

FUEL REPORT



Machine Id

ALGOMA #2

Diesel Fuel Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- GAL)

DIAGNOSIS

A Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We advise that you filter this fluid before use. We recommend you service the filters on this component. Recommend resampling in 10 days. Resample in 30-45 days to monitor this situation.

Contaminants

There is a high amount of silt (particulates < 14 microns in size) present in the fuel. There is no bacteria or fungus (yeast and/or mold) present in the sample. The water content is negligible. Small amount of bacteria present. No reportable mold present. No reportable yeast present.

Fuel Condition

The fuel is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PP		
Sample Date		Client Info		08 Jul 2024		
Machine Age	hrs	Client Info		0		
Sample Status				SEVERE		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		ASTM D1298*	0.839	0.853		
Fuel Color	text	Visual Screen*	Yllow	Orang		
Visc @ 40°C	cSt	ASTM D7279(m)	3.0	2.5		
Pensky-Martens Flash Point	°C	ASTM D7215*	52	62.7		
SULFUR CONTER	method	limit/base	current	history1	history2	
Sulfur	ppm	ASTM D5185(m)	10	12		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D2887*	165	174		
5% Distillation Point	°C	ASTM D2887*		201		
10% Distill Point	°C	ASTM D2887*	201	212		
15% Distillation Point	°C	ASTM D2887*		220		
20% Distill Point	°C	ASTM D2887*	216	228		
30% Distill Point	°C	ASTM D2887*	230	241		
40% Distill Point	°C	ASTM D2887*	243	251		
50% Distill Point	°C	ASTM D2887*	255	261		
60% Distill Point	°C	ASTM D2887*	267	272		
70% Distill Point	°C	ASTM D2887*	280	282		
80% Distill Point	°C	ASTM D2887*	295	294		
85% Distillation Point	°C	ASTM D2887*		303		
90% Distill Point	°C	ASTM D2887*	310	312		
95% Distillation Point	°C	ASTM D2887*		328		
Final Boiling Point	°C	ASTM D2887*	341	356		
IGNITION QUALI	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D1298*	37.7	34		
Cetane Index		ASTM D4737*	<40.0	44		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	<1.0	<1		
Sodium	ppm	ASTM D5185(m)	<0.1	0		
Potassium	ppm	ASTM D5185(m)	<0.1	0		
Water	%	ASTM D6304*	<0.05	0.022		
ppm Water	ppm	ASTM D6304*	<500	222		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	4 0821		
Particles >6µm		ASTM D7647	>640	4 9527		
Particles >14µm		ASTM D7647	>80	<u> </u>		
Particles >21µm		ASTM D7647	>20	<mark> </mark> 30		
Particles >38µm		ASTM D7647	>4	2		
Particles >71µm		ASTM D7647		0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	4 23/20/15		
6-18-00) Dov: 1				Contact/Least	on Brad Pollard	DOCEDOUAN

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	MICROBIAL		method	limit/base	current	history1	history2
8024		CFU/ml	ASTM D6469*	>=100000	10000		
-22 Sovere -22	2 50			>=100000	0		
80 Abnormal -22	Yeast Mold	Colonies		MODER	NONE		
	HEAVY METALS		method	limit/base	current	history1	history2
30	² Aluminum	ppm	ASTM D5185(m)	<0.1	0		
8-	Nickel	ppm	. ,	<0.1	0		
	Lead	ppm	ASTM D5185(m)	<0.1	0		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Vanadium			<0.1	0		
Particle Trend		ppm	ASTM D5185(m)	<0.1			
0k 4μm 1	Iron	ppm			<1		
Dk - management 6μm	Calcium	ppm		<0.1	<1		
μ	Magnesium	ppm	ASTM D5185(m)	<0.1	0		
0k -	Phosphorus	ppm	ASTM D5185(m)	<0.1	0		
	Zinc	ppm	ASTM D5185(m)	<0.1	0		
Abnormal	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
	Color					no image	no image
Water (KF)							
00	Bottom					no image	no image
	GRAPHS						
00+	Fuel Distillation Cu	urve			Pensky-Marte	ns Flash Point ('	°C)
0	380°C			7		••••••	
Jul8/24	Sample Sample 360°C			7 ب			
7	∃ 360°C +						
Viscosity @ 40°C	340°C -			die /	5		
	02000			5	Base		
5-	320°C -			1	Jul8/24		18/24
4 Abnormal			/		٦٢		-
3 - Base					GCD Spectru	m	
	280°C -	,	1	20,00		91 5	
2 Abnormal			·	10.00			
2 Abnormal	a 260°C −	10		18,00	0 +		
	eram			16,00			
	eram			16,00	0-		
				16,00	0		
	47/38/PC 220°C			16,00	0		
	t2/gnp	For the second s		16,00	0		
Gas Chromatography (GCD)	47/200°C 220°C 220			16,00	0		
Gas Chromatography (GCD)	220°C 200°C			16,00			
Gas Chromatography (GCD)	47/200°C 220°C 220			16,00 14,00 (12,00 (10,00 (10,00 (10,00) (10,0			
Gas Chromatography (GCD)	220°C 200°C			16.00 14.00 2 12.00 2 10.00 2 8.00 6.00 4.00			
Gas Chromatography (GCD)	220°C 200°C			16.00 14.00 ee 112.00 ee 10.00 ee 8.00 6.00			
Gas Chromatography (GCD)	180°C 40°C 40°C 40°C 40°C 40°C 40°C 40°C 4			16.00 14.00 12.00 80 10.00 80 6.00 4.00 2.00			13 - 15 - 16 - 17 - 17 - 17 - 17 - 17 - 17 - 17
Gas Chromatography (GCD)	220°C 200°C	SG SC		16.00 14.00 2 12.00 2 10.00 2 8.00 6.00 4.00			13 - 15 - 16 - 16 - 16 - 16 - 16 - 16 - 16
Gas Chromatography (GCD)	472/80 180°C 180°C 180°C 160°C 140°C 140°C 120°C 140°C 100°C 140°C 100°C 1	Solution of the second se		16.00 14.00 12.00 80 10.00 80 6.00 4.00 2.00		9 Time (min)	13 15 16
Gas Chromatography (GCD)	220°C 200°C 180°C 180°C 200°C 180°C 140°C 200°C 180°C 100°C	5 Appleby Recei	v Line, Burlin ved : 09	16.00 14.00 212.00 200 4.00 2.00 4.00 2.00 4.00 2.00 14		т	r iple M Metal nearne Avenue
Gas Chromatography (GCD)	v : WearCheck - C8-1175 ber : 02646814	5 Appleby Recei Teste	/ Line, Burlin ved : 09 d : 21	16,00 14,00 3,00 4,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00 2,00 4,00	L 5H9	т	r iple M Metal s nearne Avenue Hamilton, ON
Gas Chromatography (GCD)	ry : WearCheck - C8-1175 lo. : PP ber : 02646814 hber : 5812366	5 Appleby Recei Teste Diagn	/ Line, Burlin ved : 09 d : 21 losed : 21	16,00 14,00 ₹12,00 8,00 4,00 2,00 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	L 5H9 vin Marson	T 670 Strath	r iple M Metals nearne Avenue Hamilton, ON CA L8H 7N
Gas Chromatography (GCD)	ry : WearCheck - C8-1179 10°C	5 Appleby Recei Teste Diagn sts: Bacte	/ Line, Burlin ved : 09 d : 21 losed : 21 ria, CC Flasł	gton, ON L7 Jul 2024 Jul 2024 Jul 2024 - Kev n, PrtCount)	L 5H9 vin Marson	T 670 Strath Contac	r iple M Metals nearne Avenue Hamilton, ON CA L8H 7N t: Brad Pollare
Gas Chromatography (GCD)	ry : WearCheck - C8-1175 lo. : PP ber : 02646814 hber : 5812366	5 Appleby Recei Tester Diagn sts: Bacte <i>rice at 1-8</i>	/ Line, Burlin ved : 09 d : 21 losed : 21 ria, CC Flash 00-268-2131	gton, ON L7 Jul 2024 Jul 2024 Jul 2024 - Kex n, PrtCount)	L 5H9	T 670 Strath Contac bpollard@trig	r iple M Metals nearne Avenue Hamilton, ON CA L8H 7N

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