Milo, Maine

Pleasant River Bridge

Bridge #3244

Deck Core Sampling Results

March 21, 2012

DESCRIPTION:

As noted in the wearing surface replacement plans for Pleasant River Bridge, Project No. AC-BR-1930(400)X, "The report contains visual inspection information and deck core data of the bridge. There is no assurance that the information or data is a true representation of the conditions of the entire deck."

This data has merely been collated, not analyzed by a professional experienced in deck evaluations. Therefore, there is no assurance that the observations below are illustrative of the overall condition of the deck or the work effort required to rehabilitate the top surface of the deck slab.

OBSERVATIONS OF THE DECK CORE SAMPLES:

1) "*I talked to Jason he said that the deck looked to be in good shape. He said that when he was coring the concrete appeared to be nice and hard. The cores did come up in good shape. All but two of the cores they came up in two pieces. Out of those ten cores all but one of the cores was a solid two pieces. I am also going to send you the pictures that Jason took of the cores."* quote from Robert (Scott) Haradon regarding the impression that Jason Godlin had of the deck condition upon taking the sample cores.
2) Per the designer's request, the lab did not take compressive strength tests of the wearing surface but only the top of the deck with an emphasis on testing cores that would be representative of the strength variation in the full sample set.
3) The top portion of the slab cores that were strength tested came from Cores #1, #3, #5, #9, #10, #11, and #12.
4) The resulting average compressive strength of the tested samples is 5364 psi; the range is 4263 psi to 6469 psi.
5) There are many extremely high chloride levels measured in the top of the existing wearing surface, seven samples measuring 9.25_lbs./CY or higher, the maximum at 14.17 lbs./CY.
6) Most of the chloride level measurements from the wearing surface level immediately above the deck range from 1.23 to 6.05 lbs./CY.
7) The lowest levels of Cores #9 and #10 measured have extremely high chloride levels, 8.81 lbs./CY and 10.36 lbs./CY. This may indicate slab problem areas, despite the likelihood that these lowest measurements for Cores #9 and 10 were taken in a level of the wearing surface above the slab. It seems the bottom of the measured level was 1 inch above the slab for Core #9, and 2.5 inches above for Core #10).

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245284		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **0+39** Offset, ft: **10, RT**

Contractor: Resident: **BURNE, B.** Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**3.09**
1.0-1.5	**2.05**
2.0-2.5	**1.26**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**3.0-7.0**	**5621.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #1, Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

Paper Copy: Structure File Electronic: Customer — BURNE, B.

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245285		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **0+83** Offset, ft: **1, RT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**9.72**
2.5-3.0	**4.51**
5.25-5.75	**1.77**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report.

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245286		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **1+42** Offset, ft: **10, RT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**4.47**
2.0-2.5	**2.34**
2.5-3.0	**1.23**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**3.0-7.5**	**6469.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #3, Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245287		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **1+76** Offset, ft: **1, RT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**9.25**
2.5-3.0	**4.26**
5.0-5.5	**2.69**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #4 , Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245288		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **2+38** Offset, ft: **9.5, RT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**5.15**
2.0-2.5	**2.23**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**3.0-7.75**	**5331.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #5 , Bridge #3244, Milo, Pleasant River Bridge

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245289		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **2+84** Offset, ft: **1,**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**11.66**
3.0-3.5	**4.13**
5.0-5.5	**2.74**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #6, Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245290		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **2+84** Offset, ft: **10, LT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**5.68**
1.0-1.5	**5.16**
4.5-5.0	**2.05**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #7, Bridge #3244, Milo, Pleasant River Bridge

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Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245291		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **2+18** Offset, ft: **1, LT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**14.17**
2.5-3.0	**9.97**
5.5-6.0	**6.05**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #8, Bridge #3244, Milo, Pleasant River Bridge

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245292		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **1+76** Offset, ft: **10, LT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**6.45**
1.0-1.5	**8.81**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**3.5-7.5**	**4593.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #9, Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245293		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **1+42** Offset, ft: **1, LT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**11.31**
2.5-3.0	**10.36**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**5.0-9.5**	**5001.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #10, Bridge #3244, Milo, Pleasant River Bridge

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Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245294		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **0+83** Offset, ft: **10, LT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**10.77**
1.0-1.5	**5.37**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**1.75-6.0**	**4263.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #11, Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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BRIDGE CORE TEST REPORT
Central Laboratory

SAMPLE INFORMATION

Reference No.	Boring No./Sample No.	Sample Description	Sampled	Received
245295		**BRIDGE CORE**	**8/9/2011**	**8/9/2011**

Sample Type: **OTHER** Sampler: **GODIN, JASON G** Sample Location:

PIN: **019304.00** Town: **Milo** Station: **0+39** Offset, ft: **1, LT**

Contractor: Resident: Dbfg, ft:

TEST RESULTS

Shear Bond (MeDOT)		
	Location, inch	Strength, psi
Specimen 1		
Specimen 2		

Chloride Content (T 260)	
Location, inch	Chloride Level, lb/yd³
0.0-0.5	**12.24**
1.0-1.5	**9.88**
2.5-3.0	**5.09**

Compressive Strength (T 22)		
	Location, inch	Strength, psi
Specimen 1	**4.5-8.5**	**6272.00**
Specimen 2		

Rebar Corrosion (MeDOT)		
	Location, inch	Corrosion Level
Specimen 1		
Specimen 2		
Specimen 3		
Specimen 4		

Comments:

Final report. Core #12, Bridge #3244, Milo, Pleasant River Bridge

AUTHORIZATION AND DISTRIBUTION

Reported by: **HARADON, ROBERT S** Date Reported: **8/29/2011**

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8

Milo Bridge # 3244

Pleasant River Bridge Core #

1

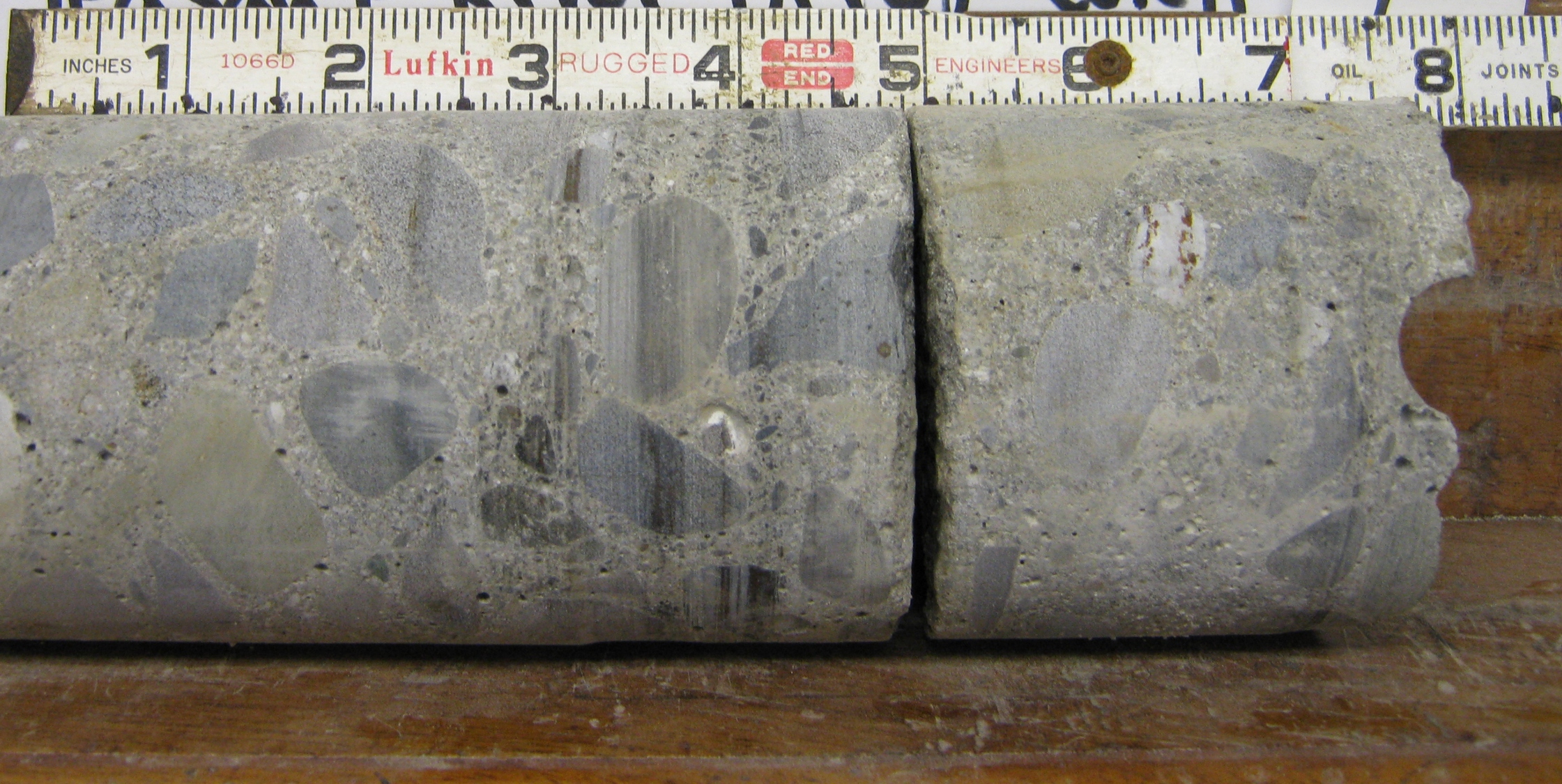
Milo Bridge # 3244
Pleasant River Bridge Co. # 2

Milo Bridge # 3244

Pleasant River Bridge Core # 3

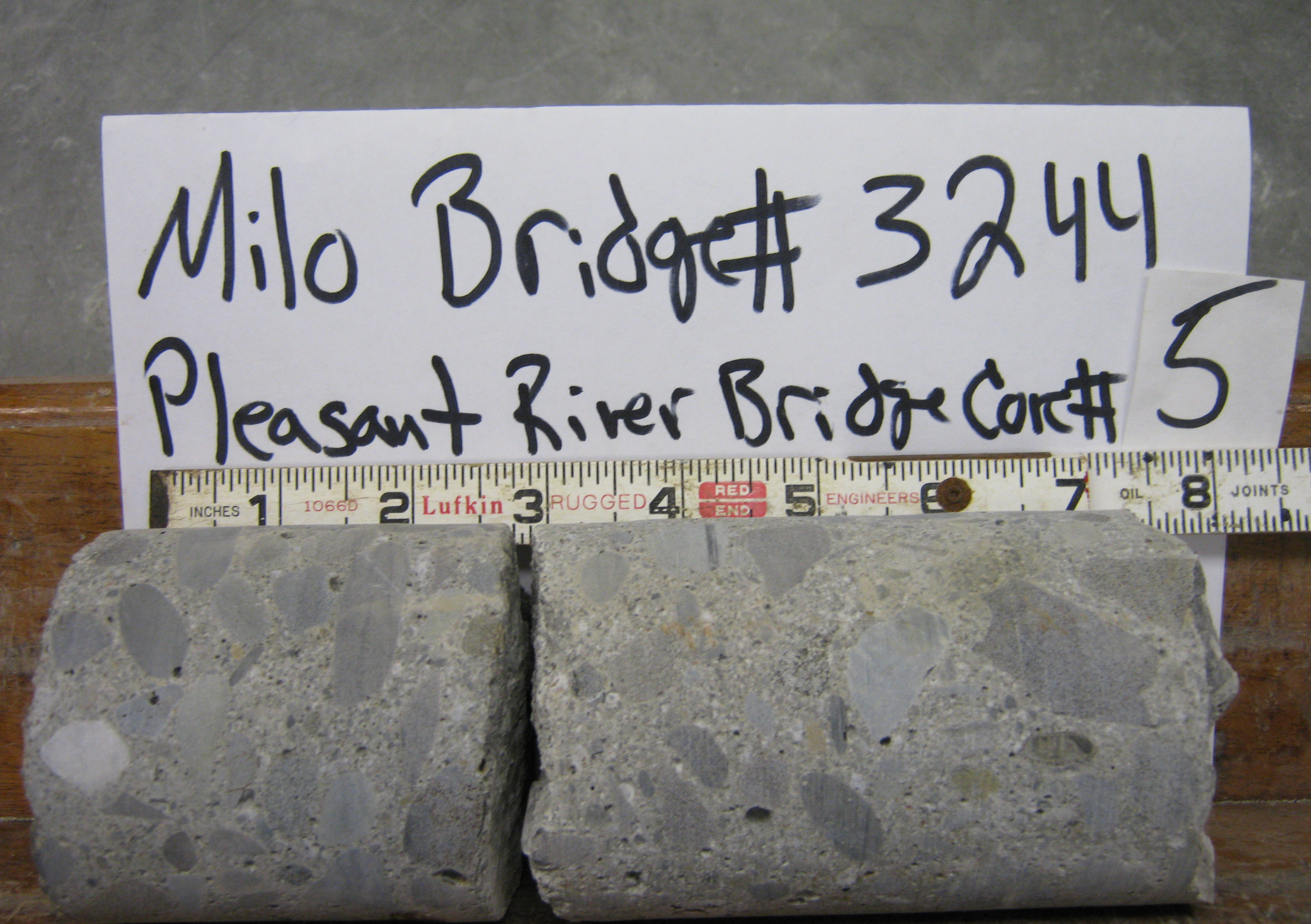
Milo Bridge # 3244

Pleasant River Bridge Core # 4



Milo Bridge # 3244

Pleasant River Bridge Core # 5

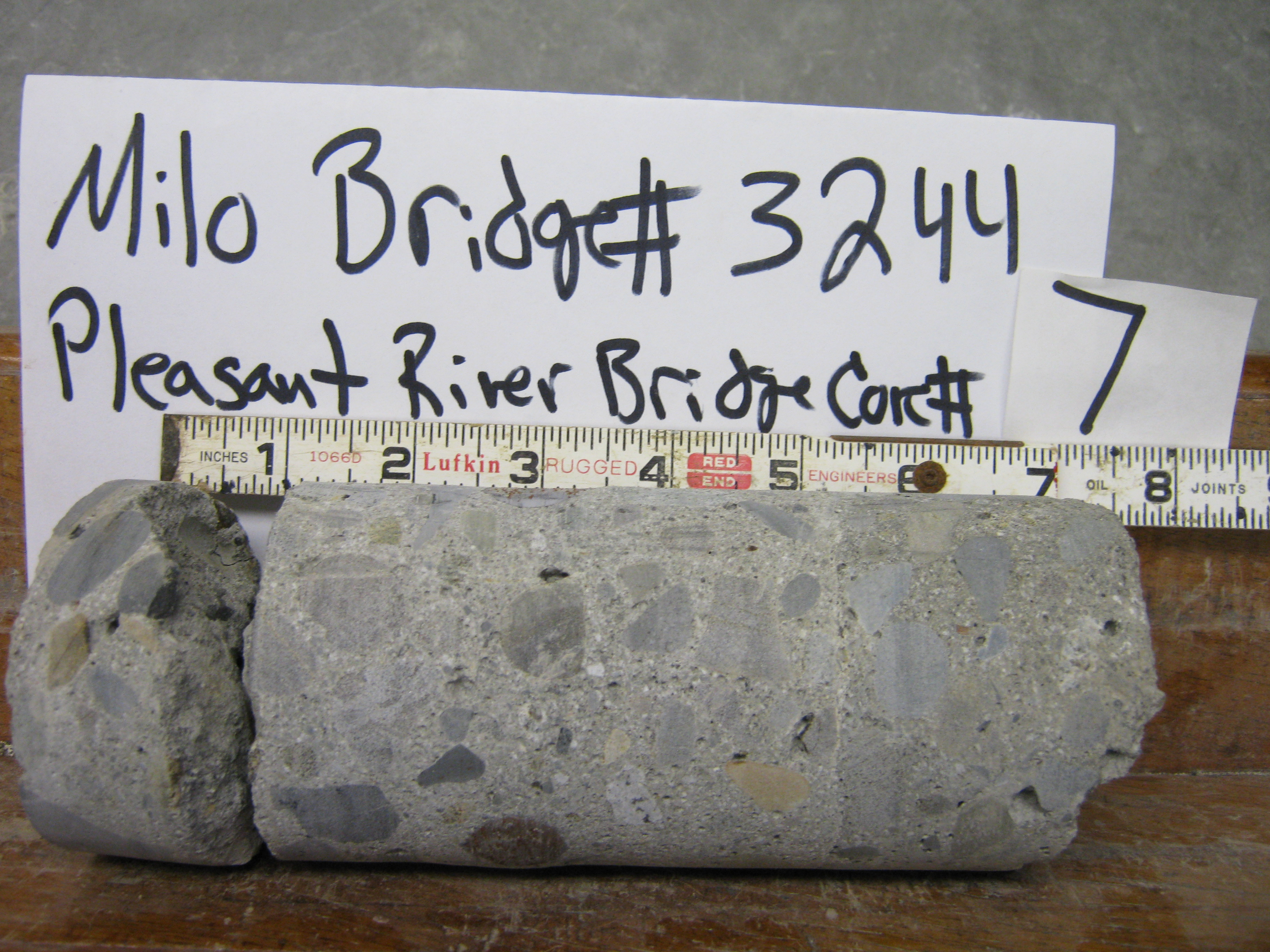


Milo Bridge # 3244

Pleasant River Bridge Core # 6

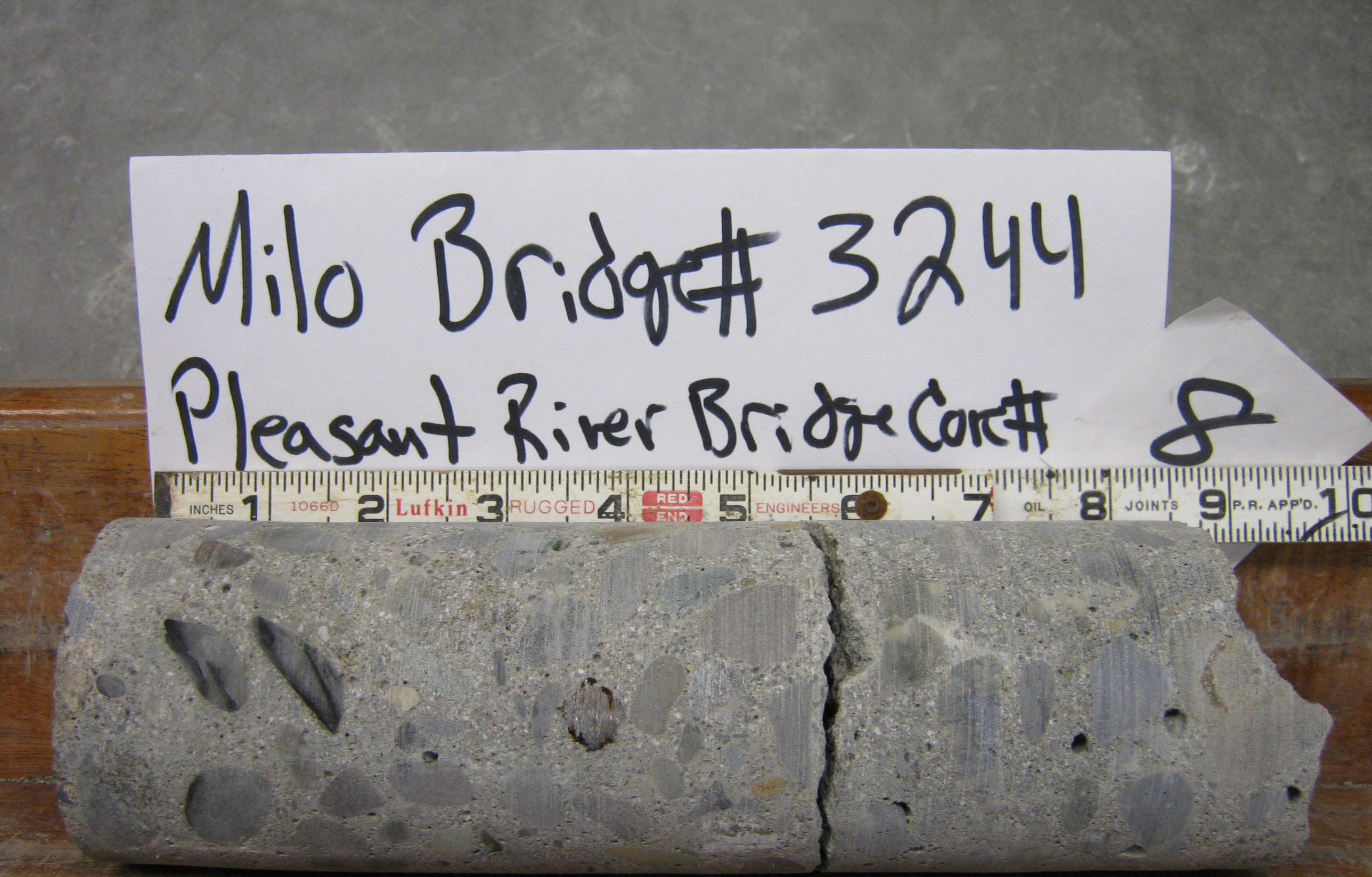
Milo Bridge# 3244

Pleasant River Bridge Core# 7



Milo Bridge# 3244

Pleasant River Bridge Core# 8



Milo Bridge # 3244

Pleasant River Bridge Core # 9

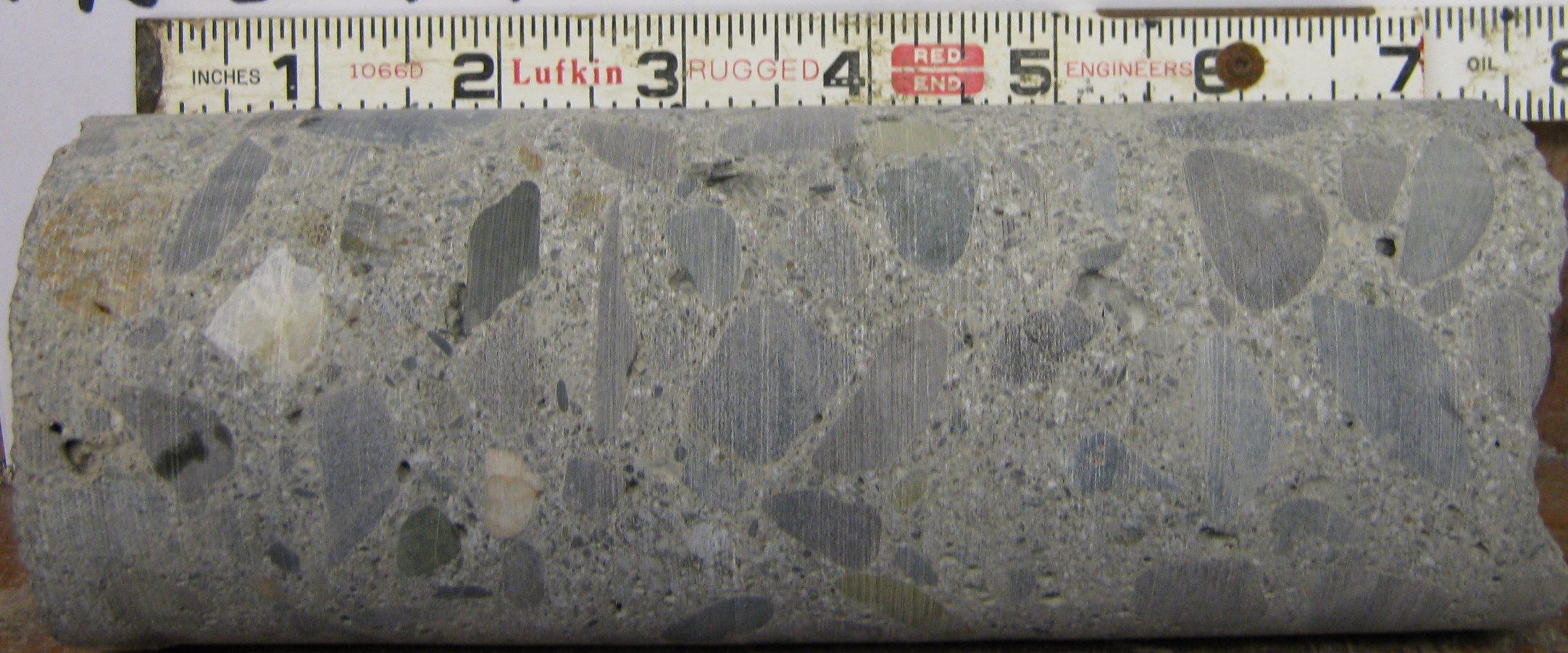
Milo Bridge # 3244

Pleasant River Bridge Core # 10

Milo Bridge # 3244

Pleasant River Bridge Core #

11



Milo Bridge# 3244

Pleasant River Bridge Core# 12