

Exercise # 5

Q. 3 DM & DL & VMOH Variances

Jones Company has set up the following standards per finished unit for DM and DL:

DM: 2.1 pounds at \$1.10 per pound

DL: 0.46 hours at \$12 per hour

VMOH rate: \$8 per DLH

During the current period, the company produced 10,000 units and purchased and used 21,500 pounds of raw materials costing \$24,080. Payroll records indicate that 4,650 hours were worked and total payroll amounted to \$54,870. VMOH costs amounted to \$37,572 during the period.

Required: Prepare an analysis of variance for the period.

DM:

(AQ x AP)		(AQ x SP)		(SQ x SP)
21,500 x \$1.12	Price V	21,500 x \$1.10	Usage V	10,000 x 2.1
\$24,080	\$430 U	\$23,650	\$550 U	21,000 x \$1.10
				\$23,100
Total DM variances = \$980 U				

DL:

(AQ x AP)		(AQ x SP)		(SQ x SP)
4,650 x \$11.8	Rate V	4,650 x \$12	Efficiency V	10,000 x 0.46
\$54,870	\$930 F	\$55,800	\$600 U	4,600 x \$12
				\$55,200
Total DL variances = \$330 F				

VMOH:

Actual VOH (AQ x AP)		(AQ x SP)		Applied VMOH (SQ x SP)
4,650 x \$8.08	Spending V	4,650 x \$8	Efficiency V	10,000 x 0.46
\$37,572	\$372 U	\$37,200	\$400 U	4,600 x \$8
				\$36,800
Total VMOH variances = Underapplied VMOH = \$772 U				

Q. 6 MOH Variances

The Singapore division of a Canadian telecommunications company uses standard costing for its machine-paced production of telephone equipment. Data regarding production during June are as follows:

VMOH costs incurred	\$155,100
VMOH rate	\$12 per standard MH
FMOH costs incurred	\$401,000
FMOH budgeted	\$390,000
The number of finished units budgeted for the period	43,333 units
Standard MH allowed per unit of output	0.30 MH
Actual units of output produced	41,000 units
Actual MH used	13,300 MH

Assume that there was no beginning inventory of either DM or finished units.

Required: Prepare an analysis of all MOH variances.

VMOH variances:

Actual VOH (AQ x AP)		(AQ x SP)		VMOH applied (SQ x SP)
13,300 x \$11.66 \$155,100	Spending V \$4,500 F	13,300 x \$12 \$159,600	Efficiency V \$12,000 U	41,000 x 0.30 12,300 x \$12 \$147,600
Total VMOH variances = Underapplied VMOH \$7,500 U				

FMOH variances:

Planned units = 43,333 units
 Budgeted MH per 1 unit = 0.3 MH
 Budgeted MH = 43,333 x 0.3 = 13,000 MH
 Budgeted FMOH rate = \$390,000 / 13,000 MH = \$30 per MH

Actual FOH		Budgeted FMOH		FMOH applied (SQ x SP)
\$401,000	Budget V \$11,000 U	13,000 x \$30 \$390,000	Production Volume V \$21,000 U	41,000 x 0.30 12,300 x \$30 \$369,000
Total FMOH variances = Underapplied FMOH \$32,000 U				