

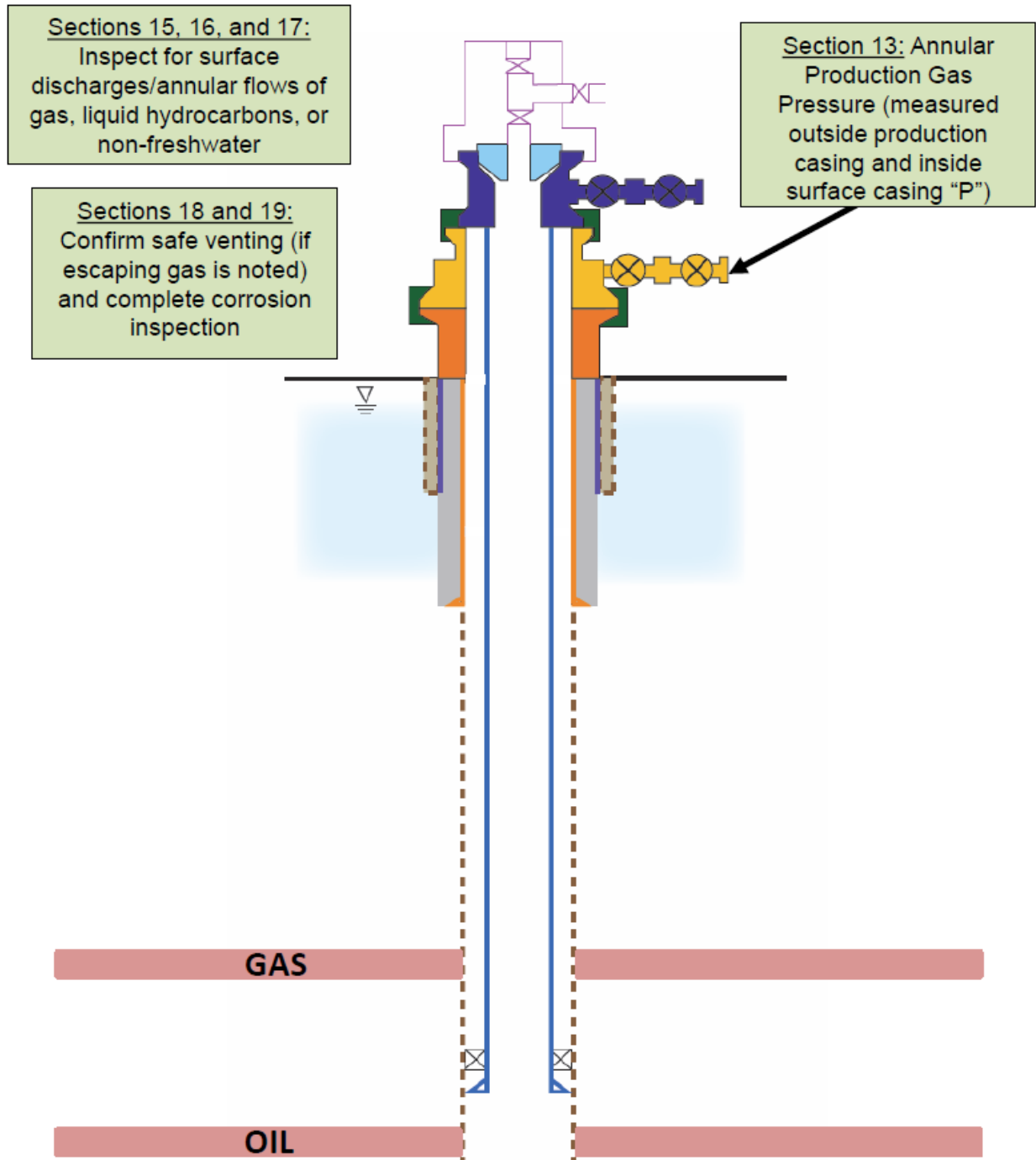
MIA Training Example (Multi-Year)

This example demonstrates how to manage well integrity data over a two-year period. In this scenario, the operator has two wells in their inventory. The first well, the Welsh No. 3, is a 5-year old 2-string combination well. It is an open-hole completion equipped with a production string set on a packer. Oil is produced through a rod and tubing assembly and a gas-bearing zone above the packer is produced inside the surface-by-production casing annulus. The second well, the Swank 4H, is a 3-string gas well equipped with surface, intermediate, and production strings. It is a cased-hole completion and the cement top on the production string is below the depth of the intermediate casing shoe. Primary gas production is through a tubing assembly and annular gas is produced inside the intermediate casing.

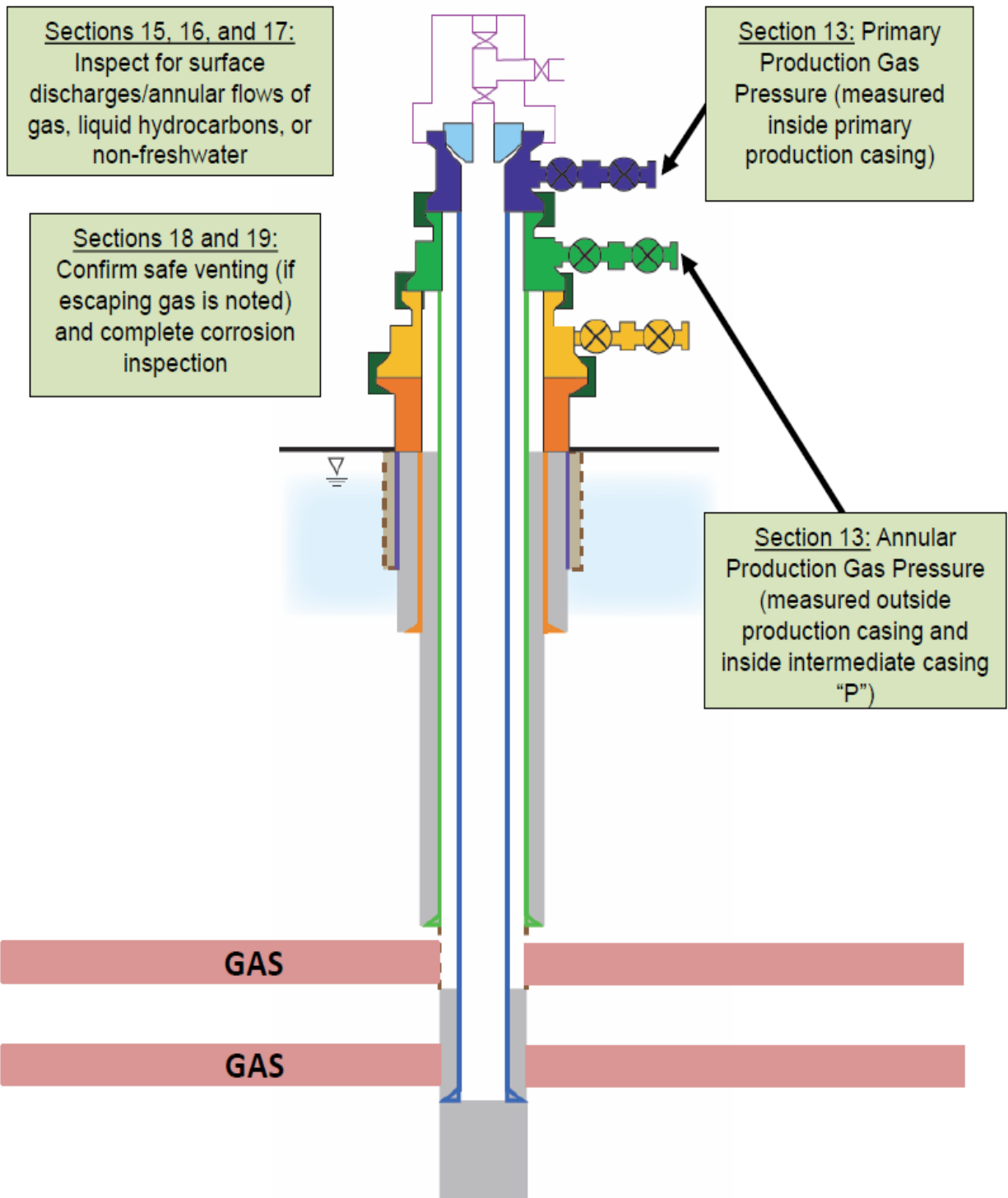
The Welsh No. 3 was in operation during all 4 quarters of 2013 and was inspected during each of those quarters. The Swank 4H was completed during the end of the second quarter of 2013 and began producing by the third quarter of the year. In the example, the operator completes all the necessary 2013 inspections, compiles the data for submission to DEP, and sets up the spreadsheet for the 2014 inspections. They also complete the first quarterly inspection for 2014 at each well location.

For this tutorial, you will need to download the pre-populated version of Form A titled "MIA_Form_A_Multi_Year_Example."

Welsh No. 3 Well Schematic and Inspection Components



Swank 4H Well Schematic and Inspection Components



MIA Training Example (Multi-Year)

Step 1: Download and open the pre-populated Form A prepared for this example. It is titled “MIA_Form_A_Multi_Year_Example.” As shown on the form, Operator A has completed the 2013 inspections for the Welsh No. 3 and Swank 4H and would next like to summarize the 2013 inspection data, create a template for next year, and enter the quarterly data for the first quarter of 2014.

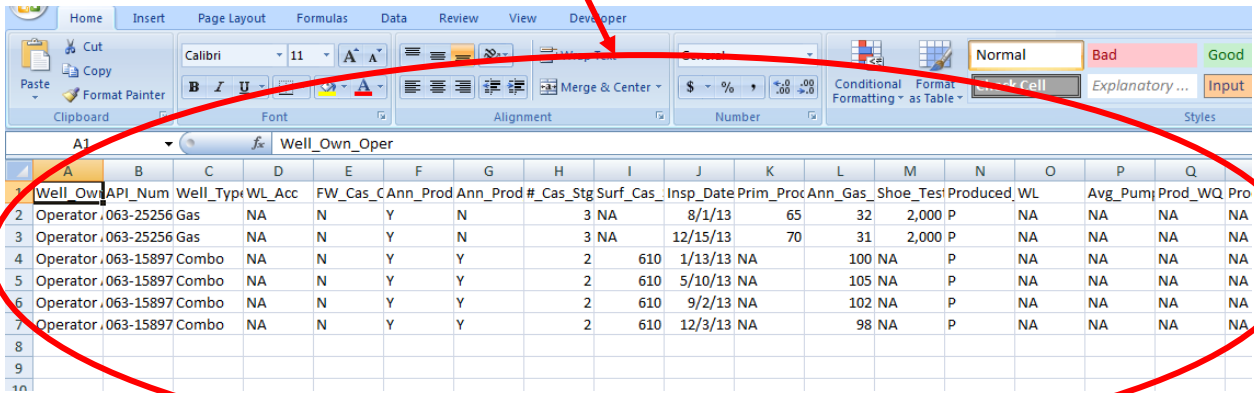
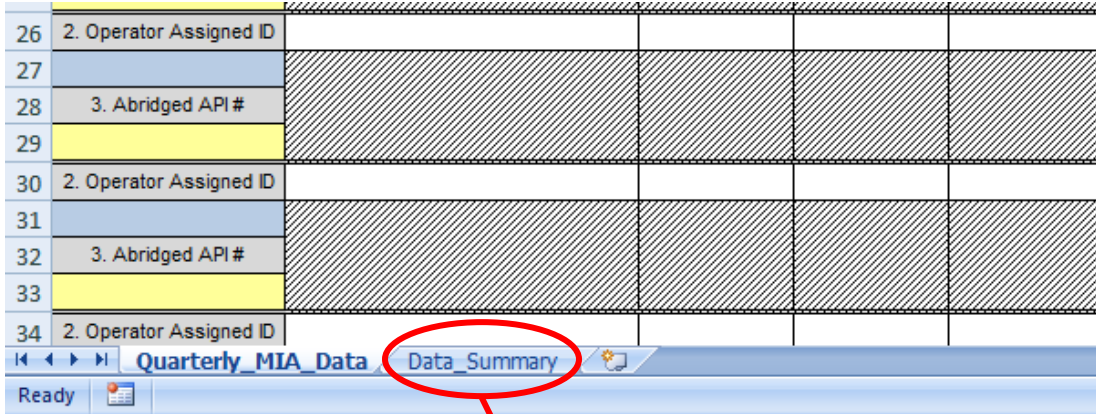
1. Well Operator/Owner	4a. Well Type Oil Gas Combo Oil (Freshwater Casing Only) Combo (Freshwater Casing Only)	5. Water Level Accessible (Yes/No)	6. Freshwater Casing Only (Yes/No)	7. Annular Production (Yes/No)	8. Annular Production Inside Surface or Coal Casing String (Yes/No)	9. Number of Casing Strings Excluding Conductor Pipe, Tubing, and Liners	10. Surface or Coal Casing Set Depth (ft)	11. Quarterly Inspection Information	
								Date	Quarter
Operator A	4b. Well Construction Information Not Readily Available Set Up Well for First Inspection	Yes	Yes	Yes	Yes	2	610	1/13/13	Q1
2. Operator Assigned ID	Combo			Y	Y			5/10/13	Q2
3. Abridged API #								9/2/13	Q3
063-15897								12/3/13	Q4
2. Operator Assigned ID	Gas		N	Y	Y	3			Q1
Swank 4H								8/1/13	Q3
3. Abridged API #								12/15/13	Q4
063-25256									

Step 2: The first step involves preparing a report for submission to DEP. First, answer the questions in Sections 23 and 24 in the upper left-hand corner of the spreadsheet and then generate the data summary sheet.

- Have you finished entering all quarterly inspection data? (cell/box 23): **Y**
- Have you checked for and corrected any duplicate API #s? (cell/box 24): **Y**
- Click (cell/box 25): **Create Data Summary Sheet for Annual Report**

23. Have you finished entering all quarterly inspection data?:		Y	25. Create Data Summary Sheet for Annual Report	
24. Have you checked for and corrected any duplicate API #s?:		Y		
1. Well Operator/Owner	4a. Well Type Oil Gas Combo Oil (Freshwater Casing Only) Combo (Freshwater Casing Only)	5. Water Level Accessible (Yes/No)	6. Freshwater Casing Only (Yes/No)	7. Annular Production (Yes/No)
	Operator A			

The worksheet tab labeled “Data_Summary” now contains the report for submission to DEP.

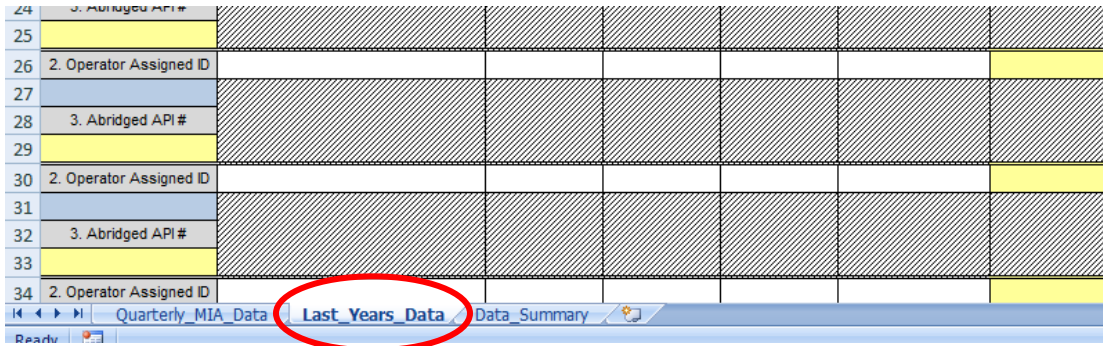


Step 3: Now a template for next year’s inspections can be created by completing Sections 26 and 27 of Form A.

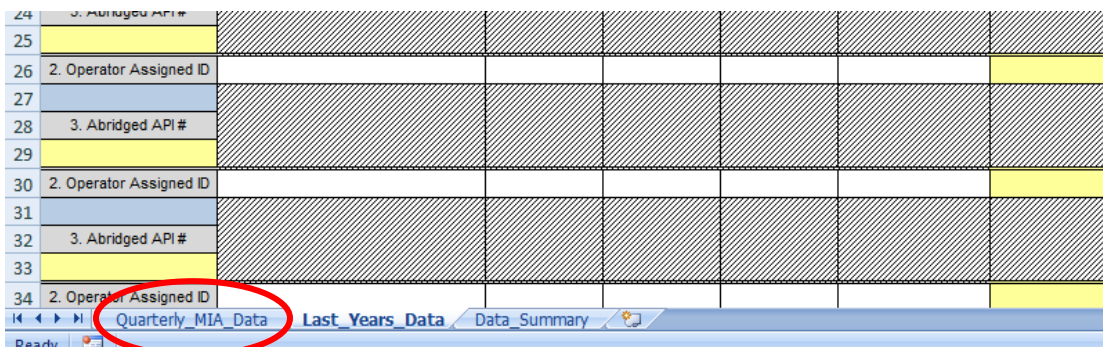
- a. Have you created a data summary sheet for the annular report to DEP? (cell/box 26): **Y**
- b. Click (cell/box 27): **Create Template for Next Year**

26. Have you created a data summary sheet for the annual report to DEP?		Y	27. Create Template for Next Year	
8. Annular Production Inside Surface or Coal Casing String (Yes/No) Yes No	9. Number of Casing Strings Excluding Conductor Pipe, Tubing, and Liners Customize Data Tables	10. Surface or Coal Casing Set Depth (ft)	11. Quarterly Inspection Information	
			Date	Quarter

Last year’s inspection data are stored under the worksheet tab labeled “Last_Years_Data.”



The template for storing 2014 well integrity data is found under the worksheet tab labeled “Quarterly_MIA_Data.” **(Note:** all well construction information is saved in the template so it does not have to be entered again.)



Step 4: It is now time to enter the 2014 inspection data. The Welsh No. 3 was first inspected on 1/10/14. Select the worksheet tab labeled “Quarterly_MIA_Data,” return to Section 11 “Quarterly Inspection Information” and enter the date of the Q1 inspection. Next, fill out Section 12 “All Well MIA Conditions Unchanged from Previous Quarter” and click the button labeled “Transfer 4th Qtr from Previous Year.” This will transfer all data for the Welsh No. 3 from the fourth quarter of 2013 to the first quarter of 2014.

- a. Click worksheet tab: **Quarterly_MIA_Data**
- b. Q1 Date (cell/box 11.): **1/10/14**
- c. All Well MIA Conditions Unchanged from Previous Quarter (cell/box 12.): **Y**
- d. Click: **Transfer 4th Qtr from Previous Year**

11. Quarterly Inspection Information		12. All Well MIA Conditions Unchanged from Previous Quarter (Y)
Date	Quarter	Transfer 4th Qtr From Previous Year
1/10/14	Q1	Y
	Q2	
	Q3	
	Q4	

Step 5: Once all data from the previous quarter have been transferred, make the following changes to Section 13 for this example. Sections 14, 15, 16, 17, 18, 19 and 20 require no changes from the previous quarter.

a. Section 13

1) Produced Annular Gas Pressure(psig) (cell/box 13b.): 100

13. Wellhead Pressure or Water Level §78.88(b)(1)						
a. Primary Production Gas Pressure (psig)	b. Produced Annular Gas Pressure (psig)	c. Shoe Test Pressure (psig) (OPTIONAL)	d. Annulus	e. Water Level (ft)	ENTER ONE FROM CHOICES BELOW (IF FIELDS ARE AVAILABLE)	
					f. Average Daily Pumping Time (hours) or Average Daily Pumping Volume (bbls) (If no produced water, indicate "NPW")	g. Produced Water Quality - Specific Conductance (µS or µmhos/cm)
	100		P			
			P			
			P			
			P			

Step 6: The Swank 4H was first inspected on 2/12/14. Return to Section 11 “Quarterly Inspection Information” and enter the date of the Q1 inspection. Next, fill out Section 12 “All Well MIA Conditions Unchanged from Previous Quarter” and click the button labeled “Transfer 4th Qtr from Previous Year.” This will transfer all data for the Welsh No. 3 from the fourth quarter of 2013 to the first quarter of 2014.

a. Click worksheet tab: Quarterly_MIA_Data

b. Q1 Date (cell/box 11.): 2/12/14

c. All Well MIA Conditions Unchanged from Previous Quarter (cell/box 12.): Y

d. Click: Transfer 4th Qtr from Previous Year

11. Quarterly Inspection Information		12. All Well MIA Conditions Unchanged from Previous Quarter (Y)
Date	Quarter	Transfer 4th Qtr From Previous Year
		Transfer Previous Quarter's Data
1/10/14	Q1	Y
	Q2	
	Q3	
	Q4	
2/12/14	Q1	Y
	Q2	
	Q3	
	Q4	

Step 7: Once all data from the previous quarter have been transferred, make the following changes to Section 13 for this example. Sections 14, 15, 16, 17, 18, 19 and 20 require no changes from the previous quarter.

a. Section 13

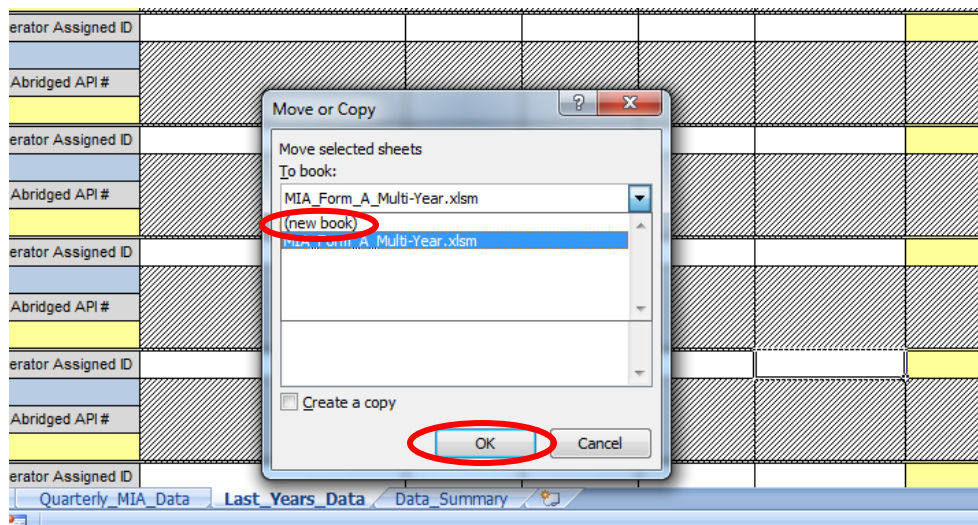
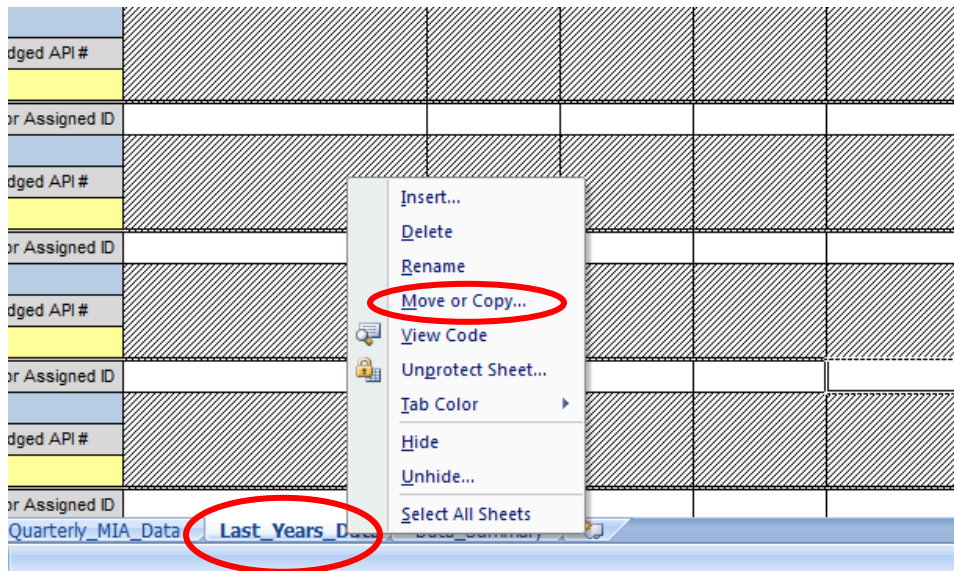
- 1) Primary Production Gas Pressure (psig) (cell/box 13a.): 65
- 2) Produced Annular Gas Pressure (psig) (cell/box 13b.): 32

13. Wellhead Pressure or Water Level §78.88(b)(1)						
a. Primary Production Gas Pressure (psig)	b. Produced Annular Gas Pressure (psig)	c. Shoe Test Pressure (psig) (OPTIONAL)	d. Annulus	e. Water Level (ft)	ENTER ONE FROM CHOICES BELOW (IF FIELDS ARE AVAILABLE)	
					f. Average Daily Pumping Time (hours) or Average Daily Pumping Volume (bbls) (if no produced water, indicate "NPW")	g. Produced Water Quality - Specific Conductance (µS or µmhos/cm)
	100		P			
			P			
			P			
			P			
65	32	2,000	P			
			P			
			P			
			P			

Note: Before completing the 2014 inspections and generating a data summary sheet for submission to DEP, IT IS CRITICALLY IMPORTANT THAT THE WORKSHEET TITLED “LAST YEARS DATA” BE MOVED TO ANOTHER EXCEL WORKBOOK. The worksheet can be moved as soon as all necessary data from the 4th quarter of the previous year have been transferred to the first quarter of the current inspection year.

Step 8: Moving the worksheet is a two-step process. First, right-click the tab labeled “Last_Years_Data” and choose “Move or Copy.” Next, choose “(new book)” from the drop-down box.

- a. Right-Click worksheet tab: Last_Years_Data
- b. Select: Move or Copy
- c. From drop-down menu, select: (new book)
- d. Click: OK



The new workbook can now be saved under any name for archiving purposes.

Final: This concludes the Multi-Year example.