



## RedLine reviews results of Salinas Field Pilots for PTI Compliance

As new pilots for PTI Compliance for field-packed product begin in the Oxnard and Yuma growing districts, RedLine Solutions is releasing the results of the Field Pilots from the past summer and fall in the Salinas district.

### Overview

From July through October, 2009, RedLine worked on pilot projects with five leading grower/shippers in the Salinas Valley, to implement PTI traceability for field-packed product. During the pilots, RedLine customers successfully labeled and tracked over 250,000 cases of produce, representing multiple commodities and harvest operation types including ground harvest, machine harvest, and “value-added” harvesters.

The consensus from the participating grower/shippers was that they had gained critical experience that has allowed them to understand the effect PTI compliance will have on their operations, and how to plan for a smooth and effective roll-out of PTI within their organizations.

At the beginning of the pilot projects, RedLine worked with each company to document and understand their reasons for running a pilot and to clarify their goals for the pilot process. As expected, there were a number of detailed goals that reflected each company’s specific business. In addition, a common set of questions around PTI compliance also emerged. The most critical question was always, “Does PTI compliance slow down my harvesting crews?” To cut to the chase, the answer to this question is uniformly “No”.

In addition, a number of more detailed questions were shared by the pilot participants:

- What information do I need to generate PTI labels?
- What is the most effective configuration of hardware, software, consumables and services?

- How do my planning and harvesting processes need to change?
- What changes do I need to make to my existing internal systems?
- How do I estimate the costs for PTI compliance, both for start-up and on-going operations?

## Pilot Structure

Pilot tests were organized into two phases: Phase One involved two weeks of preparation, during which we worked with the customer pilot team to gather PTI information such as their Product/GTIN listing and their Lot ID information. This information was used to configure the system and design the PTI labels. The other key activity during the preparation phase was walking through the proposed PTI process in the field with actual crews. This allowed the pilot team to test out alternatives for when and where to apply labels based on the specific commodity and harvest operation, as well as to discuss the trade-offs between pre-printing labels and printing in the field.

Once Phase One was complete, Phase Two, the actual in-field PTI compliance activities, could begin. The duration of this phase ranged between one and ten weeks depending on the pilot goals for the grower/shipper. RedLine worked with one or two harvest crews and trained them to generate PTI labels as needed, to apply the correct label to each case of produce, and to capture the traceability information at the point of harvest.

Over the course of the field testing, crews experienced all of the “typical” variations that can affect the harvest process, such as changing product requirements from sales, adjusting to conditions in the field, switching to a new field in the middle of the day, packing into multiple types of packaging including RPC’s and wax cartons, and variable weather including rain and very high winds.

Another key part of the field testing was to experiment with different approaches and scenarios for PTI compliance. Variations of the pilot scope included:

- Harvest Crews
  - Expanding the pilot to multiple crews
  - In-house crews vs. outside harvesting contractors
- Label Printing
  - Pre-printing labels at the office

- Printing in the field
- Printing and applying labels at the Cooler.
- Commodities and Harvest Types
  - Iceberg, Romaine, Romaine Hearts, Mixed Leaf, and Celery
  - Standard Harvesters, Ground Crews and Value-Added Harvesters
- Related Processes
  - Adding new products or harvest acreage
  - Automating the receiving process at the cooler

## **Pilot Project Experience**

The primary result reported by all of the pilot participants was that they were now confident that they could implement PTI Compliance in their field operations without slowing down the productivity of the harvest crews. This directly addressed their key PTI compliance concern.

As expected, the pilots demonstrated that different commodities and harvest types require different approaches to compliance. “One Size Fits All” does not apply to PTI compliance any more than it applies to the rest of the Fresh Produce industry. Effective solutions must have the flexibility to adapt to the different areas of each grower/shipper’s business.

Deciding whether to pre-print labels at the office or cooler, versus printing labels in or near the field, was a critical focus area for the pilots. What RedLine and their customers found was that both approaches were effective. They learned that it is even possible to print 100% of the labels in the field if needed. Over the course of a pilot, the crews involved tended to move towards printing at the field on an as-needed basis. This was made possible by using mobile devices that can manage barcode label printers as well as capture the traceability information right in the field.

Another area that showed significant differences between commodities and harvest types was the question of identifying the best time, place and person to put the PTI label on the carton. Generally, where it was clear which items would be packed into which boxes, the preference was to label the boxes as they were built. Where multiple items might be packed into a similar or identical box, it was more productive to label the box once it had

been packed. It was interesting to learn that across the pilot projects, different companies and crews had different approaches for when and where they applied the labels, even for similar commodity and harvest types. The success of these different methods in meeting the goal of compliance without slowing down the harvest showed that “crew ownership” of the solution contributed more to accuracy and productivity than enforcing a single “right” way for compliance.

Many people in the industry, and all of RedLine’s pilot participants, were very interested in the possibility of printing and applying PTI labels as product was received at the cooler. The attraction for this approach was that it would not require any change for field operations, and had the potential to greatly reduce the risk of pre-printing and then scrapping case labels. The trade-off for this method was the time and space it required to off-load the pallets from the trailer, spread them out, label, and then move the labeled cases to pre-cool, versus the current practice of moving pallets directly from the harvest truck to the pre-cool equipment. One of the participants tested this approach thoroughly, running three separate trials of labeling at the cooler. While they were able to improve the process over the multiple tests, their best result was that labeling at the cooler added 20-30 minutes and took about 700 square feet of space in the receiving area for each truck received. The conclusion of the company performing the test (and the others observing the test) was that while there would almost always be a requirement to print and apply labels at the cooler for exceptions, this process was not suitable for high volume commodities.

“Crew ownership” of the compliance process was another major concern of the pilot participants. In their view, the success of PTI compliance in the field depended on the individual harvest crews. Successful deployments must provide crews the tools they need to be successful, as well as a way to measure and monitor that success. This, combined with the reality that harvest crew members are generally not highly-educated or computer-literate, increased the focus on this area.

One critical element of “crew ownership” was making sure that the system and information used was consistent with the way the crew operates. A good example of this issue is product descriptions. The description for an item used in the accounting system and/or by the sales team with their customers often is different from the description used in the field. This caused confusion in early pilots before RedLine identified it as a key part of the pilot planning. Another important aspect of crew ownership was ensuring that the system worked for both English- and Spanish-speaking users. By paying attention to these types of items and including several other crew suggestions for improvements over the

course of the pilots, the crew's ownership of the system and the traceability results were very high.

Reporting was not a focus area for the pilots compared to label printing and crew productivity. However, the improved visibility into harvest operations and the potential for using this information to better manage the harvest became a standard topic at the review meetings at the end of each pilot project. RedLine Field enables measuring and monitoring the results of the traceability process by providing individual users with views into the data directly from the mobile devices as well as through a web-based reporting system. The people printing labels for the harvest were able to track their progress against the daily plan, while harvest operations could monitor progress across teams and commodities thanks to the remote synchronization capabilities of the mobile devices.

The ability to easily view harvest status across locations, crews, and commodities, to measure the timing and source of changes to the daily plan, and to better understand productivity across crews were identified as significant new information that could be generated by the PTI compliance process.

## **Summary**

Across the board, the companies participating in the RedLine Field traceability pilots concluded that PTI compliance was achievable within their harvest operations without slowing down the overall pace or productivity of the harvest.

The process of performing PTI Compliance field projects has been very successful for both RedLine and for the pilot participants. RedLine's partners in this process report that they now have a strong understanding of how compliance will effect their harvest operations, as well as valuable information on the necessary timing and approach for rolling out their new process.

RedLine has adapted its solutions based on the pilot experience and continues to build on a wealth of practical knowledge regarding the most effective combinations of hardware, software, media (labels) for different commodities and harvests. They look forward to continuing to work with Fresh Produce companies to deploy PTI Compliance solutions based on each company's requirements and time-line.

## **Contacts**

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## **About RedLine Solutions**

RedLine Solutions provides complete solutions that enable whole-chain traceability for Growers, Packers and Shippers. We have over a decade of experience integrating barcode and wireless technologies to increase productivity in the Cooler and the Field. Whether you need just a barcode printer or a complete traceability solution, RedLine can deliver the appropriate hardware and software to meet your requirements from start to finish. **For more information, please visit [www.redlineforproduce.com](http://www.redlineforproduce.com).**