

# ONGUARD RAIL CIP (Product Trial Recap)



Contents of this Report:

1. Overview of Wash Process
2. Results of ONGUARD Polishing Process

CONFIDENTIAL

## OVERVIEW

(Day 1)

- 4 cars were identified as asphalt tanker cars for the trial wash
- 1,000 gallon vat; 200 PSI sprayer
- 160 degrees at 20 minutes with ONGUARD at a 30% concentration rate
- 45 minute diesel wash prior to ONGUARD application
- 1 hour dry time
- This companies team immediately identified an improvement in our product that was used vs. their current product. The VP of Operations and his team estimated that this result would save them 2-3 hours of time for a person to conduct a final scrape and rinse inside of the car. It is important to note that the final polishing/rinse process is very labor intensive inside of a tanker car and is used with a 10,000PSI sprayer
- Keynote to point out, this customer was using 2 separate products mixed together vs. our single product solution
- Reference pictures below for comparison of results:



Competitors Product Results

Competitors Product Results

(Ceiling of Railcar with Asphalt Residue) (Bottom of Railcar with Asphalt Residue)



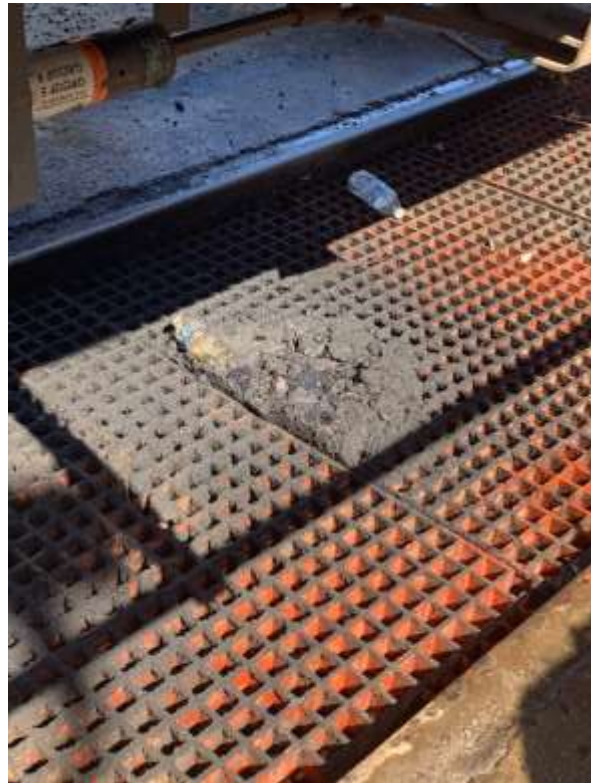
ONGUARD Product Results  
(Ceiling of Railcar with Asphalt Residue)



ONGUARD Product Results  
(Bottom of Railcar No Asphalt Residue)

(Day 2)

- 4 cars were identified as asphalt tanker cars for the trial wash
- 1,000 gallon vat; 200 PSI sprayer
- 185 degrees at 30 minutes with ONGUARD at a 30% concentration rate
- 45 minute diesel wash prior to ONGUARD application
- 1 hour dry time
- The bottom of the rail car had no residue and the ceiling of the car had minimal residue
- This company's team had a client on site to validate the cleanliness of their car after our wash process. The client was very impressed with the results and confirmed it would pass inspection.
- \*\*\*The outcome of this resulted ZERO man hours needed to enter the railcar for final polish or rinse process. On average this process can take up to 1-2 days.
- The company was very pleased with the results as it will allow them to:
  1. Reduce the man hours inside of the railcar for final rinse
  2. Reduction in risk and exposure
  3. Optimization of product use of ONGUARD by eliminating 2 products into 1
  4. Reduction of cost of product used as cleaning agent
  5. Increase in TAT (Turn Around Time) to clean each railcar
  6. Improvement in the number of railcars cleaned per day



\*Manual process to conduct final rinse of Asphalt Railcar

\*Residue that is removed from final high pressure water rinse process

