Worksheet B





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Worksheet B			Task Number:	
Chasing Air Flow at a Manifold			Review	
			Checklist	Found
Procedure:				
Step 1	Take flow (SCFH) and pressure reading <i>Check for cable leaks</i> . Manifold utility Hole H.	s (PSI) for cable at manifold utility hole. hole on worksheet is designated as Utility		Date:
Step 2	If there are two pressure testing valves utility hole, use the Flow Direction Indic In this situation it is necessary to first tu	on the high flowing cable in the manifold ator to determine the direction of the leak. Irn off flow to the cable at the manifold		Hours Worked:
	before connecting the Flow Direction In after taking reading.	dicator. <i>Remember to turn flow back on</i>		Pipe Route:
Step 3	53 Visit utility hole on either side of manifold utility hole (go toward leak if flow direction is known.) Check for leaks. Calculate air flow between this utility hole and Utility Hole H. If calculated flow is more than 50% of measured air flow at manifold, continue in the same direction. If it is less than 50% and you have determined flow direction (as in Step 2), there is a leak on the cable in the section between this utility hole and the manifold utility hole. If no flow direction reading was taken on the cable at the manifold utility hole and the calculated flow			Name:
				Cause of Problem:
Step 4	is less than 50%, visit the utility hole on other side of the hole. Using the calculated flow rate and cable pressure reading, calculate a Zero Leak Projection (ZLP) to determine the area of search. Record the ZLP footage calculation on the worksheet.			 Missing Plug Leaking Plug Leaking Valve Section Leak Leaking Hardware Other
Step 5	Continue chasing flow in the direction of the leak within the ZLP boundary. Calculate and record the flow between each utility hole. A new ZLP should be calculated each time the cable changes pneumatic resistance. Chase calculated flow until the leak is found.			
Step 6	Enter all calculations, footages and cable size on diagram. All Air Flow Calculations and Zero Leak Projections should also be entered on worksheet.			
Equipment and Procedures Required:				
 C Pressure Gauge Portable Flow Rater (0-20 SCFH) Ultrasonic Leak Locator or Soap Bucket 		 Flow Gauge Flow Direction Indicator Calculator 		
Pneumatic Resistance Charts		Zero Leak Projection		

Air Flow Calculation

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