CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2002
DateRun:	06/18/2002
Experimenters:	Jason Marshall, Heidi Wilcox
ClientType:	General
ProjectNumber:	Project #1
Substrates:	Steel
PartType:	Coupon
Contaminants:	Paints
Cleaning Methods:	Low Pressure Spray
Analytical Methods:	Visual
Purpose:	To compare new spray delivery system with traditional spray can method for single pass application.
Experimental Procedure:	Three clean steel plates (12" x 12") were coated with a single pass of from each system from 12" away. After the single pass, the coupons were laid flat to dry. Once dry, two measurement were made to determine the spray width and the over-spray amount. The spray patterns were photographed as well. The results were compared for both systems.
Results:	The Enviro Caddie system (EC system) provided a thicker strip of paint than the Traditional Spray Can system (TSC system). The EC system provided a strip about 5 cm wide compared to 3 cm for the TSC system. The EC system also resulted in a wider over-spray measurement. Tables 1, 2 3 and 4 list the measurements for both systems.

Table 1. Enviro Caddie Thick strip measurement

(cm)	Three measurements. Each end of strip and middle			
Coupon #	left end	middle	right end	average
1	5	4.8	4.8	4.87
2	5.2	5.3	5.1	5.2
3	6	5	5.6	5.53

Table 2. Overspray measurement

Coupon #	One measurement at widest area (cm)
1	14
2	17
3	20
Average	17

Table 3. Traditional Method Thick strip measurement

(cm)	Three measurements. Each end of strip and middle			
Coupon #	left end	middle	right end	average
4	3	2.3	3	2.77
11	2.8	2.8	3	2.87
12	4	3.1	2.9	3.33

One measurement at widest area	
4	7
11	11
12	10.2
Average	9.4

Figures 1 and 2 show the single pass spray pattern for each system. Figure 3 compares the two systems directly.

Figure 1. Enviro Caddie System Single Pass
Figure 2. Traditional Spray Can System Single Pass
Figure 3. Direct Comparison of EC system and TSC system

Substrates: Steel Plate;
Coating Type: Paint;

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Delivery System:	Average Spray Width	Average Over-Spray Width
Enviro Caddie	5.20 cm	17 cm
Traditional Spray Can	2.99 cm	9.4 cm

Summary:

Conclusion: The Enviro Caddie System delivered a wider spray path than the Traditional System did.