

# **Pavement Technology, Inc.**



**PAVEMENT PRESERVATION EXPERTS  
FOR  
39 YEARS**

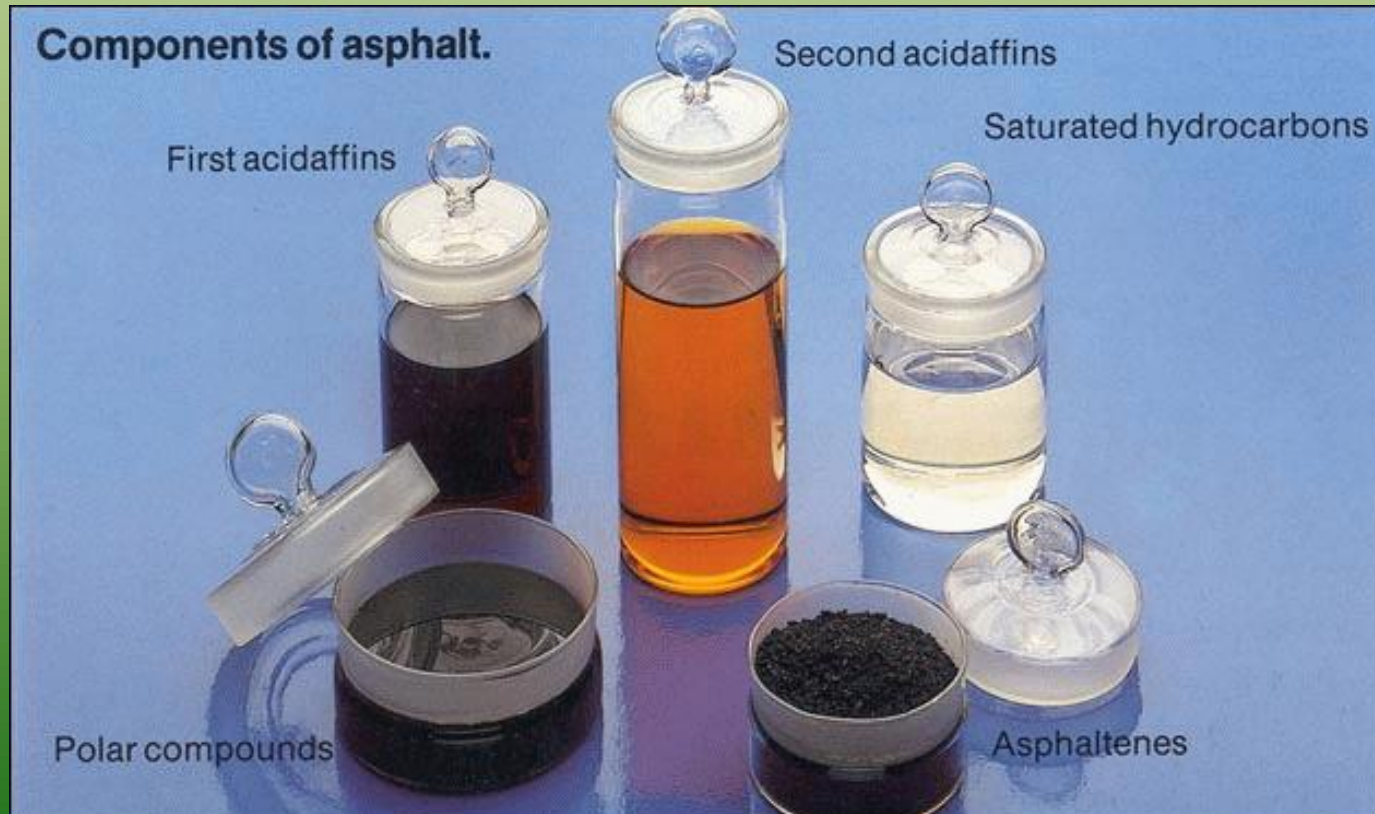
# PTI has been involved in Pavement Preservation Since 1972

- Before pavement preservation was as popular as it is today;
- Processes we provide to DOT's include:
  - Longitudinal Joint Stabilization with **JOINTBOND®**;
  - Asphalt Rejuvenation with **Reclamite®**;
  - Skidabrader-Reclamite Treatment.

**ALL ARE MALTENE REPLENISHMENT  
PROCESSES**

# Why MALTENE replenishment?

## Simple Asphalt Chemistry!



Asphalt Cement = Asphaltenes & Maltenese



# Maltene Loss



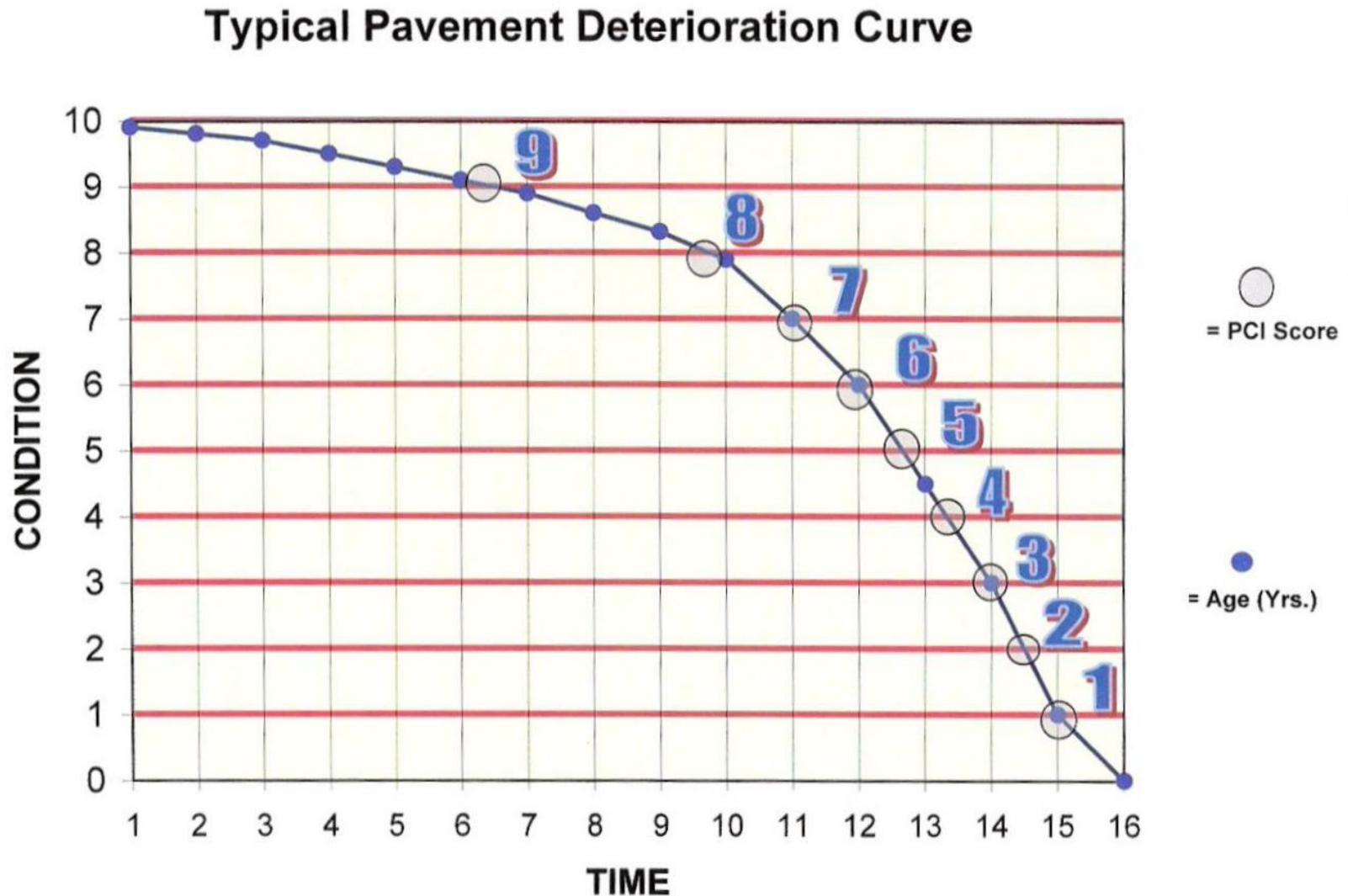
**Due to high temps during hot-mix production**

**Constant exposure to the sun's UV rays and subsequent surface flushing by rains**





# Maltene Loss = Deterioration



# JOINTBOND®

Prevent longitudinal joint deterioration





# JOINTBOND® Polymerized Maltene Emulsion for Longitudinal Joints





# Reclamite Asphalt Rejuvenator





# Skidabrader & Reclamite® Surface Treatment



Skidabrading the surface  
increases Skid Numbers Prior to  
Reclamite Application



**Reclamite** Asphalt Rejuvenator is applied  
and penetrates down into the pavement.



**Skid Testing 30 Minutes After Reclamite**  
**application verifies acceptable skid numbers**

# Skidabrader & Reclamite® Surface Treatment

## PAVEMENT CORE TEST RESULTS

Testing by APART, Inc., Shafter, CA - Nov. 5, 2010

Top 3/8-inch of Treated and Untreated Core Samples

Sample Location	Viscosity 60C, Poises	% Change	Phase Angle, Deg.	MODULUS, 60C, Pa			
				Complex	Elastic	% Change	Viscous
TN SR12 Reclamite Treated	15260	41.73%	78.2	15300	3127	51.86%	14978
TN SR12 Untreated	26189		75.7	26258	6496		25442

Summary of Testing: Testing the top 3/8" of each core, the asphalt was extracted and recovered as prescribed by California Test Method 365.

60 C Viscosities, Pa's, phase angles, complex, elastic, and viscous moduli were determined on recovered asphalt binder using the Dynamic Shear Rheometer as prescribed by AASHTO T316.

## Tennessee DOT Skidabrader-Reclamite Treatment Test - State Route 12

### Skid Test Results : Day Before, Day of Treatment, and Day After Treatment

Day Before		9/16/2010		9/16/2010		9/16/2010		9/17/2010	
PM	PM	AM (30 Min. After)		AM (60 Min. After)		PM (3-1/2 Hr. After)		AM (24 Hrs. After)	
1st run	2nd run	1st run		2nd run		3rd run		4th run	
45.2	48.1	Abraded & untreated	55.7	Abraded & untreated	59.2	Abraded & untreated	52.3	Abraded & untreated	52.3
		Abraded & treated	35.0	Abraded & treated	35.8	Abraded & treated	46.9	Abraded & treated	48.7
44.7	47.7	Abraded & untreated	53.7	Abraded & treated	36.9	Abraded & treated	36.0	Abraded & treated	44.2

Note: Rain/standing water was present at this time



**Numerous studies and reports conducted over the past 30+ years have confirmed the effectiveness of Reclamite in extending pavement life.**

Report No. FHWA-RD-78-108

**TECHNIQUES FOR REHABILITATING PAVEMENTS WITHOUT OVERLAYS –  
A SYSTEMS ANALYSIS**

**Vol. 1. Analysis**



**September 1977  
Final Report**

Document is available to the public through  
the National Technical Information Service,  
Springfield, Virginia 22161

**Prepared for  
FEDERAL HIGHWAY ADMINISTRATION  
Offices of Research & Development  
Washington, D. C. 20590**

**Asphalt Rejuvenators  
“Fact, or Fable”**

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**Prepared for Presentation at the  
Transportation Systems 2000 (TS2K) Workshop  
San Antonio, Texas  
February 28 – March 3, 2000**



**VALUE ENGINEERING**

**SUBJECT: Report on Reclamite Usage,  
Naval Weapons Center  
China Lake, Calif.**



**LOWEST COST  
VERSUS  
FUNCTION**

**DEPARTMENT OF THE NAVY  
WESTERN DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
SAN BRUNO, CALIFORNIA 94066**

# **Pavement Technology, Inc.**

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