

FUEL REPORT

Sample Rating Trend

ISO

Machine Id AJINOMOTO

Component Diesel Fuel Fluid No.2 DIESEL FUEL (LOW-SULPHUR) (--- QTS)

DIAGNOSIS

A Recommendation

We advise that you filter this fluid before use. 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

There is a moderate amount of particulates present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

Fuel Condition

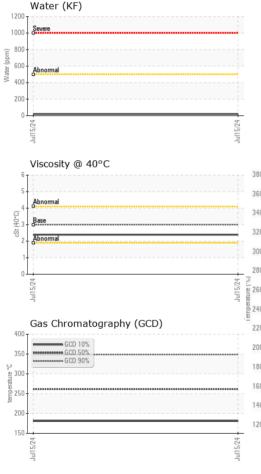
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06237470		
Sample Date		Client Info		15 Jul 2024		
Machine Age	hrs	Client Info		0		
Sample Status				ABNORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Red		
ASTM Color	scalar	*ASTM D1500		L4.5		
Visc @ 40°C	cSt	ASTM D445	3.0	2.39		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	60.8		
SULFUR CONTE	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	250	0		
Sulfur (UVF)	ppm	ASTM D5453		9		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	171		
5% Distillation Point	°C	ASTM D86		193		
10% Distill Point	°C	ASTM D86	201	202		
15% Distillation Point	°C	ASTM D86		210		
20% Distill Point	°C	ASTM D86	216	217		
30% Distill Point	°C	ASTM D86	230	232		
40% Distill Point	°C	ASTM D86	243	246		
50% Distill Point	°C	ASTM D86	255	259		
60% Distill Point	°C	ASTM D86	267	274		
70% Distill Point	°C	ASTM D86	280	288		
80% Distill Point	°C	ASTM D86	295	305		
85% Distillation Point	°C	ASTM D86		316		
90% Distill Point	°C	ASTM D86	310	327		
95% Distillation Point	°C	ASTM D86		344		
Final Boiling Point	°C	ASTM D86	341	358		
IGNITION QUALIT	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	37		
Cetane Index		ASTM D4737	<40.0	48		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1		
Sodium	ppm	ASTM D5185m	<0.1	2		
Potassium	ppm	ASTM D5185m	<0.1	0		
Water	%	ASTM D6304	<0.05	0.002		
ppm Water	ppm	ASTM D6304	<500	21		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	1.1		



FUEL REPORT

1,520 T	icle Count				T ²⁶
2,880 -					-24
30,720 Severe					-22
7,680 Abnorm	al ·				-20
1,920					+20 +18 +16 +14 +12 +10
480.					-16
120-		1			-14
30-			-		-12
8-					-10
2-				-	-8
					0
$^{0}_{4\mu}$ A Part 5k	6μ icle Trend	14µ	21µ	38 [°] µ	71μ
≜ Part	icle Trend 4μm 6μm 14μm	14μ	21 ['] µ	38µ	71µ
Sk F Sk F Sk Sk Sk Sk Sk Sk Sk Sk Sk Sk	icle Trend 4μm 6μm 14μm	14μ	21µ	38µ	



I LOID OLLANLI	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	4180		
Particles >6µm		ASTM D7647	>640	<u> </u>		
Particles >14µm		ASTM D7647	>80	53		
Particles >21µm		ASTM D7647	>20	10		
Particles >38µm		ASTM D7647	>4	1		
Particles >71µm				0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	1 9/17/13		
HEAVY METALS	5	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0		
Nickel	ppm	ASTM D5185m	<0.1	0		
Lead	ppm	ASTM D5185m	<0.1	0		
Vanadium	ppm	ASTM D5185m	<0.1	0		
Iron	ppm	ASTM D5185m	<0.1	0		
Calcium	ppm		<0.1	0		
Magnesium	ppm	ASTM D5185m	<0.1	0		
Phosphorus	ppm	ASTM D5185m	<0.1	0		
Zinc	ppm	ASTM D5185m	<0.1	0		
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color					no image	no image
Bottom				(no image	no image
Bottom				6	no image	no image
GRAPHS Fuel Distillation C	urve			Pensky-Ma	no image	-
GRAPHS Fuel Distillation C	urve		ç	Pensky-Ma		_
GRAPHS Fuel Distillation C	urve		D-antead	Pensky-Ma		_
GRAPHS Fuel Distillation C	urve		temperature °C	80 70 60 Base		_
GRAPHS Fuel Distillation Cr C Sample	urve		temperature °C	80 70 60 8ase 50		(°C)
GRAPHS Fuel Distillation Cl	urve		temperature *C	80 70 60 Base		(°C)
GRAPHS Fuel Distillation Co	urve			Base Base GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Co	urve		5:	Bases GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Co	urve		53	B0 Base Base 60 60 60 60 60 60 60 60 60 60	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Co	urve		51	Bases GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Cr	urve		51	GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Cr	urve		51	GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Cl	urve		51	GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Co	urve		55 55 44 44 (Yd) 33 33 33 33 33 33 33 33 33 33 33 33 33	GCD Spect	rtens Flash Point ((°C)
GRAPHS Fuel Distillation Cr Sample C C C C C C C C C C C C C C C C C C C	urve		55 55 44 44 (Yd) 33 3 3 3 3 3 3 3 3 3 1 1	GCD Spect	rtens Flash Point (_
GRAPHS Fuel Distillation Co	urve		55 55 44 44 (Yd) 33 33 33 33 34 20 22 21 11 11	GCD Spect	rtens Flash Point ((°C)



: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **COUCH OIL COMPANY** Laboratory : WC06237470 Received : 15 Jul 2024 2907 HILLSBOROUGH RD Sample No. Lab Number : 06237470 Tested : 18 Jul 2024 DURHAM, NC : 18 Jul 2024 - Elizabeth Valachovic US 27705 Unique Number : 11126304 Diagnosed Test Package : DF-2 (Additional Tests: Fuel, Screen) Contact: JESSE BROWN Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jesse@couchoilcompany.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)285-5408 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Percent Recovered

Report Id: COUDUR [WUSCAR] 06237470 (Generated: 07/18/2024 08:24:04) Rev: 1

Contact/Location: JESSE BROWN - COUDUR

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