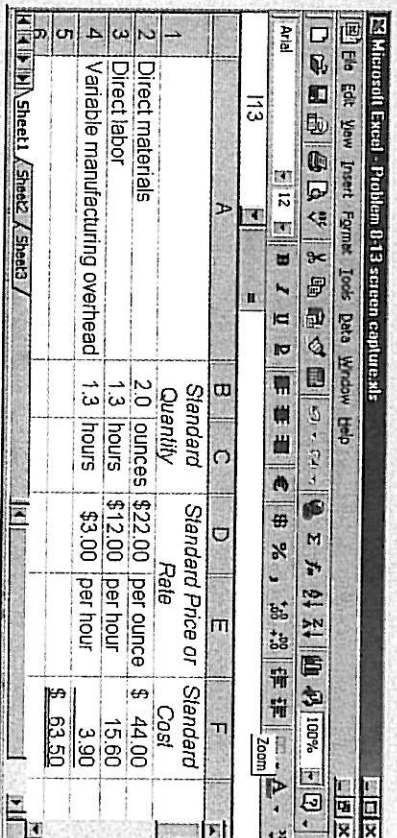


PROBLEM 8-13A Basic Variance Analysis (LO2, LO3, LO4)

Riley Labs produces various chemical compounds for industrial use. One compound, called Lundor, is prepared using an elaborate distilling process. The company has developed standard costs for one unit of Lundor as follows:



	A	B	C	D	E	F
		Standard Quantity		Standard Price or Rate		Standard Cost
1						
2	Direct materials	2.0 ounces		\$22.00 per ounce		\$ 44.00
3	Direct labor	1.3 hours		\$12.00 per hour		15.60
4	Variable manufacturing overhead	1.3 hours		\$3.00 per hour		3.90
5						<u>\$ 63.50</u>

During November, the following activity was recorded by the company relative to production of Lundor:

- Materials purchased, 11,500 ounces at a cost of \$236,900.
- There was no beginning inventory of materials; however, at the end of the month, 3,000 ounces of material remained in ending inventory.
- The company employs 36 lab technicians to work on the production of Lundor. During November, each worked an average of 160 hours at an average rate of \$11.90 per hour.
- Variable manufacturing overhead is assigned to Lundor on the basis of direct labor-hours. Variable manufacturing overhead costs during November totaled \$16,416.
- During November, 4,200 good units of Lundor were produced.

The company's management is anxious to determine the efficiency of the Lundor production activities.

Required:

- For direct materials used in the production of Lundor:
 - Compute the price and quantity variances.
 - The materials were purchased from a new supplier who is anxious to enter into a long-term purchase contract. Would you recommend that the company sign the contract? Explain.
- For direct labor employed in the production of Lundor:
 - Compute the rate and efficiency variances.
 - In the past, the 36 technicians employed in the production of Lundor consisted of 21 senior technicians and 15 assistants. During November, the company experimented with fewer senior technicians and more assistants in order to save costs. Would you recommend that the new labor mix be continued? Explain.
- Compute the variable overhead spending and efficiency variances. What relation can you see between this efficiency variance and the labor efficiency variance?

CHECK FIGURE

- Materials price variance: \$16,100 F
- Labor efficiency variance: \$3,600 U

