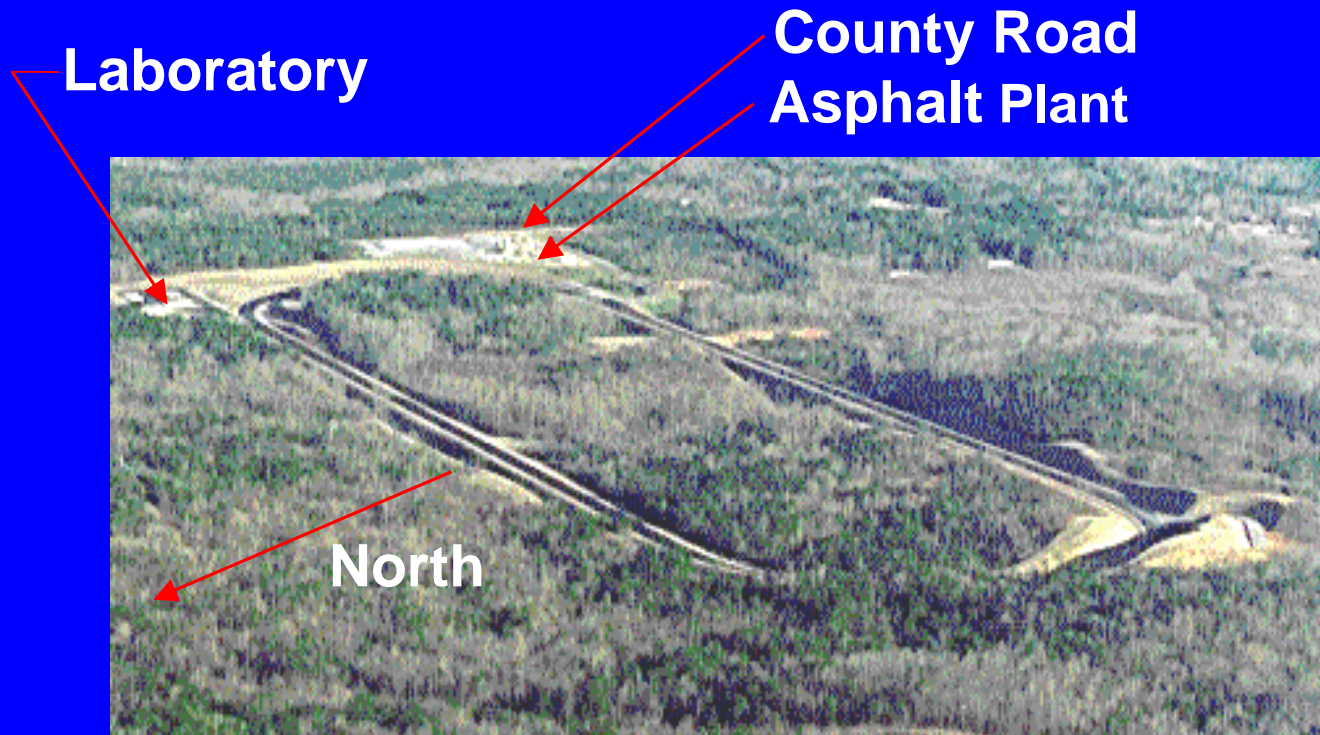




**NCAT TEST TRACK**



# AERIAL VIEW



- 1.7 Mile Oval Test Track on 309 acres
- 46 Cooperatively Sponsored 200 ft Test Sections
- 4700 sq ft Testing Laboratory
- 2600 sq ft Truck Maintenance Facility

**The primary overall objective is to verify/develop tests to improve performance prediction.**

# **INSTRUMENTATION**

- **MOISTURE GUAGES**
- **TEMPERATURE GUAGES**
- **WEATHER STATION**

# CONSTRUCTION (April – July, 2000)



# AGGREGATE STORAGE YARD







# SCOPE OF WORK

- **69 Stockpiles in 46 Total Sections**
- **29 Mix Designs by NCAT**
- **25 Mix Designs by Sponsors**
- **JMF's Adjusted via Plant Trial Runs**
- **Approximately 900 QC Pills**
- **Approximately 4000 Research Pills**
- **Approximately 900 Beams (AVC)**
- **Up to 7 Plant Runs in a Day**
- **500 to 750 tons of Aggregate per Section**

# QUALITY CONTROL SAMPLING



# JOINT GRINDING





**FULLY LOADED TRUCKS  
USED TO APPLY TRAFFIC**





# DATA COLLECTION







# VEHICLE LOADING



- Trucks Currently Run 17 Hours a Day (5:00 AM to 10:00 PM)
- Truck ESAL's Logged Continuously via VIS, Mileage Log, & Tube
- No Trucking on Monday for Data Collection & Vehicle Maintenance
- On Target to Apply 10 Million ESAL's by November 11<sup>th</sup>, 2002

# TRUCKING OPERATIONS









# **SAFETY IS PRIMARY ISSUE**

**STOPPING DISTANCE  
DISTANCE FOR  
ACCELERATION  
ANIMALS**







- **Coarse Superpave Mix**

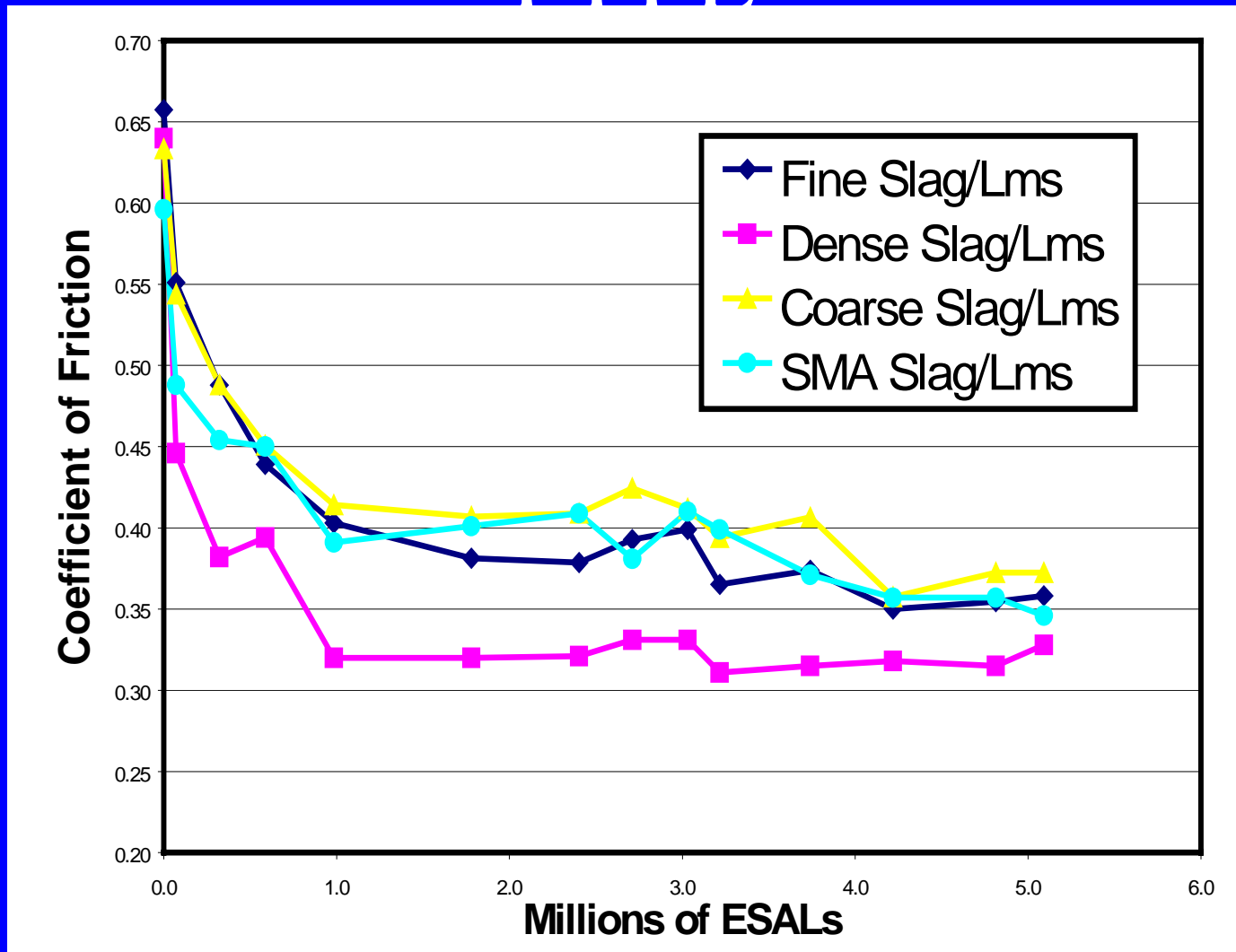


- **Stone Matrix Asphalt Mix**



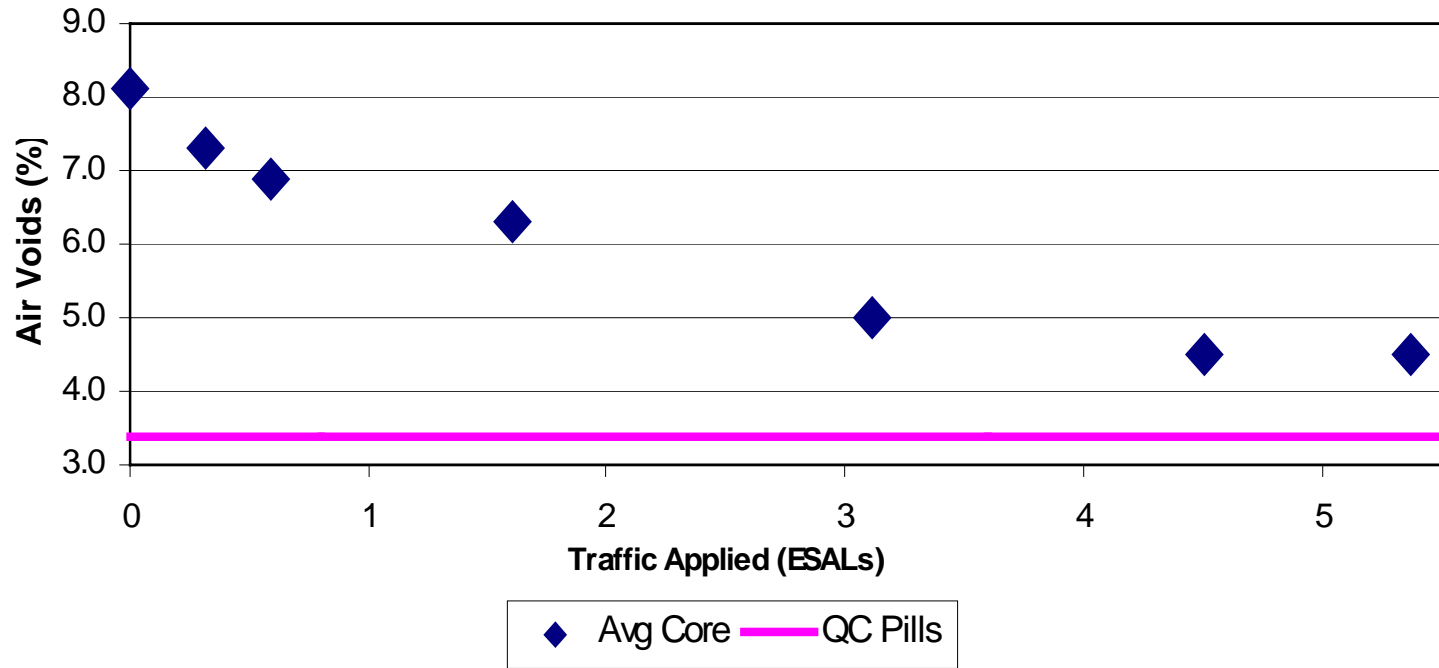
- **Open Graded Friction Course**

# SURFACE FRICTION vs MIX TYPE



# MAT DENSIFICATION

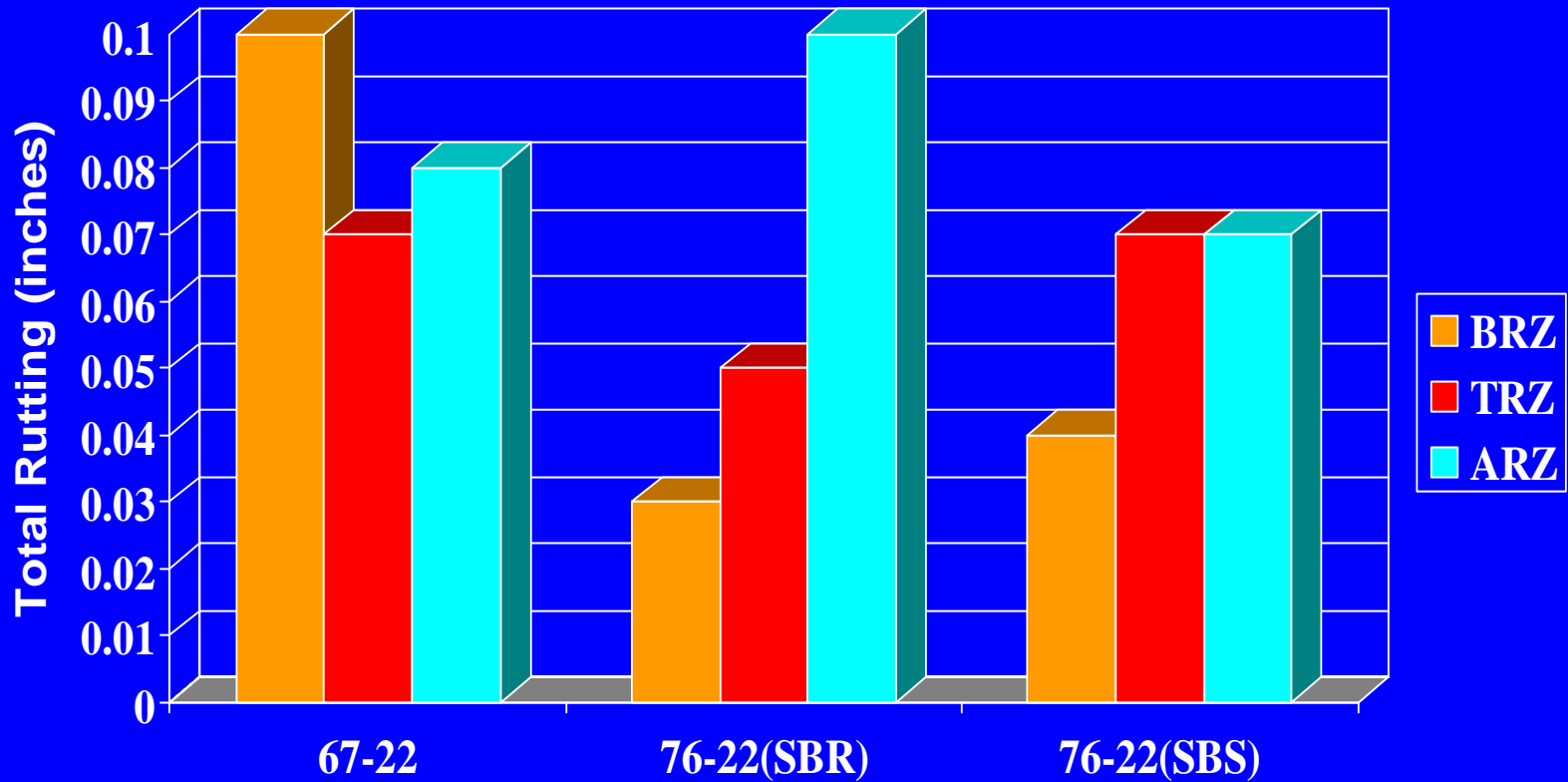
## CORES FROM LAST 25 FT EACH SECTION



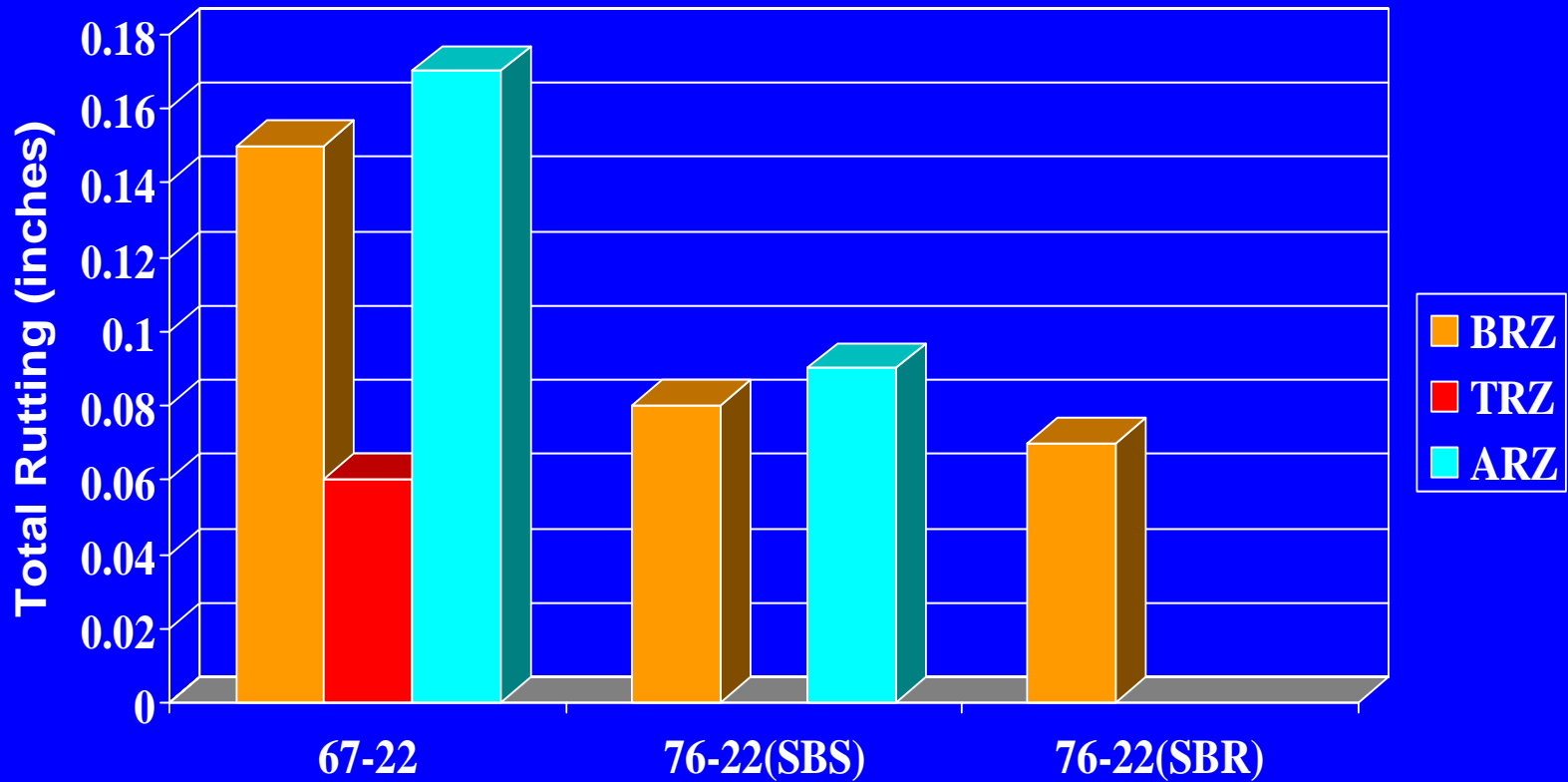
# **OBSERVATIONS TO DATE**

- **OVER 8.0 MILLION ESALS APPLIED**
- **1,300,000 MILES DRIVEN BY TRUCKERS**
- **NO SIGNIFICANT ACCIDENTS**
- **TIRE WEAR HAS BEEN A PROBLEM**
- **MAXIMUM RUT DEPTH---0.3 INCHES**
- **COARSE GRADED MIXES PERFORMING SLIGHTLY BETTER THAN FINE GRADED**
- **NO CRACKING**
- **NO RAVELING**
- **SECTION OVERLAID DUE TO FRICTION**

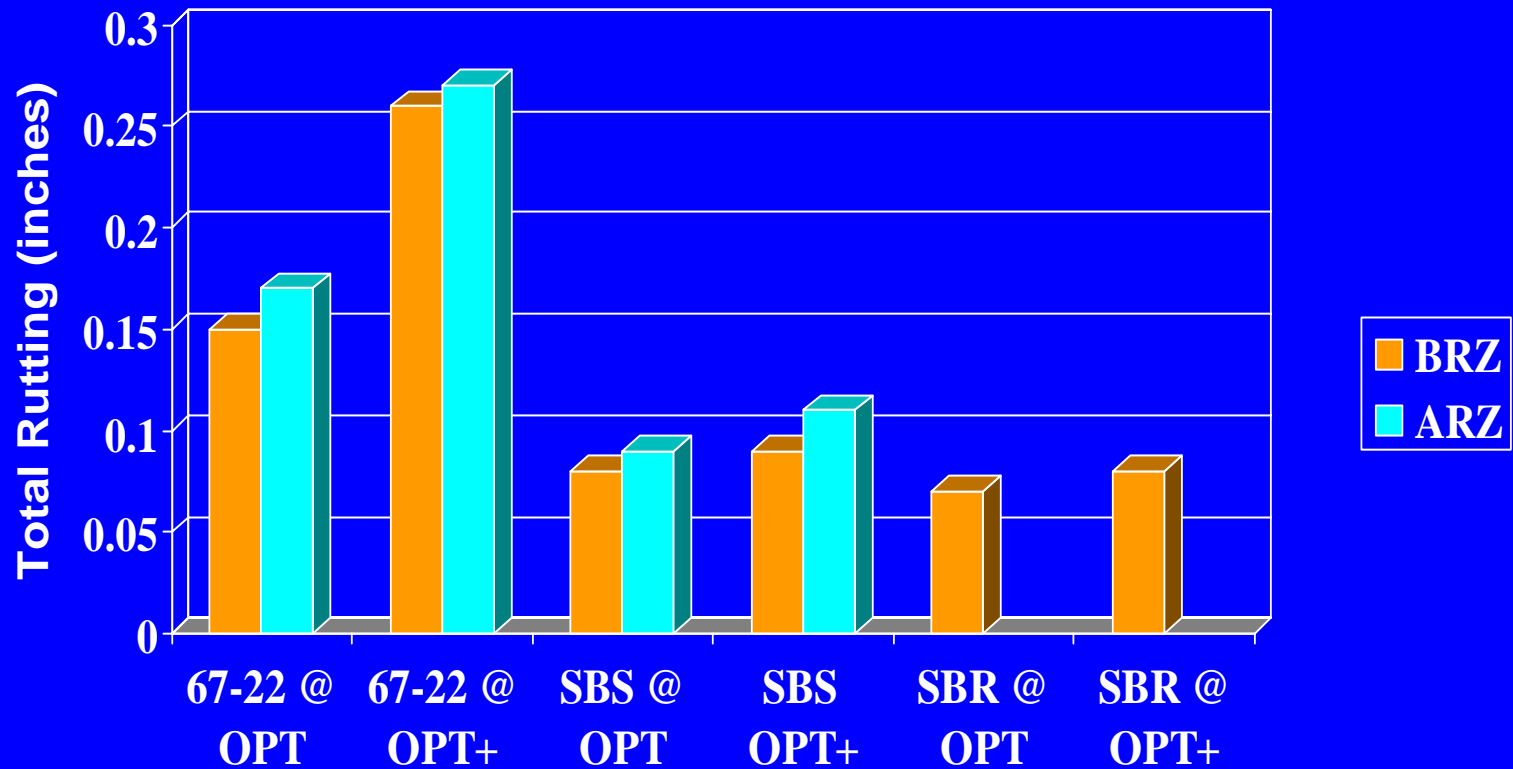
# EAST CURVE GRANITE STUDY



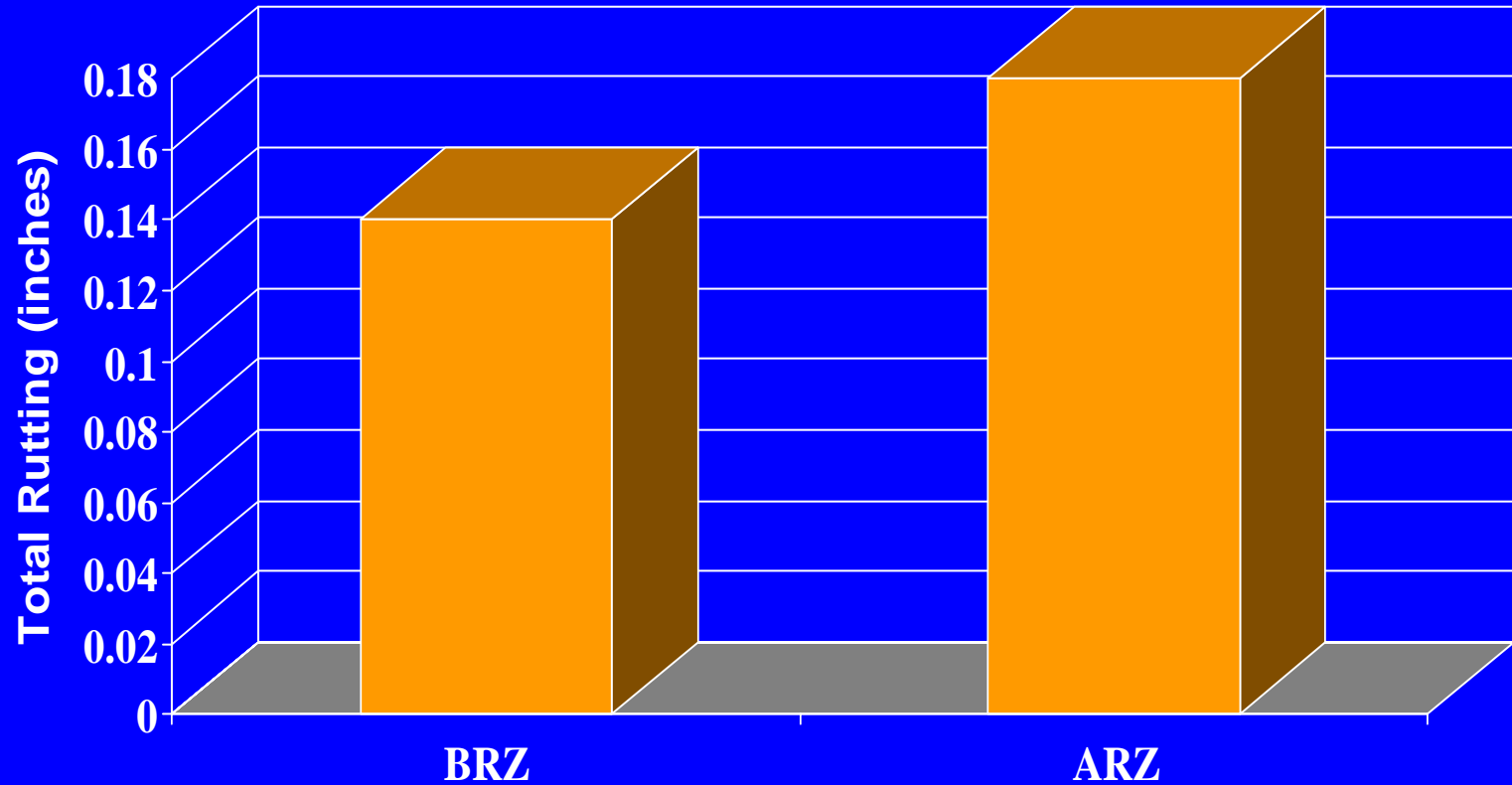
# SLAG/LIMESTONE STUDY



# NORTH TANGENT SLAG/LMS STUDY

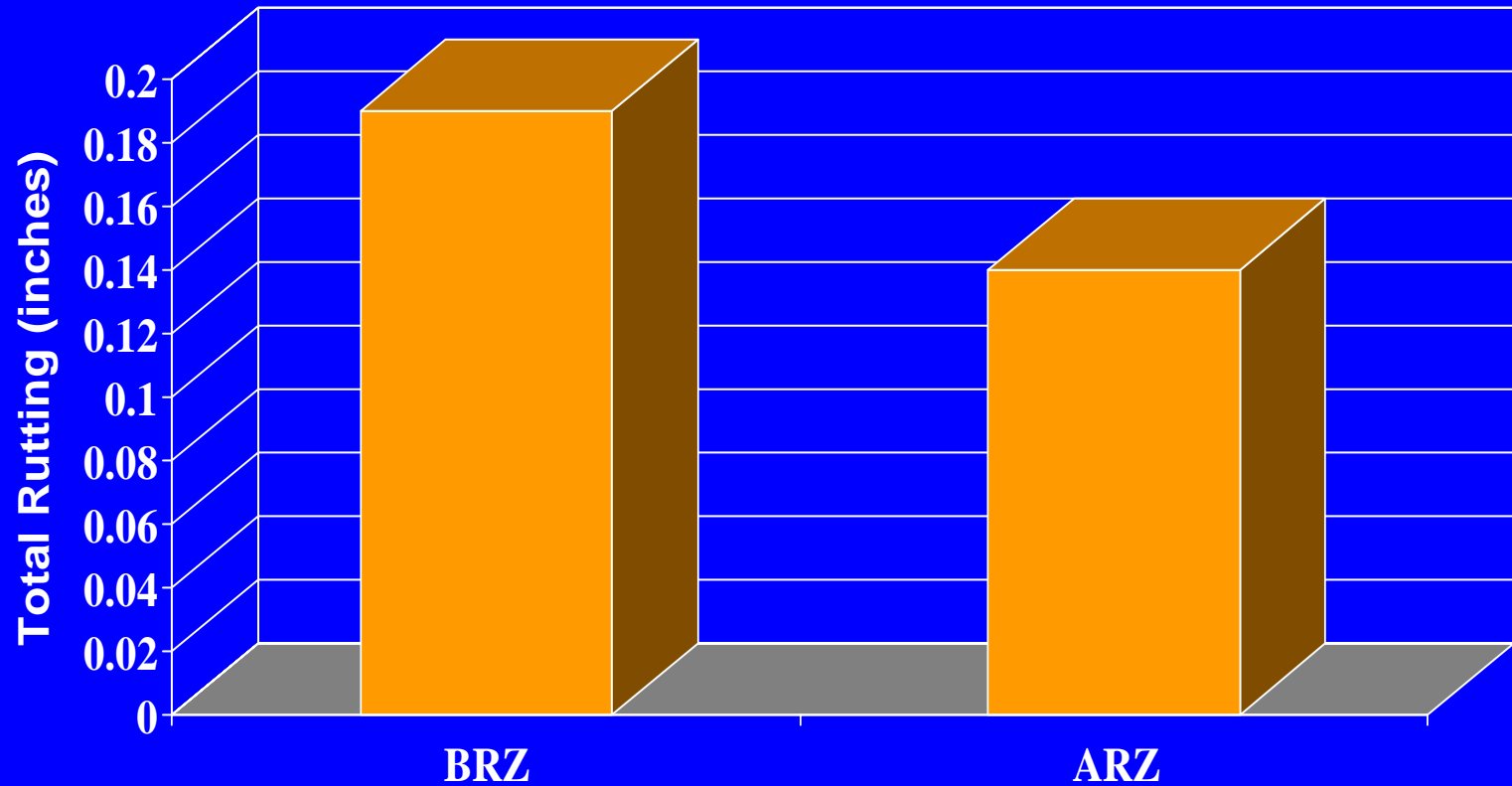


# SOUTH TANGENT LIMESTONE

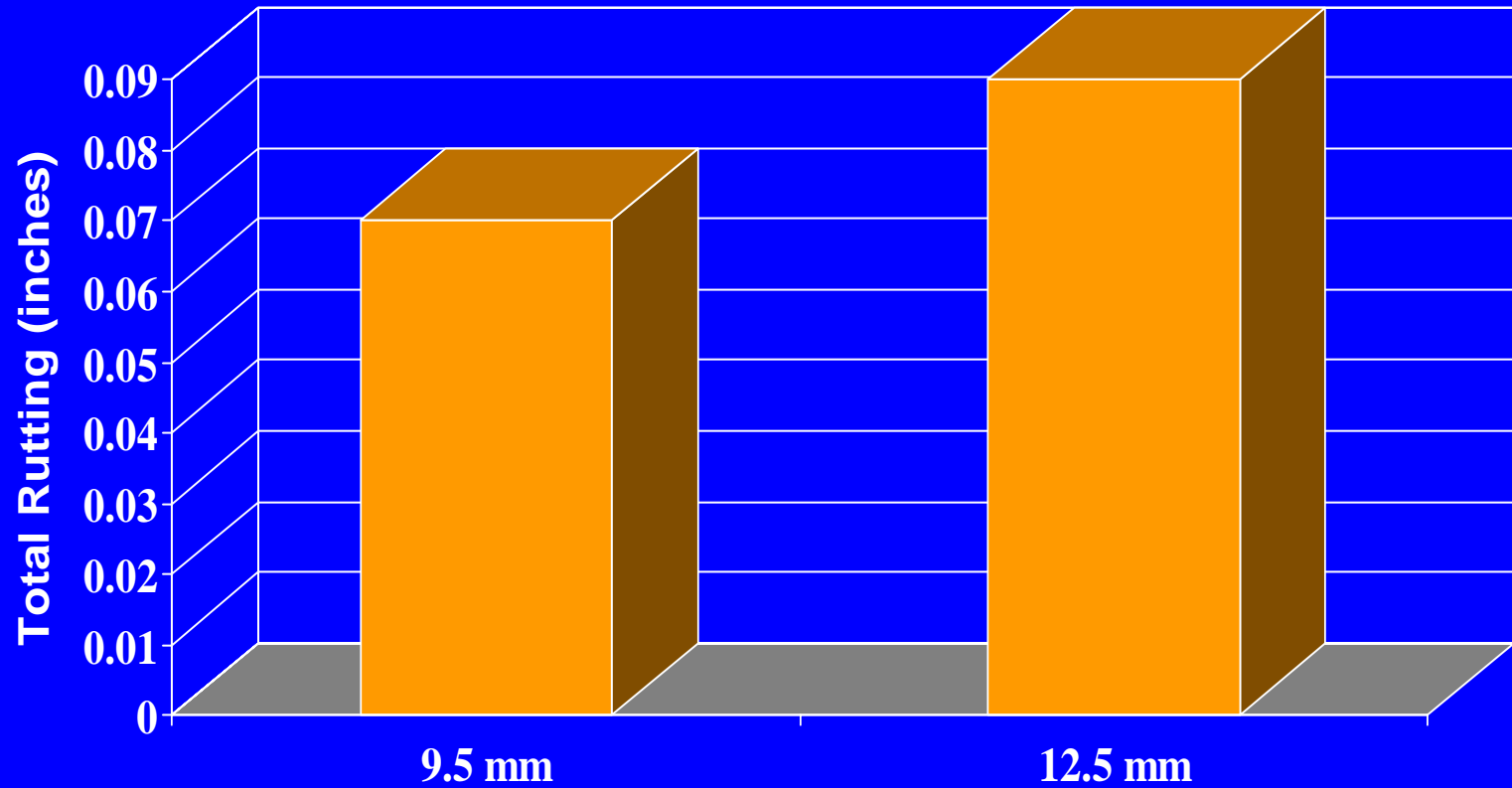




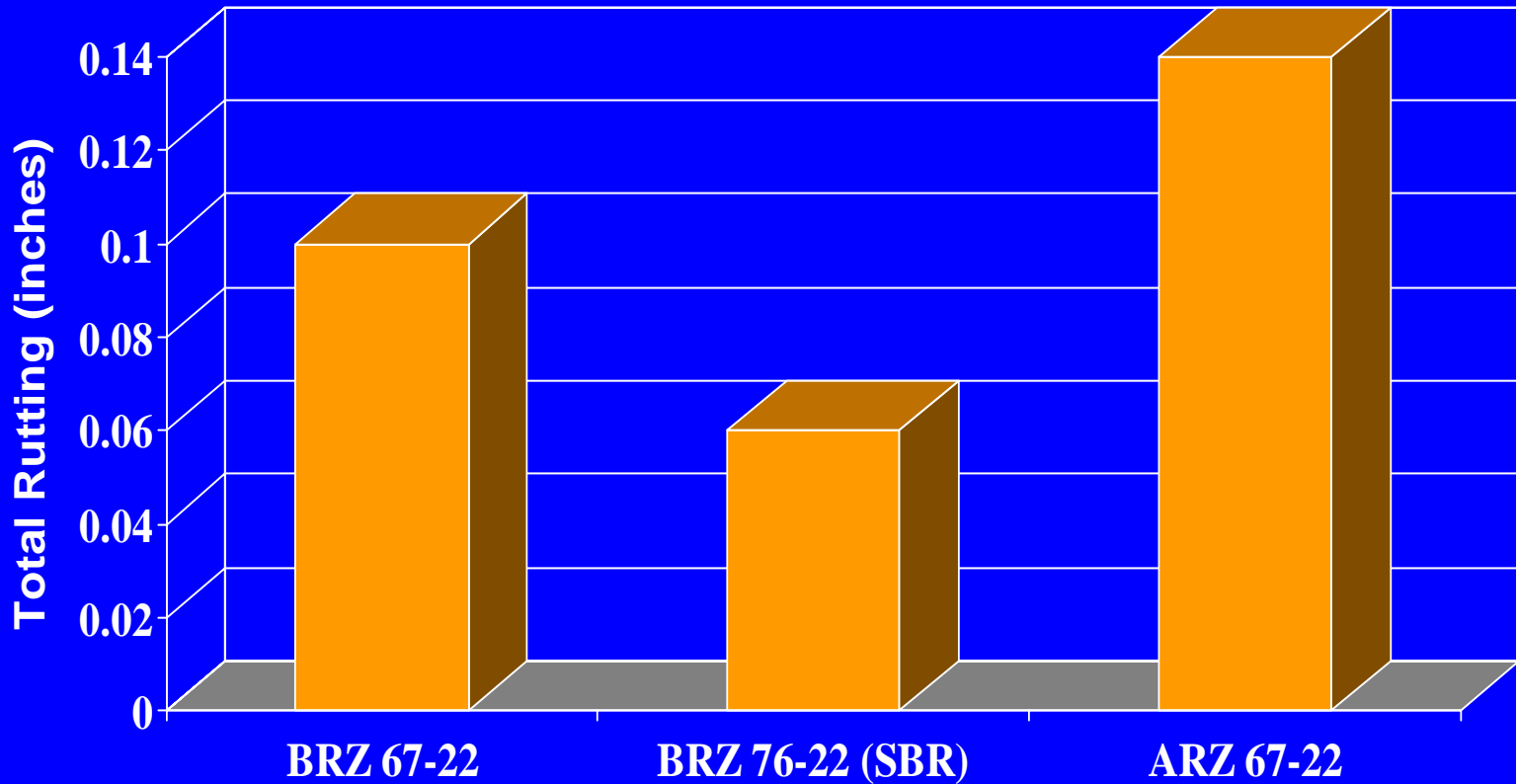
# SOUTH TANGENT GRANITE



# SOUTH TANGENT NMA

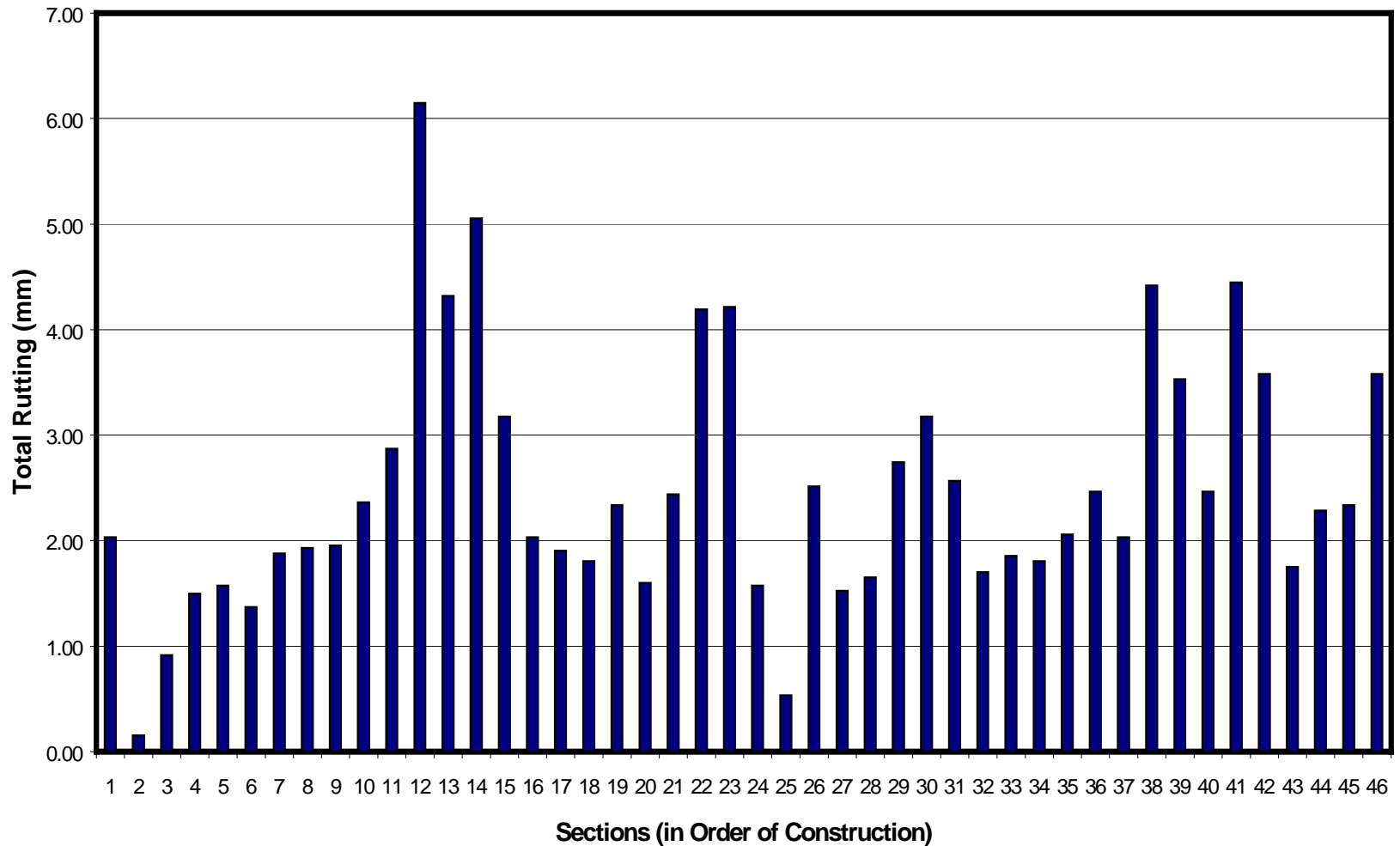


# CURVE GRAVEL STUDY

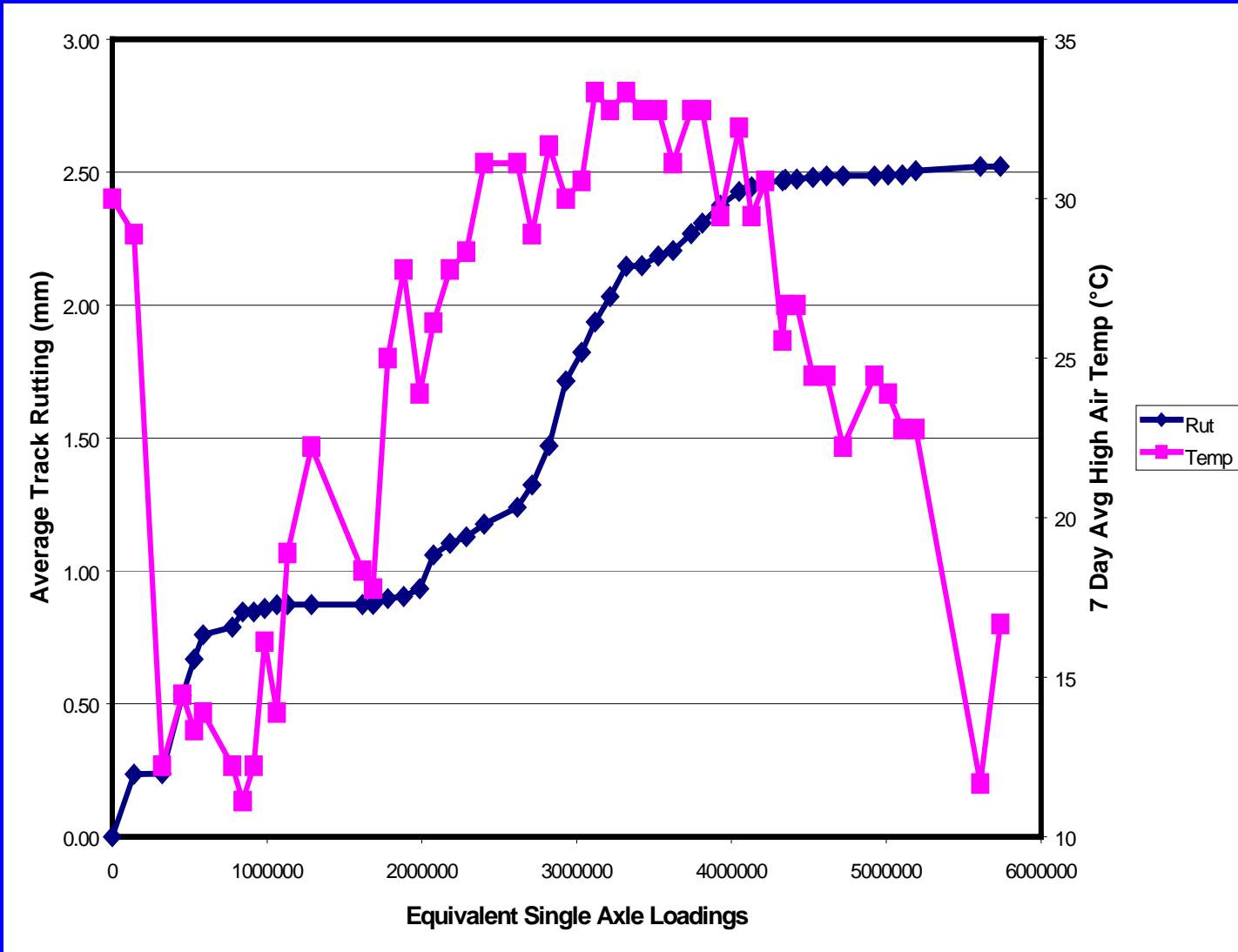


# RUTTING DISTRIBUTION

(Numbered Counterclockwise where 1=E2, 10=N1, 23=W1, 33=S1, 46=E1)



# AVG RUTTING OVER TIME



**TRAFFIC SHOULD BE  
COMPLETED IN  
NOVEMBER 2002 AND  
REPORTS COMPLETED  
ABOUT 6 MONTHS LATER**

**NEXT CYCLE OF TESTS  
SHOULD BEGIN IN 2003---  
WE ARE NOW TALKING TO  
POTENTIAL SPONSORS**

**WEB PAGE**  
**pavetrack.com**



# STRUCTURAL STUDY