



## Portable Solves Ground Fault Mystery at Paramount Farms

"I'm very happy we have this monitor now." Victor Gaona reports to his Square D representative on April 16, 2004. Using the POWERLOGIC Portable Circuit Monitor PCM4000, Victor was able to unravel the mystery of a ground fault at Paramount Farms in the San Joaquin Valley, California.

Two days in a row, there was an unusual power event that occurred at the world's largest pistachio and almond processing plant. Without explanation, a new electronic laser sorting machine started turning itself off. All of the electrical people were scratching their heads trying to troubleshoot what could be happening in that section of the processing facility.

On the second day, upon reviewing the portable Circuit Monitor's 100ms RMS log, Victor realized that the problem occurred at exactly 1:35pm both days. This clue helped narrow down the possible culprits. Victor combed the area pinning it down to 4 possible suspect areas.



On the third day, at 1:30pm, Victor and 4 other employees were ready and standing guard. At exactly 1:35pm, again the fault hit and three electricians reported on the radio that their areas were affected. The fourth employee, the refrigerator technician, didn't see the fault but radioed back that he heard a timer click on.

Victor went to the refrigeration area to check on the situation. He turned the timer off. Immediately, the problem went away. All stations confirmed. To be sure, he turned the timer back on and all stations confirmed the problem was back.

It turned out that the timer controls a defrost heater in the cold room. The deteriorating defrost heater was causing the ground fault. The case is now closed with Victor Gaona and Paramount Farms satisfied that they had invested in tools to help them do their job effectively.

5410	04/14/2004 13:35	399ms	1413A	1414A	1391A	1437A	487V	488V	484V	272V	287V	283V
5411	04/14/2004 13:35	500ms	1413A	1414A	1391A	1437A	487V	488V	484V	275V	276V	313V
5412	04/14/2004 13:35	599ms	1413A	1414A	1391A	1437A	487V	488V	484V	424V	82V	497V
5413	04/14/2004 13:35	699ms	1413A	1414A	1391A	1437A	487V	488V	484V	442V	58V	496V
5414	04/14/2004 13:35	799ms	1413A	1414A	1391A	1437A	488V	488V	484V	443V	56V	495V
5415	04/14/2004 13:35	899ms	1413A	1414A	1391A	1437A	487V	488V	484V	443V	56V	495V

As shown in the last three columns on 100ms RMS log above, at 1:35pm, the problem defrost heater unit turned on causing erratic phase to ground voltages.