



**BUREAU
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Certificate of Analysis

Nomination ID: USCOR-20-00832

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Client	IWC OIL & REFINERY, LLC	Date Sampled	IWC Oil & Refinery, LLC
Asset	SHORE TANK 4012 (56,200 BBLs)	Submitted By	
Product	REGULAR GASOLINE	Date Sampled	08-Jul-2020
Client Reference	SUBMITTED	Date Received	08-Jul-2020
Job Location	FLINT HILLS WEST - CC, TX	Date Analyzed	08-Jul-2020
TOCM Job ID	USCOR-20-00832	Date Reported	09-Jul-2020

SHORE TANK 4012			
USCOR-20-00832-001			
Method	Test	Result	Specification
ASTM D4052	API Gravity @60°F, °API	57.7	
	Specific Gravity, 20/4°C	0.7434	Report
ASTM D3227	Mercaptan Sulfur, ppm (m/m)	3	20 Max
ASTM D130	Corrosion Copper Strip - 3h at 50°C (122°F)	1a	STD 1
ASTM D381	Unwashed Gum Content, mg/100mL	2.5	70 Max
	Washed Gum Content, mg/100mL	<0.5	5 Max
ASTM D525	Induction Period at 100°C, Minutes	>240	240 Min
ASTM D2699C	Research Octane Number	92.9	Report
ASTM D2700C	Motor Octane Number	83.8	82.0 Min
ASTM D4814	Antiknock Index	88.4	87.0 Min
ASTM D1319	Corrected Aromatics, % (V/V)	32.6	Report
	Corrected Olefins, % (V/V)	13.9	Report
ASTM D3606-10	Benzene, % (V/V)	1.30	2 Max
ASTM D2622	Total Sulfur Content, mg/kg	4.5	80 Max
ASTM D4815	Total Oxygen, % (m/m)	<0.20	2.7 max
	Total Oxygenates, % (V/V)	<0.20	Report
ASTM D86	10% Evaporated, °C	43.2	69 Max
	50% Evaporated, °C	97.1	65 Min / 118 Max
	90% Evaporated, °C	172.2	190 Max
	Endpoint, °C	220.8	225 Max
	Recovery, % (V/V)	96.7	
	Residue, % (V/V)	1.1	
	Loss, % (V/V)	2.2	
ASTM D5191, ASTM Calc.	DVPE, psi	9.87	10 Max
	DVPE, kPa	68.1	
ASTM D5188	Vapor-Liquid Ratio Temperature, °C	53.8	50 Min

JESSICA RODRIGUEZ, Shift Lead Lab Technician