2024 HMA PROFICIENCY INSTRUCTIONS

This sample is for the 2024 Statewide Hot Mix Asphalt Proficiency Program. The Level 1A Certified Specialist, to whom this sample is addressed, needs to receive the sample promptly so they can proceed with testing in a timely manner. HMA Proficiency consists of four tests:

- Tex-236-F, Asphalt Content determination by the Ignition Method (Part I)
- Tex-227-F, Theoretical Maximum Specific Gravity (Part II)
- Tex-207-F, Bulk Specific Gravity (Part I)
- Tex-207-F, Bulk Specific Gravity (Part VI, only if applicable)
- Tex-200-F, Dry Sieve Analysis (Part I)

IMPORTANT NOTE: HMA Proficiency must be run independently by each Level 1A Specialist. All tests must be performed according to applicable test procedures, except as noted below. Failure to abide by these directions will obscure results and bias the proficiency ratings.

SAMPLE:

1. **Record the Color ID (Red/Yellow/Blue) located on the exterior of the bucket.**
2. Place the bucket in an oven that has been pre-heated to 250°F.
3. Leave the bucket in the oven for two hours.
4. Remove the bucket from the oven and empty the material in a large flat pan.
5. Weigh up samples using the following weights:

   - Ignition Oven: 1200 grams
   - SGC Molded Specimen at 62.0 mm: 2600 grams
   - Theoretical Maximum Specific Gravity (G_r): 1100 grams

6. Return the samples to a 250°F oven.
7. When the temperature is reached, begin molding SGC specimen, running G_r, and Ignition Oven Extraction:

   - Ignition Oven should be run at 500°C (932°F) or on the default setting on NTO ovens. Do not apply correction factors.
   - Ensure that sieve sizes correspond to those listed in the attached worksheet. Run a dry sieve analysis only on the ignited sample in accordance to Tex-200-F.
   - No dry back is necessary for the G_r.

8. Hand calculate the results.

Submit and upload test results by February 26th, 2024 at www.txhmac.org.

Contact the HMAC at (512) 312-2099 if you have trouble logging in or submitting your results.

Thank you,
Michael Rung
The University of Texas at Austin
Phone (Office): (512) 471-4565
E-mail: mrung@mail.utexas.edu

2024 HMA PROFICIENCY WORKSHEET

This worksheet will be used to hand calculate your 2024 HMA Proficiency results. Keep this worksheet until you have received the final proficiency report.

Submit and upload results by February 26th, 2024 at www.txhmac.org.

TECHNICIAN	
CERTIFICATION NUMBER	
DATE	
COLOR ID (RED/YELLOW/BLUE)	☐ Red ☐ Yellow ☐ Blue

IGNITION OVEN

Weight of basket (g)	
Weight of basket and sample (g)	
Weight of sample (g)	
Weight of basket and sample after burn (g)	
Calculated Asphalt Content (%)	

THEORETICAL MAXIMUM SPECIFIC GRAVITY

Weight of calibrated pycnometer (g)	
Weight of sample (g)	
Weight of pycnometer, sample, and water (g)	
Calculated G_r	

BULK SPECIFIC GRAVITY

Height of specimen (mm)	
Weight of specimen in air (g)	
Weight of specimen in water (g)	
SSD weight (g)	
Calculated G_a	
Calculated % Density	

SIEVE ANALYSIS

Sieve Size	Individual weight retained (g)	Individual % retained	Cumulative % retained	**Total % passing**
¾"				
⅜"				
#4				
#8				
#30				
#50				
#200				
Pan				
Loss from sieving (g)				
Total -200 (g)				

SGC INFO

☐ Pine		Model #	
☐ Troxler		Identification Number	
		Calibration Date	
☐ Interlaken		Internal Angle	