 123 worksheets designed for the generation of farm enterprise budgets. These spreadsheets will work with either version 1A or version 2 of Lotus 123. With version 1A, the memory requirement is 256 kilobytes -- 320 kilobytes are necessary with version 2. EBMCH1 calculates machine costs and generates a machine cost report. It also creates a database of per hour costs which may be used by enterprise budget worksheets EBCRP1 and EBGEN1. One EBCRP1 or EBGEN1 worksheet is used for each enterprise to be budgeted -- EBCRP1 for crops and EBGEN1 for livestock or special enterprises. This paper will serve as a user's guide for this set of enterprise budgeting worksheets. It is intended for users who are familiar with Lotus 123. However, only the most fundamental Lotus 123 operations are necessary to use the worksheets, which have been automated through the use of macros.

EBMCH1 is a worksheet designed to perform machine cost calculations which support the generation of enterprise budgets. One EBMCH1 worksheet will contain data for a particular set of machinery (for a specific farm business, for example, or simply a set of machines for which costs are needed). It may be desirable to have different EBMCH1 worksheet files for different machine sets. Note, however, that at any one time, machine data from only one EBMCH1 worksheet may be combined into a particular EBCRP1 or EBGEN1 worksheet. EBMCH1 has a capacity of up to 40 machines. Ownership costs calculated in the

worksheet include annual capital recovery cost, taxes, insurance, housing, total annual ownership cost and ownership cost per hour. Calculated operating costs include accumulated repair costs, repair cost per hour, fuel and lubrication cost per hour, and total fuel lubrication and repair cost per hour. Computational procedures are based on those described in Farm Management by Boehlje and Eidman [Chapter 4]. A printed report may be generated with a summary of per hour costs as well as detailed data and costs for all machines.

EBCRP1 is designed to generate crop enterprise budgets. Costs for field operations rely on a data range of per hour machine ownership and operating costs which is combined from EBMCH1. The machine data range also contains machine descriptions. Machines are identified by machine number. EBCRP1 accommodates up to 16 field operations -- each operation may use up to three machines. From one to three products/receipts and up to 16 operating inputs may be included in the budget. Up to three ownership costs may be entered in addition to the machine ownership costs for the field operations. Fuel, lubrication, repair and labor costs for the field operations and interest on operating expenses are also calculated. A numerical code is used to identify the months in which operating inputs are purchased, when field operations take place and when products are sold or transferred to another enterprise. Enterprise cash flows are allocated by month as indicated by this code. A report can be generated which includes all of the budget data, field operation costs, a cash/labor flow summary and a detailed enterprise budget.

EBGEN1 is a general purpose enterprise budget generator. It is specifically designed to accommodate livestock enterprises, however it may be used for other enterprises, also. The format of EBGEN1 is similar to that of

EBCRP1. The most notable difference is that the field operations section of EBCRP1 has been replaced with a more general table for calculating costs and labor requirements for up to 16 labor/machine operations. Also, EBGEN1 will accommodate from one to ten products/receipt items and has a greater capacity for receipt and operating input data.

EBMCH1

Worksheet Layout and User Data Requirements

The layout of EBMCH1 is depicted in Figure 1. Pages in the worksheet "map" are pages of printed output which make up the machine cost report. Output page 1 contains general data and a summary data range which is used in the EBCRP1 and EBGEN1 worksheets. The summary data include machine labels, ownership costs per hour, and fuel, lubrication, and repair costs per hour which are combined into the enterprise budget worksheets. Output pages 2.1 through 2.5 contain user-provided machine data and calculated machine costs. Parameters used in the machine cost calculations are on pages 3.1 through 3.5. All cells in the worksheets are protected except those designated for user data entries. Specific user data requirements are described in Tables 1 and 2. Table 1 contains a list of general user data items and their ranges in the worksheet. Data on output pages 2.1 through 2.5 describe individual machines. A detailed list of machine data by range is given in Table 2. One column is used for each machine: column Q for machine number 1 through column BD for machine number 40. The user data ranges given in Table 2 are for the first machine (column Q). The same descriptions and row ranges apply for machines 2 through 40 in columns R through BD, respectively. Columns N, O and P contain line descriptions for worksheet Table V. Row 7 contains machine numbers which

identify the columns of Table V. While entering machine data it will be useful to use the /Worksheet Titles command to "freeze" columns N, O and P and row 7 on the screen.

EBMCH1 Macros

Several macros have been written for EBMCH1 to perform setup, calculation and report printing functions. A main macro initiates several menu-driven worksheet procedures. The main macro is evoked by pressing and holding the Alt key while pressing the A key. The following menu items will then appear at the top of the screen:

READY GOTO CALC/COPY PRINT

A menu selection within a macro is made in the same way general Lotus 123 command choices are made -- by moving the cursor to the selected item and pressing ENTER or by pressing the key of the first letter in the selected menu item. If READY is selected, the macros are abandoned and Lotus returns to the ready mode. By selecting GOTO, the user is prompted to select a range in the worksheet to which the screen will be moved. If CALC/COPY is selected, machine cost calculations are performed and certain user-provided labels are copied as needed to various ranges within the worksheet. CALC/COPY should always be used rather than manually calculating with the F9 function key. CALC/COPY sets the necessary recalculation options and calculates the formulas. Also, the copy commands executed in this macro are necessary for both report generating purposes and to properly set up data ranges which are combined into other enterprise budget worksheets. Finally a printed report may be generated by selecting PRINT. This selection initiates a series of NO YES menu choices to select output pages for printing. The choices are offered

for Pages 1, 2.1 through 2.5, and 3.n. Machine data, costs and cost parameters appear on the output pages as follows:

Pages 2.1 and 3.1	Machine Numbers 1-8
Pages 2.2 and 3.2	Machine Numbers 9-16
Pages 2.3 and 3.3	Machine Numbers 17-24
Pages 2.4 and 3.4	Machine Numbers 25-32
Pages 2.5 and 3.5	Machine Numbers 33-40

If page "3.n" is selected for printing, 3.01 will be printed if 2.01 was printed, 3.02 will be printed if 2.02 was printed, and so on (page 3.n contains machine cost parameters). Be sure to execute CALC/COPY before printing whenever user data have been changed.

EBCRP1 AND EBGEN1

Each enterprise will be budgeted on a separate worksheet. Per hour machine costs are combined from an EBMCH1 worksheet file for use in machine cost calculations. Most crop enterprises can be effectively budgeted within the structure of EBCRP1. For livestock and some other enterprises, EBGEN1 should be used.

Worksheet Layout

The layouts of EBCRP1 and EBGEN1 are illustrated in the maps in Figures 2 and 3, respectively. The pages in the Figures refer to pages of printed output. For EBCRP1, output page 1 contains the enterprise budget. Monthly cash and labor flows are summarized on output page 2. Product/receipt,

operating input and machine cost data are on output page 3. Output pages 4.1 and 4.2 contain operations data and costs. The contents of the output pages in EBGEN1 are basically the same except Page 3.2 has been added for additional product/receipt and operating input data.

User Data Requirements

The numerical coding scheme used in EBCRP1 and EBGEN1 to allocate cash and labor by month is organized as follows. Numbers 1, 2, ..., 12 correspond to Jan, Feb, ..., Dec in the year in which the crop is produced. For field operations and input purchases scheduled in the previous calendar year, use -1 through -12 for Jan through Dec, respectively. Crop sales may occur in 1 through 12 or the next calendar year -- use code numbers 13 through 24 for Jan through Dec in the year following production. If a zero (0) is entered, the corresponding item will not be used in the cash/labor flow, but will appear as an item in the budget. Table 3 contains a summary of the numerical month codes.

Specific receipt and operating input items in the budget are identified by number -- 1-3 for receipts (1-10 in EBGEN1) and 21-36 for operating inputs. Each item in the budget may represent one or more product receipts or operating input purchases. The value and quantity in the budget is the total of all receipts or purchases for that item. The price is calculated as the total value divided by the total quantity. Therefore, if more than one entry is made for a particular item, the price in the budget is a weighted average price. If it is desirable to have more specific results in the budget, a particular product or input may be entered as two or more budget items.

Interest cost on operating expenses is calculated internally. Fuel,

lubrication and repair costs, operating input costs and receipts are allocated to the table on output page 2. The compounded cash balance is calculated each month through the month of the last product receipt or input purchase. If the compounded balance becomes positive, no interest is compounded in that month. Interest expense is calculated as receipts minus fuel, lubrication, repair and operating input costs and the ending compounded cash balance. NOTE: Labor costs for operations are not included in the monthly cash flow calculations.

The specific data requirements for EBCRP1 are given in Tables 4, 5 and 6. Tables 4 and 5 describe the data requirements and their ranges for output pages 1 and 3, respectively. Field operation data requirements (output pages 4.1 and 4.2) are described in Table 6. The data requirements for EBGEN1 are given in Tables 7, 8 and 9. Tables 7 and 8 describe the data requirements and their ranges for output pages 1, 3.1 and 3.2. Labor/machine operation data requirements (output pages 4.1 and 4.2) are described in Table 9.

EBCRP1 and EBGEN1 Macros

Several Lotus 123 macros are used to perform setup, calculation and report printing functions. All of the macros are executed by first evoking a main macro (press and hold the Alt key and press the A key). When macro A is evoked, the following menu items will appear on the screen:

READY GOTO MDATA CALC/COPY PRINT

One of the menu items is selected by pressing the key of the first letter in the selected item or by moving the cursor to the selected item and pressing the ENTER key. If READY is selected, execution of the macros stops and the

user is returned to the ready mode. GOTO can be used to move the screen to a page within the worksheet of the user's choice. MDATA leads to a series of commands to combine machine cost data from an EBMCH worksheet. When MDATA is chosen, the user is prompted to ready the disk containing the appropriate machine cost worksheet file. Then, the user is prompted to enter the name of the machine cost worksheet file. If the file is not on a disk in the default drive (usually b), the drive must be indicated (e.g. d:filename). Then the machine data will be combined into the EBCRP1 or EBGEN1 worksheet. The current (system) date is written on output page 3 (3.1 for EBGEN1), along with the machine cost data as a record of when the machine data were combined.

If CALC/COPY is selected, copy commands are used to copy user-provided labels throughout the worksheet. In EBCRP1, machine labels are matched to the operations which use them. Also, the worksheet formulas are calculated when this macro selection is made. Enterprise costs can be calculated in the conventional manner (i.e. by pressing the calc key -- F9). However, user provided labels in the worksheet and the machine labels will not be properly entered unless CALC/COPY is used. When this menu choice is made, data query commands are used to match machine labels to the field operations (EBCRP1 only) and the proper calculation mode is set before the calculation command is executed.

By selecting PRINT, the user evokes a series of NO YES menu choices to indicate which pages of the enterprise budget report should be printed. The contents of the report pages are as follows:

Page 1 Enterprise Budget

Page 2 Cash and Labor Flows by Month

Page 3 Operating Input, Product Receipt and Machine
Cost Data Pages 3.1 and 3.2 in EBGEN1)

Page 4.1 Field Operation Data and Costs, Operations 1-8

Page 4.2 Field Operation Data and Costs, Operations 9-16

For more detail on the contents of the EBCRP1 and EBGEN1 enterprise budget reports, see the sample reports in Appendix B and Appendix C, respectively.

SUMMARY

The purpose of this paper is to document the design and use of three Lotus 123 worksheets designed for generating enterprise budgets. The paper is intended for experienced users of Lotus 123, however, only the most basic skills are necessary. More advanced Lotus 123 users may want to modify or expand the contents of these worksheets. However, before such modifications are attempted, one should become familiar with the internal logic of the worksheets by closely examining the formulas and macros.

Appendices A, B and C contain printed output from EBMCH1, EBCRP1 and EBGEN1, respectively. The output show data and results for a hypothetical machinery set, a crop enterprise and a livestock enterprise. Users may want to learn the organization of the worksheets by examining the output along with the maps in Figures 1, 2 and 3.

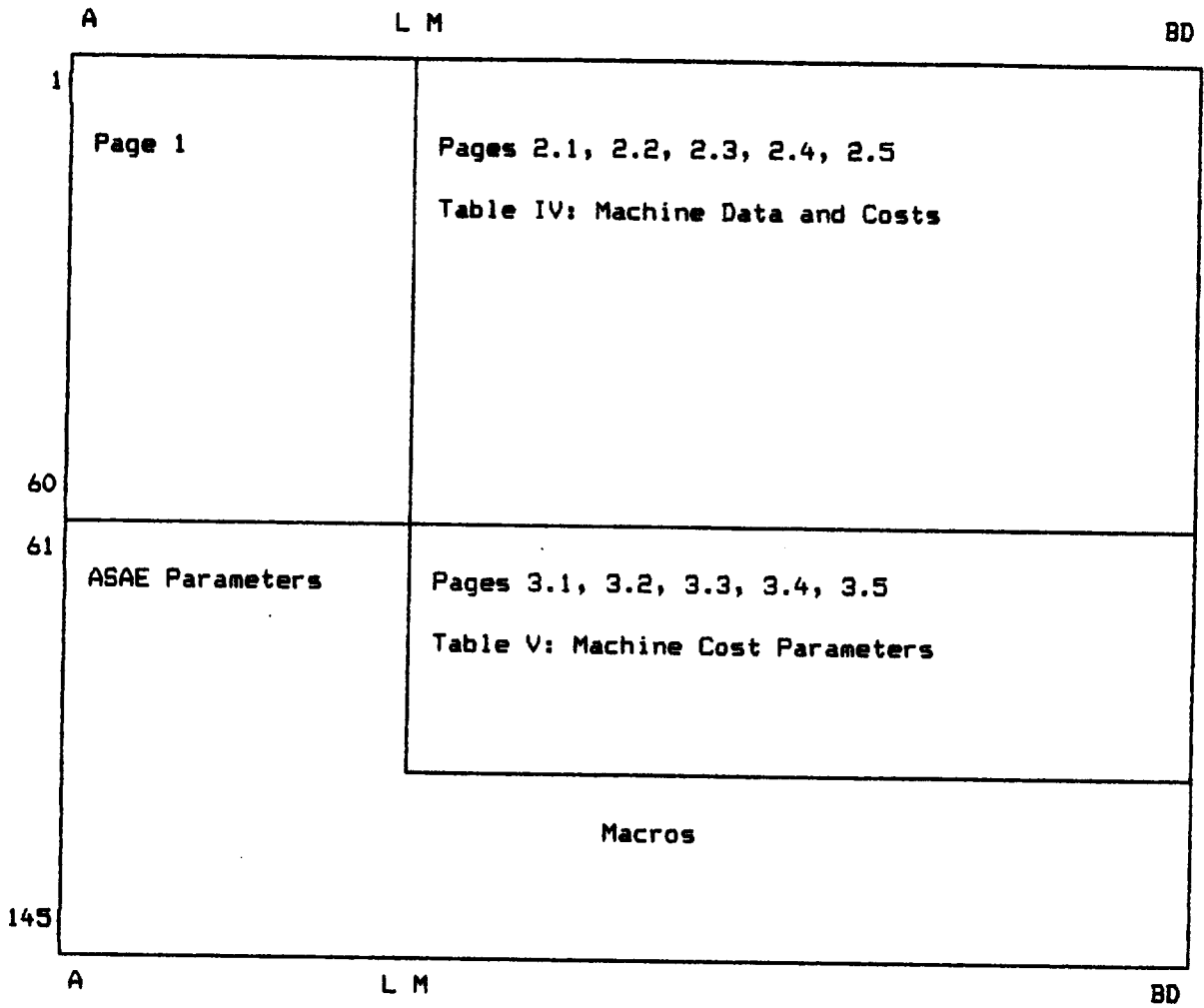


Figure 1: Map of EBMCH1.

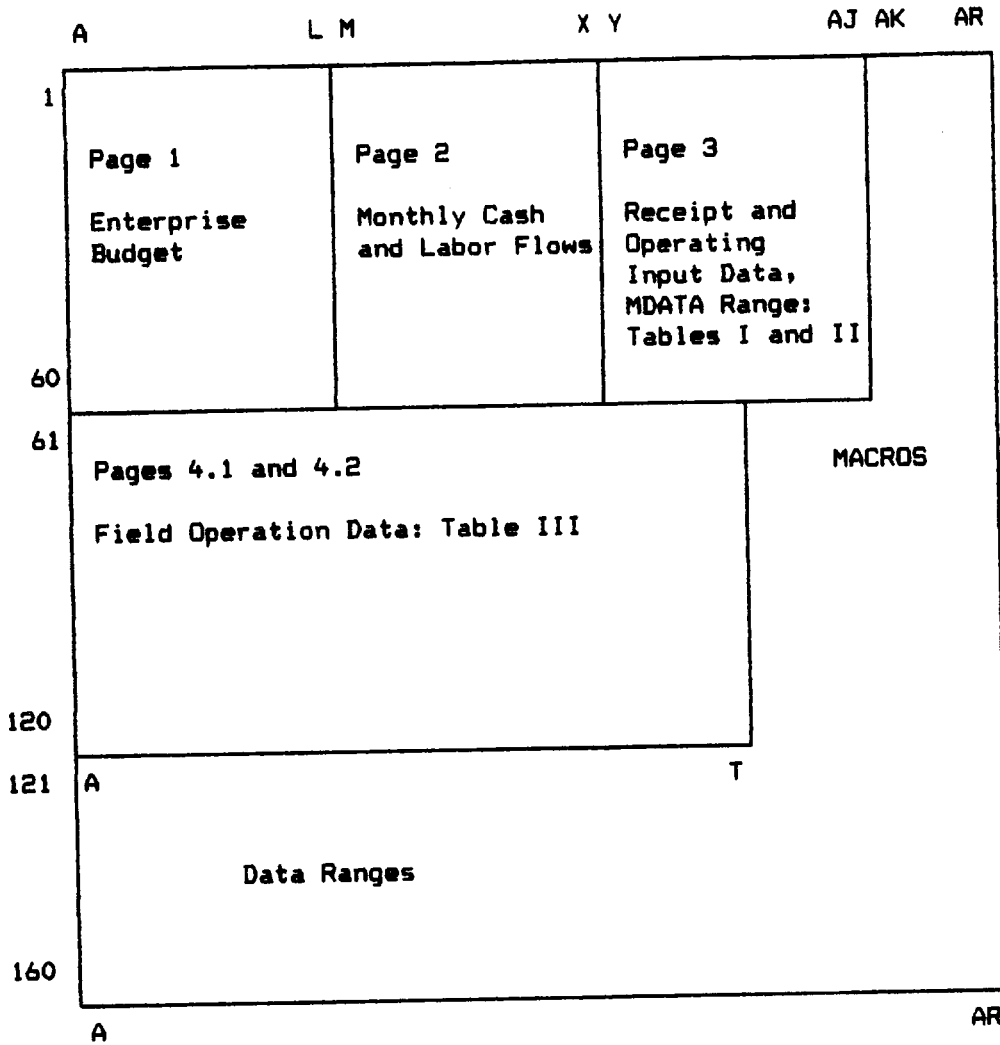


Figure 2: Map of EBCRP1.

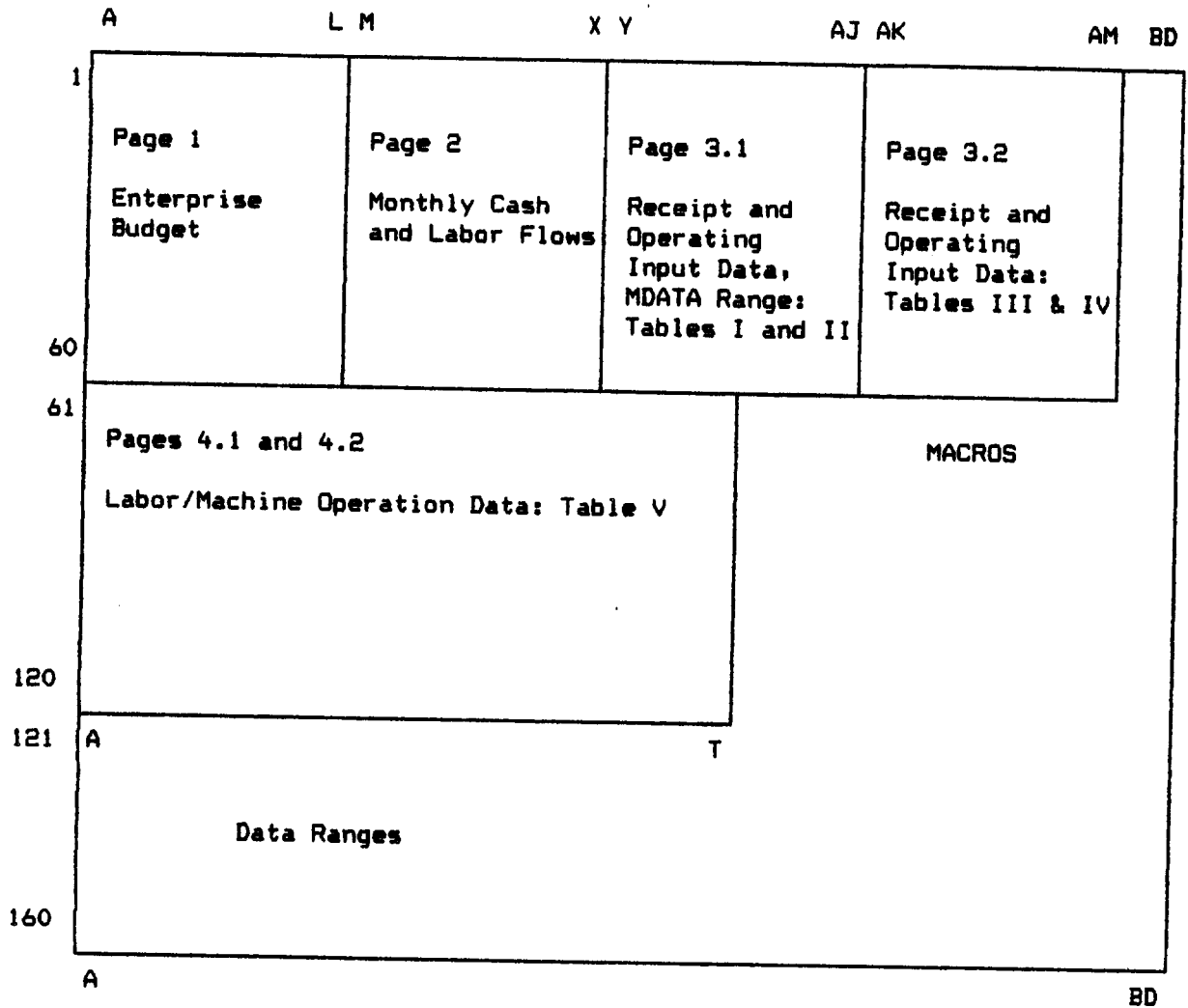


Figure 3: Map of EBGEN1.

Table 1: EBMCH1 User Data, Output Page 1.

Range(s)	Description.....
E2	Machine Set Title: Enter a label of up to 60 characters to describe the current set of machinery. Use the single quote (left justification) label prefix.
E3	Current Worksheet File Name: Enter the file name of the current EBMCH worksheet (for reference purposes only).
F7	Nominal Annual Interest Rate: Enter the nominal annual interest rate (used in the calculation of the real rate).
F8	Annual Inflation Rate: Enter the annual rate of inflation (used in the calculation of the real rate of interest).
F11,F12,F13	Unit Fuel Prices: Enter the per unit prices of gasoline (type 1), diesel fuel (type 2) and LP gas (type 3), respectively.
F14	Lubrication Cost as a Percentage of Fuel Cost: Enter percentage to be applied to fuel cost per hour in estimating lubrication cost per hour.
B18.F55	Notes and Assumptions: Enter text to document any relevant information about the current worksheet, especially assumptions, data sources or modifications of the original EBMCH1 worksheet.

Table 2: EBMCH1 User Data, Output Pages 2.1 Through 2.5.

Range(s)	Description.....
Q8.Q9	Machine Description: Enter one or two character strings of up to nine characters each to describe the machine. Right justify by using the " character prefix.
Q11	Total Useful Life, Years: Enter the total useful life in years. For machines purchased used, this should include years of use before purchase.
Q12	Annual Use, Hours: Enter average annual use in hours.
Q14	Prior Use, Years: For machines purchased used, enter age of the machine when purchased. Otherwise, enter zero.
Q15	Prior Accumulated Use, Hours: For machines purchased used, enter hr. of use prior to purchase. For machines purchased new, enter zero.
Q18	Remaining Value Category: Enter the remaining value category (1-4); (see Table 4.3, p. 141, Boehlje and Eidman). If ASAE equations are not to be used, enter salvage value as minus the appropriate proportion of the list price (the minus sign is not used in the calculation but indicates that the user is over-riding the ASAE equations).
Q20	Repair Cost Category: Enter the repair cost category (1-12); (see Tables 4.2 and 4.5, p. 140 and 148, Boehlje and Eidman). If ASAE equation is not to be used, enter accumulated repair cost as minus the appropriate proportion of the list price (minus sign is not used in the calculation but indicates that the user is over-riding the ASAE equation).
Q22	Fuel Type: Enter 1 for gasoline, 2 for diesel fuel, or 3 for liquid propane. See page 146 of Boehlje and Eidman for fuel consumption equations. If equation is to be over-ridden (see PTO HP, Q24), type will identify the appropriate fuel price.
Q24	PTO or Engine Horsepower: Enter the horsepower of the machine for use in the fuel consumption equations. To over-ride the equations, enter minus fuel consumption in gallons per hour.
Q26	List Price: Enter the list price of the machine.
Q27	Purchase Price: Enter the purchase price of the machine.
Q29,Q30,Q31	Taxes, Insurance and Housing as Percent of List: Enter each of these annual ownership costs as a percent of the machine's list price.

Table 3: Numerical Codes for Identifying the Months of Operations, Operating Input Purchases and Product Sales in EBCRP1 and EBGEN1.

Year	Month	Code	Field Operations	Input Purchases	Product Receipts
Prior Year.....	Jan	-1	X	X	
	Feb	-2	X	X	
	Mar	-3	X	X	
	Apr	-4	X	X	
	May	-5	X	X	
	Jun	-6	X	X	
	Jul	-7	X	X	
	Aug	-8	X	X	
	Sep	-9	X	X	
	Oct	-10	X	X	
	Nov	-11	X	X	
	Dec	-12	X	X	
Year of Production...	Jan	1	X	X	X
	Feb	2	X	X	X
	Mar	3	X	X	X
	Apr	4	X	X	X
	May	5	X	X	X
	Jun	6	X	X	X
	Jul	7	X	X	X
	Aug	8	X	X	X
	Sep	9	X	X	X
	Oct	10	X	X	X
	Nov	11	X	X	X
	Dec	12	X	X	X
Following Year.....	Jan	13			X
	Feb	14			X
	Mar	15			X
	Apr	16			X
	May	17			X
	Jun	18			X
	Jul	19			X
	Aug	20			X
	Sep	21			X
	Oct	22			X
	Nov	23			X
	Dec	24			X

Table 4: EBCRP1 User Data, Output Page 1.

Range(s)	Description.....
E2	Enterprise Title: Enter text to identify the budgeted enterprise (up to 40 characters, all entered in the cell indicated).
E3	File Name: Enter the current wks file name. (Used for reference purposes only.)
E9.E11	Product Labels: Enter text to describe each product. The label range allows for up to 40 characters for each label.
I9.I11	Product Units: Enter label to identify the units (e.g. labels "LB", "BU", etc) in which price and quantity data are given. Right justify by using the " label prefix.
E15.E30	Operating Input Label: Enter text to describe each input. The label range allows for up to 40 characters for each label.
I15.I30	Operating Input Unit Labels: Enter label to identify the units (e.g. Unit Labels "LB", "AC", etc) in which price and quantity data are given. Right justify by using the " label prefix.
J32	Labor Wage: Enter wage in dollars per hour.
J33	Annual Interest: Enter the annual interest rate to be used for calculating interest on operating costs.
E39.E41	Ownership Cost Descriptions: Enter text to describe up to 3 ownership cost items for the budget. The label range allows for up to 40 characters for each label.
I39.I41	Ownership Cost Unit Labels: Enter labels to identify the units ("AC", etc) in which price/cost and quantity data are given. Right justify by using the " label prefix.
J39.J41	Unit Prices/Costs: Enter the price/cost per unit for each ownership cost.
K39.K41	Quantities: Enter the quantity per budget unit.
B49.L51	Budget Footnote: Enter text of the footnote for the enterprise budget.

Table 5: EBCRP1 Product and Operating Input Data, Output Page 3.

Range(s)*	Description.....
Z10	Item Number: Enter the item number for the entry on this line. Must correspond to the item number in the enterprise budget, output page 1, column D.
AA10	Month of Purchase/Sale: Enter the code number for the month in which the input item is purchased or the product is sold (see month codes in Table 1).
AB10	Price: Enter the per unit price for the input/product.
AC10	Quantity: Enter the number of units purchased/sold.

* Enter one line for each input purchase or product receipt. Order is arbitrary. The ranges given here are for the first entry on line 10. MORE THAN ONE ENTRY MAY BE MADE FOR EACH ITEM IN THE BUDGET.

Table 6: EBCRP1 User Data, Output Pages 4.1 and 4.2.

Range(s)*	Description.....
E68.E70	Operation Description: Enter one to three character strings of up to nine characters each to describe the machine. Right justify each by using the " character prefix.
E72,E73,E74	Machine Numbers: Enter the machine numbers of up to 3 machines used for the operation. The machine number should correspond to that in the associated EBMCH worksheet and MDATA range on output page 3.
E85	Month of Operation: Enter the numerical month code for the month in which the operation is scheduled (see description of month codes on page three).
E87.E89	Field Rate Data: Enter the machine width (ft), speed (mph), and efficiency, respectively, for the operation.
E93.E95	Hours Per Field Hour: Enter the number of hours of use per hour of operation for machines A, B and C, respectively. (Usually 1.0).
E97	Labor Hours Per Field Hour: Enter the number of labor hours required per hour of operation.
E99	Times Over: Enter the number of times the operation is to be performed.

* Ranges given are for field operation number 1 (Column E). Enter data for operations 2 through 16 in the same row ranges in columns F through T, respectively.

Table 7: EBGEN1 User Data, Output Page 1.

Range(s)	Description.....
E2	Enterprise Title: Enter text to identify the budgeted enterprise (up to 60 characters, all entered in the cell indicated).
E3	File Name: Enter the current wks file name. (Used for reference purposes only.)
E9.E18	Product Labels: Enter text to describe each product. The label range allows for up to 40 characters for each label.
I9.I18	Product Units: Enter label to identify the units (e.g. labels "LB", "BU", etc) in which price and quantity data are given. Right justify by using the " label prefix.
E22.E37	Operating Input Label: Enter text to describe each input. The label range allows for up to 40 characters for each label.
I22.I37	Operating Input Unit Labels: Enter label to identify the units (e.g. Unit Labels "LB", "AC", etc) in which price and quantity data are given. Right justify by using the " label prefix.
J39	Labor Wage: Enter wage in dollars per hour.
J40	Annual Interest: Enter the annual interest rate to be used for calculating interest on operating costs.
E46.E48	Ownership Cost Descriptions: Enter text to describe up to 3 ownership cost items for the budget. The label range allows for up to 40 characters for each label.
I46.I48	Ownership Cost Unit Labels: Enter labels to identify the units ("AC", etc) in which price/cost and quantity data are given. Right justify by using the " label prefix.
J46.J48	Unit Prices/Costs: Enter the price/cost per unit for each ownership cost.
K46.K48	Quantities: Enter the quantity per budget unit.
B56.L58	Budget Footnote: Enter the text of the budget footnote.

Table 8: EBGEN1 Product and Operating Input Data, Output Pages 3.1 and 3.2.

Range(s)*	Description.....
Z10	Item Number: Enter the item number for the entry on this line. Must correspond to the item number in the enterprise budget, output page 1, column D.
AA10	Month of Purchase/Sale: Enter the code number for the month in which the input item is purchased or the product is sold (see month codes in Table 1).
AB10	Price: Enter the per unit price for the input/product.
AC10	Quantity: Enter the number of units purchased/sold.

* Enter one line for each input purchase or product receipt. Order is arbitrary. The ranges given here are for the first entry on line 10 of Table I (Z10.AC56). If needed, additional entries may be made using Table III (AL10.AO56, on output page 3.2) and Table IV (AR10.AU56, also on output page 3.2). MORE THAN ONE ENTRY MAY BE MADE FOR EACH ITEM IN THE BUDGET.

Table 9: EBGEN1 User Data, Output Pages 4.1 and 4.2.

Range(s)*	Description.....
E68.E70	Operation Description: Enter one to three character strings of up to nine characters each to describe the machine. Right justify each by using the " character prefix.
E72.E74	Machine Numbers: Enter the machine numbers of up to 3 machines used for the operation. The machine number should correspond to that in the associated EBMCH worksheet and MDATA range on output page 4.
E78	Use Units Label: Enter a label to identify the units in which use is measured.
E79	Machine Hours Per Use: Enter the hours of machine time required for each use of the operation.
E80	Labor Hours Per Use: Enter the hours of labor required per use.
E82	Other Costs Per Use, Ownership: Enter ownership costs per use in addition to those identified for the numbered machines.
E83	Other Costs Per Use, Operating: Enter operating costs per use in addition to fuel, lubrication and repairs for the numbered machines.
E88.E99	Use Units By Month: Enter the use units in each of the months (here for the year prior to the "year of production").
E101.E112	Use Units By Month, Continued: Enter the use units in each of the months (here for the "year of production").

* Ranges given are for labor/machine operation number 1 (Column E). Enter data for operations 2 through 16 in the same row ranges in columns F through T, respectively.

REFERENCES

Boehlje, Michael D., and Vernon R. Eidman, Farm Management, New York Wiley and Sons, 1984.

Posner, John, Jeff Hill, et al., LOTUS 123 User's Manual; Cambridge, Massachusetts; Lotus Development Corporation, 1983.

Lotus 123 Version 2 Reference Manual; Cambridge, Massachusetts; Lotus Development Corporation, 1985.

MACHINE SET TITLE ----- DOCUMENTATION EXAMPLE
 CURRENT WORKSHEET FILE NAME - EBMCHL.WKS

I. GENERAL DATA:

 NOMINAL ANNUAL INTEREST RATE ----- 12.00%
 ANNUAL INFLATION RATE ----- 4.50%
 REAL ANNUAL INTEREST RATE ----- 7.18%
 UNIT FUEL PRICES.....
 TYPE 1, GASOLINE -- 1.050
 TYPE 2, DIESEL ---- 0.950
 TYPE 3, LP ----- 0.650
 LUBRICATION COST AS PCT OF FUEL COST -- 15.00%

II. NOTES AND ASSUMPTIONS:

 REPLACEMENT COST DATA: BENSON, FRED J. AND KAREN
 E. GENSMER, "MINNESOTA FARM MACHINERY ECONOMIC
 COST ESTIMATES FOR 1986", AG-FO-2308, MINNESOTA
 EXTENSION SERVICE, UNIVERSITY OF MINNESOTA.

III. MACHINE LABEL AND COST DATA RANGE: MDATA

MACHINE NUMBER	MACHINE LABEL 1	MACHINE LABEL 2	AVERAGE	AVERAGE
			OPERATING COST PER HOUR	OWNERSHIP COST PER HOUR
mn	11	12	flr	oc
0	--	--	0.000	0.000
1	60 HP	TRACTOR	5.364	9.521
2	75 HP	TRACTOR	4.997	13.035
3	120 HP	TRACTOR	7.692	33.088
4	MB FLOW	6-16	3.161	31.493
5	CHISEL	FLOW 15'	1.639	6.631
6	DISK	21'	3.697	36.832
7	FIELD	CULT 18'	1.139	11.347
8	PLANTER	8-30	12.596	63.009
9	GRAIN	DRILL 14'	4.887	24.445
10	CULT	8-30	1.402	13.973
11	ROTARY	HOE 16'	0.883	8.798
12	MT SPRAYER	30'	1.917	9.591
13	ROTARY	MOWER	0.617	11.321
14	COMBINE	MED	25.611	89.389
15	SML GRAIN	HEAD 12'	2.121	21.595
16	CORN HEAD	4-30	4.274	24.666
17	HAY	WAGON	0.000	6.314
18	FORAGE	WAGON 14'	1.880	9.959
19	GRINDER	MIXER	4.480	21.738
20	GR DRYER	& AUGERS	17.533	39.734
21	LOADER	--	0.476	4.177
22	MANURE	SPREADER	0.665	5.834
23	GRAVITY	WAGON	0.000	2.017
24	SP TOOTH	DRAG	1.290	12.847
25	TRUCK	MED	10.300	30.606
26	TRUCK	3/4 TON	6.178	9.602
27	AUTO	50% BUSN	3.236	4.978
28	-	-	0.000	0.000
29	-	-	0.000	0.000
30	-	-	0.000	0.000
31	-	-	0.000	0.000
32	-	-	0.000	0.000
33	-	-	0.000	0.000
34	-	-	0.000	0.000
35	-	-	0.000	0.000
36	-	-	0.000	0.000
37	-	-	0.000	0.000
38	-	-	0.000	0.000
39	-	-	0.000	0.000
40	-	-	0.000	0.000

b-----c-----d-----e-----f-----g-----h-----i-----j-----k-----l-----

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IV. MACHINE DATA AND COSTS:

MACHINE NUMBER -----	1	2	3	4	5	6	7	8
MACHINE DESCRIPTION -----	60 HP	75 HP	120 HP	MB PLOW	CHISEL	DISK	FIELD	PLANTER
---	TRACTOR	TRACTOR	TRACTOR	6-16	FLOW 15'	21'	CULT 18'	8-30
TOTAL USEFUL LIFE, YEARS -----	10	10	10	10	10	10	10	10
ANNUAL USE, HOURS -----	300	300	200	50	100	50	50	50
FOR MACHINES PURCHASED USED...								
PRIOR USE, YEARS -----	0	0	0	0	0	0	0	0
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
ASAE EQUATION CATEGORIES.....	c	c	c	c	c	c	c	c
REMAINING VALUE (1-4) ---	1	1	1	4	4	4	4	4
REPAIR COST (1-12) -----	2	2	2	12	12	12	12	10
FUEL TYPE (1-3) -----	1	2	2	0	0	0	0	0
PTO OR ENGINE HORSEPOWER -----	60	75	120	0	0	0	0	0
LIST PRICE -----	20332.0	27837.0	47107.0	10688.0	4501.0	12500.0	3851.0	21384.0
PURCHASE PRICE -----	20332.0	27837.0	47107.0	10688.0	4501.0	12500.0	3851.0	21384.0
COST AS PCT OF AVE INVESTMENT.								
ANNUAL TAXES -----	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ANNUAL INSURANCE -----	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
ANNUAL HOUSING -----	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
YEARS OWNED -----	10	10	10	10	10	10	10	10
SALVAGE VALUE -----	6005.8	8222.6	13914.7	1890.1	796.0	2210.5	681.0	3781.6
ANNUAL CAPITAL RECOVERY COST -	2487.5	3405.7	5763.2	1398.5	589.0	1635.7	503.9	2798.1
AVERAGE INVESTMENT -----	13168.9	18029.8	30510.8	6289.0	2648.5	7355.3	2266.0	12582.8
ANNUAL TAXES -----	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANNUAL INSURANCE COST -----	105.4	144.2	244.1	50.3	21.2	58.8	18.1	100.7
ANNUAL HOUSING COST -----	263.4	360.6	610.2	125.8	53.0	147.1	45.3	251.7
TAXES, INS, HOUSING PER YEAR ---	368.7	504.8	854.3	176.1	74.2	205.9	63.4	352.3
TOTAL ANNUAL OWNERSHIP COST --	2856.2	3910.5	6617.6	1574.6	663.1	1841.6	567.4	3150.5
TOTAL OWNERSHIP COST PER HOUR	9.521	13.035	33.088	31.493	6.631	36.832	11.347	63.009
ACCUMULATED HOURS -----	3000	3000	2000	500	1000	500	500	500
ACCUMULATED REPAIR COST -----	3049.8	4175.6	3846.3	1580.5	1638.9	1848.5	569.5	6297.8
REPAIR COST PER HOUR -----	1.017	1.392	1.923	3.161	1.639	3.697	1.139	12.596
FUEL USE PER HOUR -----	3.600	3.300	5.280	0.000	0.000	0.000	0.000	0.000
FUEL COST PER HOUR -----	3.780	3.135	5.016	0.000	0.000	0.000	0.000	0.000
LUBRICATION COST PER HOUR ----	0.567	0.470	0.752	0.000	0.000	0.000	0.000	0.000
FUEL, LUBR, REPAIR COST PER HOUR	5.364	4.997	7.692	3.161	1.639	3.697	1.139	12.596

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IV. MACHINE DATA AND COSTS:

MACHINE NUMBER -----	9	10	11	12	13	14	15	16
MACHINE DESCRIPTION -----	GRAIN	CULT	ROTARY MT	SPRAYER	ROTARY	COMBINE SML	GRAIN	CORN HEAD
	---DRILL 14'	8-30	HOE 16'	30'	MOWER	MED HEAD	12'	4-30
TOTAL USEFUL LIFE, YEARS -----	10	10	10	10	10	10	10	10
ANNUAL USE, HOURS -----	50	50	50	50	25	125	50	75
FOR MACHINES PURCHASED USED...								
PRIOR USE, YEARS -----	0	0	0	0	0	0	0	0
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
ASAE EQUATION CATEGORIES.....	c	c	c	c	c	c	c	c
REMAINING VALUE (1-4) ---	4	4	4	4	4	2	2	2
REPAIR COST (1-12) -----	10	12	12	10	11	3	7	7
FUEL TYPE (1-3) -----	0	0	0	0	0	2	0	0
PTO OR ENGINE HORSEPOWER -----	0	0	0	0	0	135	0	0
LIST PRICE -----	8296.0	4742.0	2986.0	3255.0	1921.0	76194.0	7363.0	12615.0
PURCHASE PRICE -----	8296.0	4742.0	2986.0	3255.0	1921.0	76194.0	7363.0	12615.0
COST AS PCT OF AVE INVESTMENT.								
ANNUAL TAXES -----	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ANNUAL INSURANCE -----	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
ANNUAL HOUSING -----	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
YEARS OWNED -----	10	10	10	10	10	10	10	10
SALVAGE VALUE -----	1467.1	838.6	528.0	575.6	339.7	14372.5	1388.9	2379.6
ANNUAL CAPITAL RECOVERY COST -	1085.5	620.5	390.7	425.9	251.4	9905.7	957.2	1640.0
AVERAGE INVESTMENT -----	4881.5	2790.3	1757.0	1915.3	1130.4	45283.3	4375.9	7497.3
ANNUAL TAXES -----	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANNUAL INSURANCE COST -----	39.1	22.3	14.1	15.3	9.0	362.3	35.0	60.0
ANNUAL HOUSING COST -----	97.6	55.8	35.1	38.3	22.6	905.7	87.5	149.9
TAXES, INS, HOUSING PER YEAR ---	136.7	78.1	49.2	53.6	31.6	1267.9	122.5	209.9
TOTAL ANNUAL OWNERSHIP COST --	1222.2	698.6	439.9	479.6	283.0	11173.6	1079.8	1849.9
TOTAL OWNERSHIP COST PER HOUR	24.445	13.973	8.798	9.591	11.321	89.389	21.595	24.666
ACCUMULATED HOURS -----	500	500	500	500	250	1250	500	750
ACCUMULATED REPAIR COST -----	2443.3	701.2	441.6	958.6	154.2	23901.4	1060.6	3205.7
REPAIR COST PER HOUR -----	4.887	1.402	0.883	1.917	0.617	19.121	2.121	4.274
FUEL USE PER HOUR -----	0.000	0.000	0.000	0.000	0.000	5.940	0.000	0.000
FUEL COST PER HOUR -----	0.000	0.000	0.000	0.000	0.000	5.643	0.000	0.000
LUBRICATION COST PER HOUR ----	0.000	0.000	0.000	0.000	0.000	0.846	0.000	0.000
FUEL, LUBR, REPAIR COST PER HOUR	4.887	1.402	0.883	1.917	0.617	25.611	2.121	4.274

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IV. MACHINE DATA AND COSTS:

MACHINE NUMBER -----	17	18	19	20	21	22	23	24
MACHINE DESCRIPTION -----	HAY	FORAGE	GRINDER	GR DRYER	LOADER	MANURE	GRAVITY	SP TOOTH
---	WAGON	WAGON 14'	MIXER	& AUGERS	--	SPREADER	WAGON	DRAG
TOTAL USEFUL LIFE, YEARS -----	10	10	10	10	10	10	10	10
ANNUAL USE, HOURS -----	50	100	100	100	100	100	125	50
FOR MACHINES PURCHASED USED...								
PRIOR USE, YEARS -----	0	0	0	0	0	0	0	0
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
ASAE EQUATION CATEGORIES.....	c	c	c	c	c	c	c	c
REMAINING VALUE (1-4) ---	4	4	4	4	4	4	4	4
REPAIR COST (1-12) -----	0	8	5	5	4	4	0	12
FUEL TYPE (1-3) -----	0	0	0	3	0	0	0	0
PTO OR ENGINE HORSEPOWER -----	0	0	0	-12.5	0	0	0	0
LIST PRICE -----	2143.0	6760.0	14755.0	26970.0	2835.0	3960.0	1711.0	4360.0
PURCHASE PRICE -----	2143.0	6760.0	14755.0	26970.0	2835.0	3960.0	1711.0	4360.0
COST AS PCT OF AVE INVESTMENT.								
ANNUAL TAXES -----	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ANNUAL INSURANCE -----	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
ANNUAL HOUSING -----	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
YEARS OWNED -----	10	10	10	10	10	10	10	10
SALVAGE VALUE -----	379.0	1195.4	2609.3	4769.4	501.3	700.3	302.6	771.0
ANNUAL CAPITAL RECOVERY COST -	280.4	884.6	1930.7	3529.1	371.0	518.2	223.9	570.5
AVERAGE INVESTMENT -----	1261.0	3977.7	8682.1	15869.7	1668.2	2330.1	1006.8	2565.5
ANNUAL TAXES -----	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANNUAL INSURANCE COST -----	10.1	31.8	69.5	127.0	13.3	18.6	8.1	20.5
ANNUAL HOUSING COST -----	25.2	79.6	173.6	317.4	33.4	46.6	20.1	51.3
TAXES, INS, HOUSING PER YEAR ---	35.3	111.4	243.1	444.4	46.7	65.2	28.2	71.8
TOTAL ANNUAL OWNERSHIP COST --	315.7	995.9	2173.8	3973.4	417.7	583.4	252.1	642.3
TOTAL OWNERSHIP COST PER HOUR	6.314	9.959	21.738	39.734	4.177	5.834	2.017	12.847
ACCUMULATED HOURS -----	500	1000	1000	1000	1000	1000	1250	500
ACCUMULATED REPAIR COST -----	0.0	1880.3	4480.2	8189.2	476.1	665.0	0.0	644.8
REPAIR COST PER HOUR -----	0.000	1.880	4.480	8.189	0.476	0.665	0.000	1.290
FUEL USE PER HOUR -----	0.000	0.000	0.000	12.500	0.000	0.000	0.000	0.000
FUEL COST PER HOUR -----	0.000	0.000	0.000	8.125	0.000	0.000	0.000	0.000
LUBRICATION COST PER HOUR ----	0.000	0.000	0.000	1.219	0.000	0.000	0.000	0.000
FUEL, LUBR, REPAIR COST PER HOUR	0.000	1.880	4.480	17.533	0.476	0.665	0.000	1.290

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IV. MACHINE DATA AND COSTS:

MACHINE NUMBER -----	25	26	27	28	29	30	31	32
MACHINE DESCRIPTION -----	TRUCK	TRUCK	AUTO	-	-	-	-	-
---	MED	3/4 TON	50% BUSN	-	-	-	-	-
TOTAL USEFUL LIFE, YEARS -----	10	10	10	0	0	0	0	0
ANNUAL USE, HOURS -----	125	200	150	0	0	0	0	0
FOR MACHINES PURCHASED USED...								
PRIOR USE, YEARS -----	0	0	0	0	0	0	0	0
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
ASAE EQUATION CATEGORIES.....	c	c	c	c	c	c	c	c
REMAINING VALUE (1-4) ---	-0.18	-0.17	-0.18	0	0	0	0	0
REPAIR COST (1-12) -----	-0.1	-0.1	-0.1	0	0	0	0	0
FUEL TYPE (1-3) -----	2	2	1	0	0	0	0	0
PTO OR ENGINE HORSEPOWER -----	171	115	40	0	0	0	0	0
LIST PRICE -----	26000.0	13000.0	5075.0	0.0	0.0	0.0	0.0	0.0
PURCHASE PRICE -----	26000.0	13000.0	5075.0	0.0	0.0	0.0	0.0	0.0
COST AS PCT OF AVE INVESTMENT.								
ANNUAL TAXES -----	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
ANNUAL INSURANCE -----	0.80%	0.80%	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%
ANNUAL HOUSING -----	2.00%	2.00%	2.00%	0.00%	0.00%	0.00%	0.00%	0.00%
YEARS OWNED -----	10	10	10	0	0	0	0	0
SALVAGE VALUE -----	4680.0	2210.0	913.5	0.0	0.0	0.0	0.0	0.0
ANNUAL CAPITAL RECOVERY COST -	3396.3	1707.5	662.9	0.0	0.0	0.0	0.0	0.0
AVERAGE INVESTMENT -----	15340.0	7605.0	2994.3	0.0	0.0	0.0	0.0	0.0
ANNUAL TAXES -----	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANNUAL INSURANCE COST -----	122.7	60.8	24.0	0.0	0.0	0.0	0.0	0.0
ANNUAL HOUSING COST -----	306.8	152.1	59.9	0.0	0.0	0.0	0.0	0.0
TAXES, INS, HOUSING PER YEAR ---	429.5	212.9	83.8	0.0	0.0	0.0	0.0	0.0
TOTAL ANNUAL OWNERSHIP COST --	3825.8	1920.4	746.8	0.0	0.0	0.0	0.0	0.0
TOTAL OWNERSHIP COST PER HOUR	30.606	9.602	4.978	0.000	0.000	0.000	0.000	0.000
ACCUMULATED HOURS -----	1250	2000	1500	0	0	0	0	0
ACCUMULATED REPAIR COST -----	2600.0	1300.0	507.5	0.0	0.0	0.0	0.0	0.0
REPAIR COST PER HOUR -----	2.080	0.650	0.338	0.000	0.000	0.000	0.000	0.000
FUEL USE PER HOUR -----	7.524	5.060	2.400	0.000	0.000	0.000	0.000	0.000
FUEL COST PER HOUR -----	7.148	4.807	2.520	0.000	0.000	0.000	0.000	0.000
LUBRICATION COST PER HOUR ----	1.072	0.721	0.378	0.000	0.000	0.000	0.000	0.000
FUEL, LUBR, REPAIR COST PER HOUR	10.300	6.178	3.236	0.000	0.000	0.000	0.000	0.000

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V. MACHINE COST PARAMETERS:

MACHINE NUMBER	1	2	3	4	5	6	7	8
REMAINING VALUE EQUATION a --	68	68	68	60	60	60	60	60
[a(b [^] YR)] b --	0.920	0.920	0.920	0.885	0.885	0.885	0.885	0.885
TOTAL USEFUL LIFE, YEARS -----	10	10	10	10	10	10	10	10
SALVAGE VALUE AS PCT OF LIST -	29.54%	29.54%	29.54%	17.68%	17.68%	17.68%	17.68%	17.68%
CAPITAL RECOVERY FACTOR -----	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435
REPAIR COST EQUATION d --	0.120	0.120	0.120	0.301	0.301	0.301	0.301	0.159
[.01(d((100HR/e) [^] f))] e --	12000	12000	12000	2500	2500	2500	2500	1200
f --	1.5	1.5	1.5	1.3	1.3	1.3	1.3	1.4
REPAIR COSTS.....								
TOTAL ACCUM USE, HOURS --	3000	3000	2000	500	1000	500	500	500
ACCUM COST, PCT OF LIST -	15.00%	15.00%	8.16%	14.79%	36.41%	14.79%	14.79%	29.45%
TOTAL ACCUM REPAIR COST -	3049.8	4175.6	3846.3	1580.5	1638.9	1848.5	569.5	6297.8
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
PRIOR COST, PCT OF LIST -	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PRIOR ACCUM REPAIR COST -	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FUEL USE PER HOUR [g(HP)] g --	0.060	0.044	0.044	0.000	0.000	0.000	0.000	0.000
UNIT FUEL PRICE (p) -----	1.050	0.950	0.950	0.000	0.000	0.000	0.000	0.000

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V. MACHINE COST PARAMETERS:

MACHINE NUMBER	9	10	11	12	13	14	15	16
REMAINING VALUE EQUATION a --	60	60	60	60	60	64	64	64
[a(b [^] YR)] b --	0.885	0.885	0.885	0.885	0.885	0.885	0.885	0.885
TOTAL USEFUL LIFE, YEARS -----	10	10	10	10	10	10	10	10
SALVAGE VALUE AS PCT OF LIST -	17.68%	17.68%	17.68%	17.68%	17.68%	18.86%	18.86%	18.86%
CAPITAL RECOVERY FACTOR -----	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435
REPAIR COST EQUATION d --	0.159	0.301	0.301	0.159	0.301	0.096	0.159	0.159
[.01(d((100HR/e) [^] f))] e --	1200	2500	2500	1200	2000	2000	2000	2000
f --	1.4	1.3	1.3	1.4	1.3	1.4	1.4	1.4
REPAIR COSTS.....								
TOTAL ACCUM USE, HOURS --	500	500	500	500	250	1250	500	750
ACCUM COST, PCT OF LIST -	29.45%	14.79%	14.79%	29.45%	8.03%	31.37%	14.40%	25.41%
TOTAL ACCUM REPAIR COST -	2443.3	701.2	441.6	958.6	154.2	23901.4	1060.6	3205.7
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
PRIOR COST, PCT OF LIST -	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PRIOR ACCUM REPAIR COST -	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FUEL USE PER HOUR [g(HP)] g --	0.000	0.000	0.000	0.000	0.000	0.044	0.000	0.000
UNIT FUEL PRICE (p) -----	0.000	0.000	0.000	0.000	0.000	0.950	0.000	0.000

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V. MACHINE COST PARAMETERS:

MACHINE NUMBER	17	18	19	20	21	22	23	24
REMAINING VALUE EQUATION a --	60	60	60	60	60	60	60	60
[a(b^YR)] b --	0.885	0.885	0.885	0.885	0.885	0.885	0.885	0.885
TOTAL USEFUL LIFE, YEARS -----	10	10	10	10	10	10	10	10
SALVAGE VALUE AS PCT OF LIST -	17.68%	17.68%	17.68%	17.68%	17.68%	17.68%	17.68%	17.68%
CAPITAL RECOVERY FACTOR -----	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435	0.1435
REPAIR COST EQUATION d --	0.000	0.159	0.127	0.127	0.096	0.096	0.000	0.301
[.01(d((100HR/e)^f))] e --	1	2500	2000	2000	2500	2500	1	2500
f --	1.0	1.4	1.4	1.4	1.4	1.4	1.0	1.3
REPAIR COSTS.....								
TOTAL ACCUM USE, HOURS --	500	1000	1000	1000	1000	1000	1250	500
ACCUM COST, PCT OF LIST -	0.00%	27.82%	30.36%	30.36%	16.79%	16.79%	0.00%	14.79%
TOTAL ACCUM REPAIR COST -	0.0	1880.3	4480.2	8189.2	476.1	665.0	0.0	644.8
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
PRIOR COST, PCT OF LIST -	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PRIOR ACCUM REPAIR COST -	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FUEL USE PER HOUR [g(HP)] g --	0.000	0.000	0.000	0.072	0.000	0.000	0.000	0.000
UNIT FUEL PRICE (p) -----	0.000	0.000	0.000	0.650	0.000	0.000	0.000	0.000

n-----o-----p-----ag-----ah-----ai-----aj-----ak-----al-----am-----an

ebmchl

MACHINE SET TITLE ----- DOCUMENTATION EXAMPLE
 CURRENT WORKSHEET FILE NAME - EBMCHL.WKS

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V. MACHINE COST PARAMETERS:

MACHINE NUMBER	25	26	27	28	29	30	31	32
REMAINING VALUE EQUATION a --	0	0	0	0	0	0	0	0
[a(b^YR)] b --	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
TOTAL USEFUL LIFE, YEARS -----	10	10	10	0	0	0	0	0
SALVAGE VALUE AS PCT OF LIST -	18.00%	17.00%	18.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CAPITAL RECOVERY FACTOR -----	0.1435	0.1435	0.1435	0.0000	0.0000	0.0000	0.0000	0.0000
REPAIR COST EQUATION d --	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[.01(d((100HR/e)^f))] e --	1	1	1	1	1	1	1	1
f --	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
REPAIR COSTS.....								
TOTAL ACCUM USE, HOURS --	1250	2000	1500	0	0	0	0	0
ACCUM COST, PCT OF LIST -	10.00%	10.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL ACCUM REPAIR COST -	2600.0	1300.0	507.5	0.0	0.0	0.0	0.0	0.0
PRIOR ACCUM USE, HOURS --	0	0	0	0	0	0	0	0
PRIOR COST, PCT OF LIST -	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
PRIOR ACCUM REPAIR COST -	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FUEL USE PER HOUR [g(HP)] g --	0.044	0.044	0.060	0.000	0.000	0.000	0.000	0.000
UNIT FUEL PRICE (p) -----	0.950	0.950	1.050	0.000	0.000	0.000	0.000	0.000

n-----o-----p-----ao-----ap-----aq-----ar-----as-----at-----au-----av

-----ebscrpl-----

ENTERPRISE TITLE ----- CORN, CHISEL TILL
 CURRENT WORKSHEET FILE NAME - EBCRP1.WKS

PAGE 1
 30-Jul-86

ITEM NUMBER	DESCRIPTION.....	UNIT	PRICE/COST PER UNIT	QUANTITY	VALUE OR COST

RECEIPTS.....					
1	CORN -----	BU	2.250	140.000	315.00
2	-----	--	0.000	0.000	0.00
3	-----	--	0.000	0.000	0.00
TOTAL RECEIPTS -----					315.00

OPERATING COSTS.....					
21	CORN SEED -----	BU	65.000	0.300	19.50
22	NITROGEN -----	LB	0.260	10.000	2.60
23	ANHYDROUS AMMONIA -----	LB	0.160	150.000	24.00
24	PHOSPHATE -----	LB	0.220	40.000	8.80
25	POTASH -----	LB	0.100	70.000	7.00
26	HERBICIDE AND INSECTICIDE -----	AC	22.650	1.000	22.65
27	CROP INSURANCE -----	DOL	0.025	238.000	5.95
28	-----	--	0.000	0.000	0.00
29	-----	--	0.000	0.000	0.00
30	-----	--	0.000	0.000	0.00
31	-----	--	0.000	0.000	0.00
32	-----	--	0.000	0.000	0.00
33	-----	--	0.000	0.000	0.00
34	-----	--	0.000	0.000	0.00
35	-----	--	0.000	0.000	0.00
36	-----	--	0.000	0.000	0.00
	FUEL, LUBRICATION, AND REPAIRS -----	AC	27.759	1.000	27.76
	LABOR, FIELD OPERATIONS -----	HR	6.000	1.799	10.80
	INTEREST ON OPERATING EXPENSES -----	DOL	0.120	92.616	11.11
TOTAL OPERATING COST -----					140.17
INCOME ABOVE OPERATING COST -----					174.83

OWNERSHIP COSTS.....					
	CASH RENT -----	AC	75.000	1.000	75.00
	-----	--	0.000	0.000	0.00
	-----	--	0.000	0.000	0.00
	MACHINERY, FIELD OPERATIONS -----	AC	98.472	1.000	98.47
TOTAL OWNERSHIP COSTS -----					173.47
TOTAL COSTS SHOWN -----					313.64
NET RETURNS ABOVE COSTS SHOWN -----					1.36

SOUTH CENTRAL MINNESOTA
 CONTINUOUS CORN
 CHISEL FLOW TILLAGE SYSTEM

-----b-----c-----d-----e-----f-----g-----h-----i-----j-----k-----l-----

ebcrl

ENTERPRISE TITLE ----- CORN, CHISEL TILL
 CURRENT WORKSHEET FILE NAME - EBCRP1.WKS

MONTHLY CASH FLOW, COMPOUNDED BALANCE, LABOR USE:

LAST MONTH (CODE) -- 14

MONTH CODE	MONTH	FUEL, LUBR, REPAIRS	OPER INPUT COST	TOTAL EXPENSES	RECEIPTS	COMPOUNDED BALANCE	MONTH	LABOR HOURS	LABOR COST
-1	JAN	0.000	0.000	0.000	--	0.000	JAN	0.000	0.000
-2	FEB	0.000	0.000	0.000	--	0.000	FEB	0.000	0.000
-3	MAR	0.000	0.000	0.000	--	0.000	MAR	0.000	0.000
-4	APR	0.000	0.000	0.000	--	0.000	APR	0.000	0.000
-5	MAY	0.000	0.000	0.000	--	0.000	MAY	0.000	0.000
-6	JUN	0.000	0.000	0.000	--	0.000	JUN	0.000	0.000
-7	JUL	0.000	0.000	0.000	--	0.000	JUL	0.000	0.000
-8	AUG	0.000	0.000	0.000	--	0.000	AUG	0.000	0.000
-9	SEP	0.000	0.000	0.000	--	0.000	SEP	0.000	0.000
-10	OCT	0.000	0.000	0.000	--	0.000	OCT	0.000	0.000
-11	NOV	1.425	0.000	1.425	--	-1.425	NOV	0.160	0.963
-12	DEC	0.000	0.000	0.000	--	-1.440	DEC	0.000	0.000
1	JAN	0.000	0.000	0.000	0.000	-1.454	JAN	0.000	0.000
2	FEB	0.000	0.000	0.000	0.000	-1.469	FEB	0.000	0.000
3	MAR	0.000	60.550	60.550	0.000	-62.033	MAR	0.000	0.000
4	APR	0.000	0.000	0.000	0.000	-62.654	APR	0.000	0.000
5	MAY	4.728	0.000	4.728	0.000	-68.008	MAY	0.431	2.588
6	JUN	1.869	29.950	31.819	0.000	-100.508	JUN	0.285	1.708
7	JUL	0.000	0.000	0.000	0.000	-101.513	JUL	0.000	0.000
8	AUG	0.000	0.000	0.000	0.000	-102.528	AUG	0.000	0.000
9	SEP	0.000	0.000	0.000	0.000	-103.553	SEP	0.000	0.000
10	OCT	19.736	0.000	19.736	0.000	-124.325	OCT	0.923	5.538
11	NOV	0.000	0.000	0.000	0.000	-125.568	NOV	0.000	0.000
12	DEC	0.000	0.000	0.000	0.000	-126.824	DEC	0.000	0.000
13	JAN	--	--	--	0.000	-128.092	JAN	--	--
14	FEB	--	--	--	315.000	185.627	FEB	--	--
15	MAR	--	--	--	0.000	185.627	MAR	--	--
16	APR	--	--	--	0.000	185.627	APR	--	--
17	MAY	--	--	--	0.000	185.627	MAY	--	--
18	JUN	--	--	--	0.000	185.627	JUN	--	--
19	JUL	--	--	--	0.000	185.627	JUL	--	--
20	AUG	--	--	--	0.000	185.627	AUG	--	--
21	SEP	--	--	--	0.000	185.627	SEP	--	--
22	OCT	--	--	--	0.000	185.627	OCT	--	--
23	NOV	--	--	--	0.000	185.627	NOV	--	--
24	DEC	--	--	--	0.000	185.627	DEC	--	--
TOTALS ---		27.759	90.500	118.259	315.000		TOTALS ---	1.799	10.796

TOTAL RECEIPTS ----- 315.000
 MINUS FUEL, LUBR, REPAIR COST ----- -27.759
 MINUS OPERATING INPUT COST ----- -90.500
 MINUS ENDING COMPOUNDED BALANCE ----- -185.627
 EQUAL INTEREST EXPENSE ----- 11.114



ebscrpl

ENTERPRISE TITLE ----- CORN, CHISEL TILL
 CURRENT WORKSHEET FILE NAME - EBCRPL.WKS

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I. RECEIPT AND OPERATING INPUT DATA: FQDATA

II. MACHINE LABEL AND COST DATA: MDATA

ITEM #	MONTH	PRICE	QUANTITY	VALUE
in	m	p	q	v
1	14	2.25	140	315
2	0	0	0	0
3	0	0	0	0
21	3	65	0.3	19.5
22	3	0.26	10	2.6
23	6	0.16	150	24
24	3	0.22	40	8.8
25	3	0.1	70	7
26	3	22.65	1	22.65
27	6	0.025	238	5.95
28	0	0	0	0
29	0	0	0	0
30	0	0	0	0
31	0	0	0	0
32	0	0	0	0
33	0	0	0	0
34	0	0	0	0
35	0	0	0	0
36	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
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0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

EBMCH FILE NAME -----			EBMCHI	
DATE COMBINED ----- 30-Jul-86				
MACHINE NUMBER	MACHINE LABEL 1	MACHINE LABEL 2	OPERATING COST PER HOUR	OWNERSHIP COST PER HOUR
mm	ll	12	flr	oc
0	--	--	0.000	0.000
1	60 HP	TRACTOR	5.364	9.521
2	75 HP	TRACTOR	4.997	13.035
3	120 HP	TRACTOR	7.692	33.088
4	MB FLOW	6-16	3.161	31.493
5	CHISEL	FLOW 15'	1.639	6.631
6	DISK	21'	3.697	36.832
7	FIELD	CULT 18'	1.139	11.347
8	PLANTER	8-30	12.596	63.009
9	GRAIN	DRILL 14'	4.887	24.445
10	CULT	8-30	1.402	13.973
11	ROTARY	HOE 16'	0.883	8.798
12	MT SPRAYER	30'	1.917	9.591
13	ROTARY	MOWER	0.617	11.321
14	COMBINE	MED	25.611	89.389
15	SML GRAIN	HEAD	2.121	21.595
16	CORN HEAD	4-30	4.274	24.666
17	HAY	WAGON	0.000	6.314
18	FORAGE	WAGON 14'	1.880	9.959
19	GRINDER	MIXER	4.480	21.738
20	GR DRYER	& AUGERS	17.533	39.734
21	LOADER	--	0.476	4.177
22	MANURE	SPREADER	0.665	5.834
23	GRAVITY	WAGON	0.000	2.017
24	SP TOOTH	DRAG	1.290	12.847
25	TRUCK	MED	10.300	30.606
26	TRUCK	3/4 TON	6.178	9.602
27	AUTO	50% BUSN	3.236	4.978
28	-	-	0.000	0.000
29	-	-	0.000	0.000
30	-	-	0.000	0.000
31	-	-	0.000	0.000
32	-	-	0.000	0.000
33	-	-	0.000	0.000
34	-	-	0.000	0.000
35	-	-	0.000	0.000
36	-	-	0.000	0.000
37	-	-	0.000	0.000
38	-	-	0.000	0.000
39	-	-	0.000	0.000
40	-	-	0.000	0.000

z aa ab ac ad ae af ag ah ai aj

ebcrl

ENTERPRISE TITLE ----- CORN, CHISEL TILL
 CURRENT WORKSHEET FILE NAME - EBCRP1.WKS

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 30-Jul-86

III. FIELD OPERATION DATA AND COSTS:

OPERATION NUMBER	1	2	3	4	5	6	7	8
OPERATION DESCRIPTION	CHISEL FLOW	DISK	SPRAY CHEMICALS	FIELD CULT	PLANT	APPLY ANHY AMMONIA	CULTI- VATE	HARVEST CORN
MACHINE NUMBER								
MACHINE A	3	3	2	3	2	3	2	14
MACHINE B	5	6	12	7	8	0	10	16
MACHINE C	0	0	0	0	0	0	0	0
MACHINE DESCRIPTION								
MACHINE A	120 HP TRACTOR	120 HP TRACTOR	75 HP TRACTOR	120 HP TRACTOR	75 HP TRACTOR	120 HP TRACTOR	75 HP TRACTOR	COMBINE MED
MACHINE B	CHISEL FLOW 15'	DISK MT 21'	SPRAYER 30'	FIELD CULT 18'	PLANTER 8-30		CULT 8-30	CORN HEAD 4-30
MACHINE C								
MONTH OF OPERATION	-11	5	5	5	5	6	6	10
FIELD RATE DATA								
WIDTH, FEET	15.00	21.00	30.00	18.00	20.00	18.00	20.00	10.00
SPEED, MPH	4.50	5.50	6.50	5.50	4.50	4.50	4.00	3.00
EFFICIENCY	0.80	0.80	0.60	0.80	0.70	0.75	0.80	0.75
ACRES PER HOUR	6.55	11.20	14.18	9.60	7.64	7.36	7.76	2.73
HOURS PER ACRE	0.153	0.089	0.071	0.104	0.131	0.136	0.129	0.367
HOURS PER FIELD HOUR								
MACHINE A	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MACHINE B	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MACHINE C	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LABOR HOURS PER FIELD HOUR	1.05	1.05	1.10	1.05	1.15	1.10	1.05	1.15
TIMES OVER	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FUEL, LUBR, REPAIR COST PER HOUR								
MACHINE A	7.692	7.692	4.997	7.692	4.997	7.692	4.997	25.611
MACHINE B	1.639	3.697	1.917	1.139	12.596	0.000	1.402	4.274
MACHINE C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OWNERSHIP COST PER HOUR								
MACHINE A	33.088	33.088	13.035	33.088	13.035	33.088	13.035	89.389
MACHINE B	6.631	36.832	9.591	11.347	63.009	0.000	13.973	24.666
MACHINE C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FUEL, LUBR, REPAIR COST PER ACRE	1.425	1.017	0.488	0.920	2.304	1.045	0.825	10.958
OWNERSHIP COST PER ACRE	6.068	6.243	1.595	4.629	9.958	4.493	3.481	41.820
LABOR HOURS PER ACRE	0.160	0.094	0.078	0.109	0.151	0.149	0.135	0.422
LABOR COST PER ACRE	0.963	0.563	0.465	0.656	0.904	0.896	0.812	2.530

b-----c-----d-----e-----f-----g-----h-----i-----j-----k-----l-----

ebgenl

ENTERPRISE TITLE ----- 200 HD 500 LB STEERS; CORN SILAGE, GRAIN AND HAY RATION
 CURRENT WORKSHEET FILE NAME - EBGENL.WKS

PAGE 1
 30-Jul-86

ITEM NUMBER DESCRIPTION.....	UNIT	PRICE/COST		VALUE
		PER UNIT	QUANTITY	OR COST

RECEIPTS.....				
1 SLAUGHTER STEERS, 11.0 CWT -----	HD	706.750	196.000	138523.00
2 -----	--	0.000	0.000	0.00
3 -----	--	0.000	0.000	0.00
4 -----	--	0.000	0.000	0.00
5 -----	--	0.000	0.000	0.00
6 -----	--	0.000	0.000	0.00
7 -----	--	0.000	0.000	0.00
8 -----	--	0.000	0.000	0.00
9 -----	--	0.000	0.000	0.00
10 -----	--	0.000	0.000	0.00
TOTAL RECEIPTS -----				138523.00

OPERATING COSTS.....				
21 STEER CALVES, 5.0 CWT @ \$65.00 -----	HD	325.000	200.000	65000.00
22 PURCHASING COMMISSION -----	HD	1.650	200.000	330.00
23 TRUCKING IN -----	CWT	0.250	1000.000	250.00
24 VETERINARY EXPENSE AND MEDICATION -----	HD	7.500	200.000	1500.00
25 INSURANCE -----	HD	0.000	0.000	0.00
26 CORN -----	BU	2.050	15154.000	31065.70
27 CORN SILAGE -----	T	15.750	274.000	4315.50
28 HAY -----	T	30.000	205.000	6150.00
29 PROTEIN -----	CWT	9.500	336.000	3192.00
30 MINERALS -----	CWT	10.000	48.000	480.00
31 STRAW -----	T	12.500	50.000	625.00
32 TRUCKING OUT -----	CWT	0.330	2156.000	711.48
33 BUILDING REPAIRS -----	--	675.000	1.000	675.00
34 MISCELLANEOUS AND SUPPLIES -----	--	195.000	1.000	195.00
35 MISC UTILITIES -----	--	130.000	1.000	130.00
36 -----	--	0.000	0.000	0.00
OPERATIONS -----	--	1733.926	1.000	1733.93
LABOR, OPERATIONS -----	HR	6.000	428.500	2571.00
INTEREST ON OPERATING EXPENSES -----	DOL	0.120	68262.064	8191.45
TOTAL OPERATING COST -----				127116.05

INCOME ABOVE OPERATING COST -----				11406.95

OWNERSHIP COSTS.....				
BARN, SILO, EQUIPMENT -----	YR	4540.000	1.000	4540.00
-----	--	0.000	0.000	0.00
-----	--	0.000	0.000	0.00
OPERATIONS -----	--	5129.751	1.000	5129.75
TOTAL OWNERSHIP COSTS -----				9669.75

TOTAL COSTS SHOWN -----				136785.81

NET RETURNS ABOVE COSTS SHOWN -----				1737.19

PURCHASED NOVEMBER 1, SOLD SEPTEMBER 30 (334 DAYS) AT 1100 LB.				

ebgen1

ENTERPRISE TITLE ----- 200 HD 500 LB STEERS; CORN SILAGE, GRAIN AND HAY RATION PAGE 2
 CURRENT WORKSHEET FILE NAME - EBGEN1.WKS 30-Jul-86

MONTHLY CASH FLOW, COMPOUNDED BALANCE, LABOR USE: LAST MONTH ----- 11

MONTH CODE	MONTH OPERATIONS	OPER INPUT COST	TOTAL EXPENSES	RECEIPTS	COMPOUNDED BALANCE	MONTH	LABOR HOURS	LABOR COST
-1	JAN	0.00	0.00	0.00	-- 0.00	JAN	0.000	0.000
-2	FEB	0.00	0.00	0.00	-- 0.00	FEB	0.000	0.000
-3	MAR	0.00	0.00	0.00	-- 0.00	MAR	0.000	0.000
-4	APR	0.00	0.00	0.00	-- 0.00	APR	0.000	0.000
-5	MAY	0.00	0.00	0.00	-- 0.00	MAY	0.000	0.000
-6	JUN	0.00	0.00	0.00	-- 0.00	JUN	0.000	0.000
-7	JUL	0.00	0.00	0.00	-- 0.00	JUL	0.000	0.000
-8	AUG	0.00	0.00	0.00	-- 0.00	AUG	0.000	0.000
-9	SEP	0.00	0.00	0.00	-- 0.00	SEP	0.000	0.000
-10	OCT	0.00	0.00	0.00	-- 0.00	OCT	0.000	0.000
-11	NOV	68.60	75402.00	75470.60	-- -75470.60	NOV	56.100	336.600
-12	DEC	74.92	1500.00	1574.92	-- -77800.23	DEC	20.300	121.800
1	JAN	90.01	625.00	715.01	0.00 -79293.24	JAN	20.000	120.000
2	FEB	105.09	0.00	105.09	0.00 -80191.26	FEB	21.700	130.200
3	MAR	132.33	0.00	132.33	0.00 -81125.50	MAR	22.800	136.800
4	APR	303.35	805.00	1108.35	0.00 -83045.11	APR	53.500	321.000
5	MAY	165.83	0.00	165.83	0.00 -84041.39	MAY	28.600	171.600
6	JUN	160.62	0.00	160.62	0.00 -85042.42	JUN	30.400	182.400
7	JUL	163.94	0.00	163.94	0.00 -86056.79	JUL	30.600	183.600
8	AUG	160.87	0.00	160.87	0.00 -87078.23	AUG	34.900	209.400
9	SEP	299.60	711.48	1011.08	138523.00 49562.91	SEP	108.100	648.600
10	OCT	8.76	0.00	8.76	0.00 49554.15	OCT	1.500	9.000
11	NOV	0.00	195.00	195.00	0.00 49359.15	NOV	0.000	0.000
12	DEC	0.00	0.00	0.00	0.00 49359.15	DEC	0.000	0.000
13	JAN	--	--	--	0.00 49359.15	JAN	--	--
14	FEB	--	--	--	0.00 49359.15	FEB	--	--
15	MAR	--	--	--	0.00 49359.15	MAR	--	--
16	APR	--	--	--	0.00 49359.15	APR	--	--
17	MAY	--	--	--	0.00 49359.15	MAY	--	--
18	JUN	--	--	--	0.00 49359.15	JUN	--	--
19	JUL	--	--	--	0.00 49359.15	JUL	--	--
20	AUG	--	--	--	0.00 49359.15	AUG	--	--
21	SEP	--	--	--	0.00 49359.15	SEP	--	--
22	OCT	--	--	--	0.00 49359.15	OCT	--	--
23	NOV	--	--	--	0.00 49359.15	NOV	--	--
24	DEC	--	--	--	0.00 49359.15	DEC	--	--
TOTALS --- 1733.93 79238.48 80972.41 138523.00					TOTALS --- 428.500 2571.000			

TOTAL RECEIPTS -----138523.00
 MINUS FUEL, LUBR, REPAIR COST ----- -1733.93
 MINUS OPERATING INPUT COST -----79238.48
 MINUS ENDING COMPOUNDED BALANCE -----49359.15
 EQUAL INTEREST EXPENSE ----- 8191.45



I. RECEIPT AND OPERATING INPUT DATA: PQDATA1

II. MACHINE LABEL AND COST DATA: MDATA

ITEM #	MONTH	PRICE	QUANTITY	VALUE
in	m	p	q	v
1	9	706.75	196	138523
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
21	-11	325	200	65000
22	-11	1.65	200	330
23	-11	0.25	1000	250
24	-12	7.5	200	1500
25	0	0	0	0
26	0	2.05	15154	31065.7
27	0	15.75	274	4315.5
28	-11	30	205	6150
29	-11	9.5	336	3192
30	-11	10	48	480
31	1	12.5	50	625
32	9	0.33	2156	711.48
33	4	675	1	675
34	11	195	1	195
35	4	130	1	130
36	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

MACHINE		MACHINE		MACHINE		OPERATING	OWNERSHIP
NUMBER	LABEL 1	LABEL 2	PER HOUR	COST	PER HOUR	COST	
mm	11	12	flr	oc			
0	--	--	0.000	0.000			
1	60 HP	TRACTOR	5.364	9.521			
2	75 HP	TRACTOR	4.997	13.035			
3	120 HP	TRACTOR	7.692	33.088			
4	MB FLOW	6-16	3.161	31.493			
5	CHISEL	FLOW 15'	1.639	6.631			
6	DISK	21'	3.697	36.832			
7	FIELD	CULT 18'	1.139	11.347			
8	PLANTER	8-30	12.596	63.009			
9	GRAIN	DRILL 14'	4.887	24.445			
10	CULT	8-30	1.402	13.973			
11	ROTARY	HOE 16'	0.883	8.798			
12	MT SPRAYER	30'	1.917	9.591			
13	ROTARY	MOWER	0.617	11.321			
14	COMBINE	MED	25.611	89.389			
15	SML GRAIN	HEAD	2.121	21.595			
16	CORN HEAD	4-30	4.274	24.666			
17	HAY	WAGON	0.000	6.314			
18	FORAGE	WAGON 14'	1.880	9.959			
19	GRINDER	MIXER	4.480	21.738			
20	GR DRYER	& AUGERS	17.533	39.734			
21	LOADER	--	0.476	4.177			
22	MANURE	SPREADER	0.665	5.834			
23	GRAVITY	WAGON	0.000	2.017			
24	SP TOOTH	DRAG	1.290	12.847			
25	TRUCK	MED	10.300	30.606			
26	TRUCK	3/4 TON	6.178	9.602			
27	AUTO	50% BUSN	3.236	4.978			
28	-	-	0.000	0.000			
29	-	-	0.000	0.000			
30	-	-	0.000	0.000			
31	-	-	0.000	0.000			
32	-	-	0.000	0.000			
33	-	-	0.000	0.000			
34	-	-	0.000	0.000			
35	-	-	0.000	0.000			
36	-	-	0.000	0.000			
37	-	-	0.000	0.000			
38	-	-	0.000	0.000			
39	-	-	0.000	0.000			
40	-	-	0.000	0.000			

ebgen1

ENTERPRISE TITLE ----- 200 HD 500 LB STEERS; CORN SILAGE, GRAIN AND HAY RATION
 CURRENT WORKSHEET FILE NAME - EBGEN1.WKS

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V. OPERATIONS DATA AND COSTS:

OPERATION NUMBER	1	2	3	4	5	6	7	8
OPERATION DESCRIPTION	GRIND	SILAGE	HAY	SUPE-	FEEDLOT	LOAD	HAUL	--
	MIX AND	FEEDING	FEEDING	VISION	CLEANING	MANURE	MANURE	--
	HAUL GRN	--	--	& MISC	--	--	--	--
MACHINE NUMBER (0,40)								
MACHINE A	2	0	1	0	1	1	2	0
MACHINE B	19	0	21	0	21	21	22	0
MACHINE C	0	0	0	0	0	0	0	0
TOTAL MACHINE COSTS PER HOUR..								
OWNERSHIP	34.773	0.000	13.697	0.000	13.697	13.697	18.869	0.000
OPERATING	9.477	0.000	5.840	0.000	5.840	5.840	5.662	0.000
USE UNITS LABEL	BATCH	OPERATION	OPERATION	HR	OPERATION	OPERATION	--	--
MACHINE HOURS PER USE	0.75	0	0.5	0	1.5	16	8	0
LABOR HOURS PER USE	1	0	0.5	1	1.5	16.8	8.4	0
OTHER COSTS PER USE.....								
OWNERSHIP	0	0	0	0	0	0	0	0
OPERATING	0	0.6	0	0	0	0	0	0
TOTAL NON-LABOR COST PER USE..								
OWNERSHIP	26.080	0.000	6.849	0.000	20.546	219.160	150.954	0.000
OPERATING	7.108	0.600	2.920	0.000	8.760	93.435	45.297	0.000
USE UNITS BY MONTH.....								
JAN	-1	0	0	0	0	0	0	0
FEB	-2	0	0	0	0	0	0	0
MAR	-3	0	0	0	0	0	0	0
APR	-4	0	0	0	0	0	0	0
MAY	-5	0	0	0	0	0	0	0
JUN	-6	0	0	0	0	0	0	0
JUL	-7	0	0	0	0	0	0	0
AUG	-8	0	0	0	0	0	0	0
SEP	-9	0	0	0	0	0	0	0
OCT	-10	0	0	0	0	0	0	0
NOV	-11	2.6	30	8	48	1	0	0
DEC	-12	4.3	35	8	12	0	0	0
JAN	1	6	40	8	10	0	0	0
FEB	2	7.7	45	8	10	0	0	0
MAR	3	10.3	45	8	7	1	0	0
APR	4	12.8	40	8	7	3	1	1
MAY	5	17.1	30	0	7	3	0	0
JUN	6	18.9	0	0	7	3	0	0
JUL	7	20.6	0	0	7	2	0	0
AUG	8	21.4	0	0	12	1	0	0
SEP	9	21.4	0	0	60	1	1	1
OCT	10	0	0	0	0	1	0	0
NOV	11	0	0	0	0	0	0	0
DEC	12	0	0	0	0	0	0	0
TOTAL USE UNITS	143.100	265.000	48.000	187.000	16.000	2.000	2.000	0.000
TOTAL OWNERSHIP COST	3732.044	0.000	328.740	0.000	328.740	438.320	301.908	0.000
TOTAL OPERATING COST	1017.155	159.000	140.153	0.000	140.153	186.871	90.594	0.000
TOTAL LABOR USE (HR)	143.100	0.000	24.000	187.000	24.000	33.600	16.800	0.000

b-----c-----d-----e-----f-----g-----h-----i-----j-----k-----l