

Certificate of Analysis

Vessel / Object: HAFNIA HAWK (9607198)

Location: Port Arthur, TX / GT Gulfway (United States)

Job Type: Load

Sample 5 1

160-24-04577-039

Product Grade: 95 Ron Gasoline

Client Reference: Atlantic Trading & Marketing Inc. / HV50198

Job No: 160-24-04577

Date Sampled: 09/17/24

Date Tested:

Version: 1 / 18 Sep 2024 11:18

09/17/24

Sample ID, Type & Description

6P,6S,Slop-P,Slop-S Volumetric Composite After Load

<u>Method</u>	<u>Test</u>	<u>Min</u>	<u>Max</u>	Result	<u>Units</u>	<u>Remarks</u>
Visual	Visual Appearance			C&B		
Visual	Color			Undyed		
ASTM D4052	Gravity by Digital Density Meter					
	API Gravity @60°F			54.9	•	
	Density @15°C	720	780	759.0	kg/m³	
ASTM D86-20a	Distillation Evaporated					
	IBP			28.6	°C	
	10%		65	45.6	°C	
	50%	77	118	113.8	°C	
	90%		190	173.6	°C	
	FBP		225	213.2	°C	
	Residue		2	1.0	%vol	
ASTM D4814	Driveability Index °C		591	583		
ASTM D381	Gum Unwashed and Solvent Washed					
	Solvent Washed Gum Content		5	< 0.5	mg/100ml	
	Unwashed Gum Content			< 0.5	mg/100ml	
ASTM D3237	Lead		50	< 10	mg/USgal	
ASTM D2699	Research Octane Number by Compression Ratio	95		95.1		
ASTM D2700	Motor Octane Number by Compression Ratio	83		85.7		
ASTM D4814	Antiknock Index (R+M)/2	89		90.4		
ASTM D130	Copper Strip Corrosion Rating @50°C/122°F for 3 Hours		1	1A		
ASTM D3231-18	Phosphorus		5	< 0.0008	g/US gal	
ASTM D2622-16	Total Sulfur Content		0.008	0.00058	mass%	
ASTM D4952	Doctor Test	Negative		Negative		
ASTM D3227	Mercaptan Sulfur		0.0015	0.0003	mass%	
ASTM D3606 Proc. B	Benzene		5	0.22	%vol	
ASTM D1319	Aromatics			33.4	%vol	
Visual/Olfactory	Odor	Marketable		Marketable		
ASTM D525	Oxidation Stability @100°C	240		>240	mins	
ASTM D5191	DVPE @ 100F° (ASTM CALC AVG)		10	9.53	psi	
ASTM D4815	Oxygenates in Gasoline					
	Ethanol		0.2	< 0.20	%wt	
	MTBE		0.5	< 0.20	%wt	
	Total Oxygen Content		0.35	< 0.01	%wt	
ASTM D3831	Manganese Content of Gasoline		0	0	mg/L Mn	

Notes: RESULTS ARE VALID "AS AT" DATE AND LOCATION LISTED

All samples were obtained per ASTM D4057, 40 CFR1090.1335 and are retained in compliance with 40 CFR 1090.1345