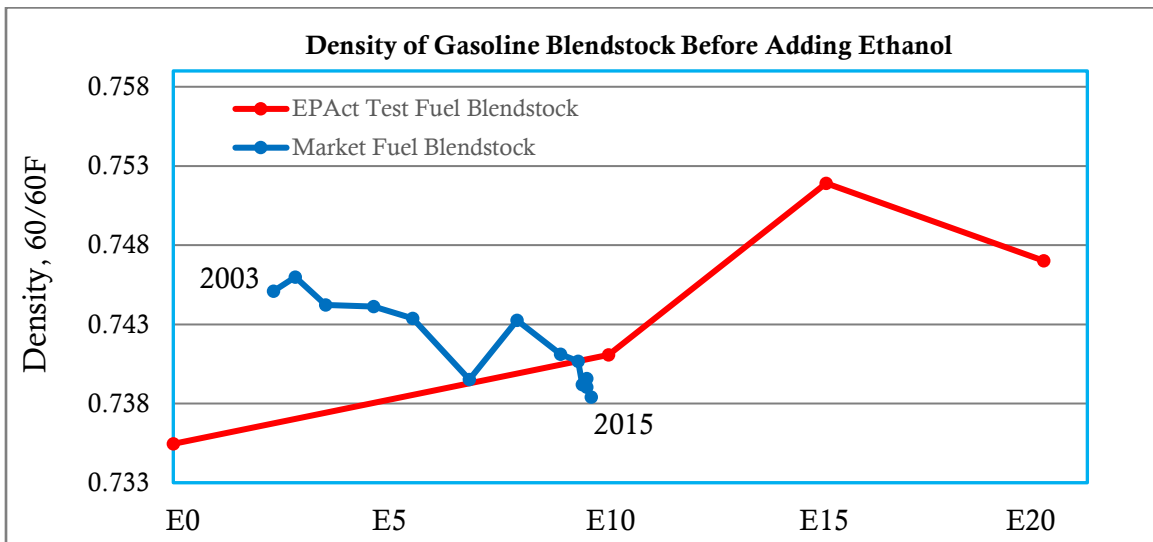
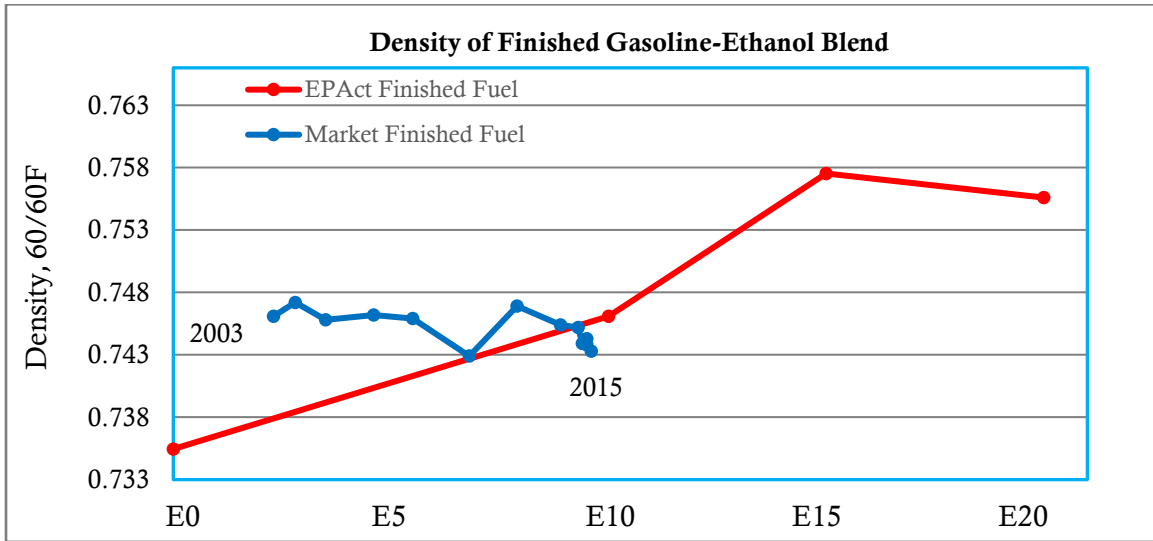


EXHIBIT H
DENSITY OF EPA^{act} STUDY TEST FUELS vs.
MARKET FUEL

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DENSITY OF EPA^{ct} STUDY TEST FUELS vs. MARKET FUEL
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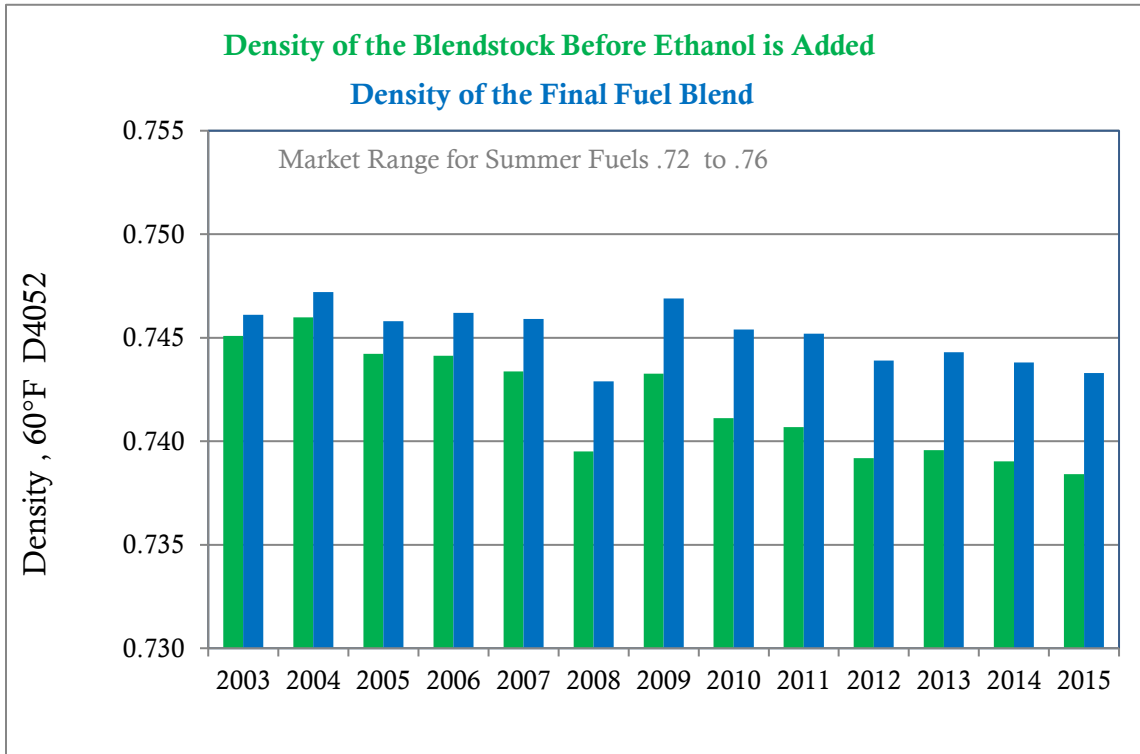
Density and Ethanol Content in the EPAct Study and Market Fuels¹



¹ Market fuel data represents the average density and ethanol content of market regular gasoline sampled nationwide by the Auto Alliance from 2003 to 2015, excluding Fairbanks, Alaska, where the gasoline contains no ethanol. The EPAct data represents the average density for each of the four ethanol blend levels tested in the EPAct study. *See infra* at H-3. The density of a pre-ethanol blendstock is calculated from the density of the finished fuel using the following formula:

$$\text{Blendstock Density} = \frac{\text{Finished Fuel Density} - \left(\frac{\text{Ethanol Content}}{100}\right) \times 0.7893}{\frac{100 - \text{Ethanol Content}}{100}}$$

Density of Market Fuel Over Time²



² “Finished Fuel” data (blue bars) represents the annual average density of regular gasoline sampled nationwide by the Auto Alliance from 2003 to 2015, excluding Fairbanks, Alaska, where the gasoline contains no ethanol. The density of the blendstock before adding ethanol (green bars) is calculated using the blendstock density formula. *See supra* note 1.

Density and Ethanol Content of EPA Act Study Test Fuels³

Fuel Number	Density, 60°F	Ethanol %
0	0.7596	10.30
1	0.7211	10.03
2	0.7220	<0.10
3	0.7350	10.36
4	0.7346	9.94
5	0.7573	<0.10
6	0.7342	10.56
7	0.7208	<0.10
8	0.7191	<0.10
9	0.7454	<0.10
10	0.7644	9.82
12	0.7517	9.83
13	0.7540	<0.10
14	0.7223	<0.10
15	0.7428	<0.10
16	0.7636	10.76
20	0.7425	20.31
21	0.7754	20.14
22	0.7371	20.51
23	0.7476	20.32
24	0.7422	20.51
25	0.7702	20.03
26	0.7593	15.24
27	0.7434	14.91
28	0.7699	14.98
30	0.7508	9.81
31	0.7742	20.11

Ethanol Blend	Average Finished Fuel Density	Average Blendstock Density
E0	0.7355	0.7355
E10	0.7461	0.7411
E15	0.7575	0.7519
E20	0.7556	0.7470

³ EPA, EPA Act/V2/E-89: Assessing the Effect of Five Gasoline Properties on Exhaust Emissions from Light-Duty Vehicles Certified to Tier 2 Standards: Final Report on Program Design and Data Collection 31–32 (Apr. 2013); *see* Exhibit D, at D-4. The density of the blendstock before adding ethanol is calculated using the blendstock density formula. *See supra* note 1.