

FUEL REPORT

Area Map Runner [Map Runner] Diesel - #1 Starboard

Diesel Fuel Fluid

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (7320 GAL)

Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

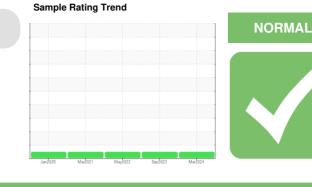
All metal levels are normal indicating no corrosion in the system.

Contaminants

The water content is negligible. There is no Bacteria, Yeast and/or Fungus indicated in the sample. There is no indication of any contamination in the fuel.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.



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SAMPLE INFORI	VIATION		limit/base		history1	history2
Sample Number		Client Info		WC0600390	WC0683251	WC0600452
Sample Date		Client Info		29 Mar 2024	27 Sep 2023	10 May 2022
Machine Age	hrs	Client Info		0	0	0
Sample Status				NORMAL	NORMAL	NORMAL
PHYSICAL PROP	PERTIES	s method	limit/base	current	history1	history2
ASTM Color	scalar	*ASTM D1500		L4.0		L4.5
Visc @ 40°C	cSt	ASTM D445	3.0	2.43	2.34	2.37
SULFUR CONTE	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0	1	0
Sulfur (UVF)	ppm	ASTM D5453	10	12		8
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CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	0	0
Sodium	ppm	ASTM D5185m	<0.1	<1	<1	0
Potassium	ppm	ASTM D5185m	<0.1	0	0	0
Water	%	ASTM D6304	<0.05	0.002	0.003	0.002
ppm Water	ppm	ASTM D6304	<500	18	28.9	19.7
% Gasoline	%	*In-House	<0.50	0.0		0.0
% Biodiesel	%	*In-House	<20.0	0.0		0.0
FLUID CLEANLIN	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	1167		1239
Particles >6µm		ASTM D7647	>640	139		350
Particles >14µm		ASTM D7647	>80	16		39
Particles >21µm		ASTM D7647	>20	6		9
Particles >38µm		ASTM D7647	>4	0		0
Particles >71µm		ASTM D7647	>3	0		0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	17/14/11		17/16/12
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	<1	0
Nickel	ppm	ASTM D5185m	<0.1	0	0	0
Lead	ppm	ASTM D5185m	<0.1	0	0	0
Vanadium	ppm	ASTM D5185m	<0.1	0	0	0
Iron	ppm	ASTM D5185m	<0.1	0	0	0
Calcium	ppm	ASTM D5185m	<0.1	0	2	0
Magnesium	ppm	ASTM D5185m	<0.1	0	2	0
Phosphorus	ppm	ASTM D5185m		0	4	0
Zinc	ppm	ASTM D5185m	<0.1	0	0	0
SAMPLE IMAGE	c	method	limit/base	current	history1	history2

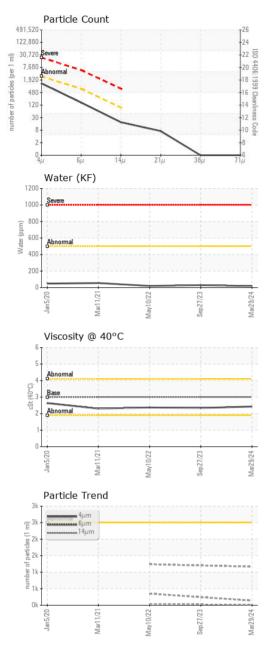
SAMPLE IMAGES Color

mitted By: M/V RUNN

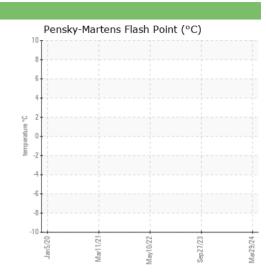
Bottom



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	à	Laboratory	boratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513			MARATHON PETROLEUM CO.		
	ANAB	Sample No.	: WC0600390	Received	: 05 Apr 2024	101 12TH ST		
- XXX (3) - 34		Lab Number	: 06140408	Tested	: 15 Apr 2024	CATLETTSBURG, KY		
	TESTING LABORATORY	Unique Number	: 10965216	Diagnosed	: 15 Apr 2024 - Doug Bogart	US 41169		
	Certificate L2367		: DF-5 (Additional T			Contact: CORY GUMBERT		
	To discuss this	s sample report,	contact Customer Se	ervice at 1-800-237-	1369.	cagumbert@marathonpetroleum.com		
	* - Denotes tes	T: (606)585-3950						
2110464377115	Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)							

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