**McDonald Valley Calibration Exercise -- Stage 4**

**DEVELOPMENT SCENARIOS**

Use your calibrated model to simulate the impact of the following two

development options:

Case A. 2 wells; Reilly Well and Virginia City Well in Location 1

owner row column Q (ft3/d)

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Reilly 6 15 -67000

Virginia City(1) 35 16 -268000

Case B. 2 wells; Reilly Well and Virginia City Well in Location 2

owner row column Q (ft3/d)

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Reilly 6 15 -67000

Virginia City(2) 33 6 -268000

Fill in the information on the attached worksheet.

**Calibration Exercise -- Stage 4**

**worksheet**

Record the following information for your simulated development scenarios in

cases A and B:

Case A.

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1. Head in the lake = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Total river discharge at southern boundary = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. River discharge at Pollock's Ford (gage 2) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Percent change in discharge at gage 2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(base the percent change on the difference between your stressed and unstressed simulations)

5. Is there any induced infiltration from the river to the aquifer.

If so, where does it occur and what is the rate?

6. Maximum drawdown in the northern part of the valley = \_\_\_\_\_\_\_\_\_\_

(model rows 1 - 16)

Case B.

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1. Head in the lake = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Total river discharge at southern boundary = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. River discharge at Pollock's Ford (gage 2) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Percent change in discharge at gage 2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(base the percent change on the difference between your

stressed and unstressed simulations)

5. Is there any induced infiltration from the river to the aquifer.

If so, where does it occur and what is the rate?

6. Maximum drawdown in the northern part of the valley = \_\_\_\_\_\_\_\_\_\_

(model rows 1 - 16)