

FUEL REPORT

Area [PMOAS2971100] CATEPILLAR C4-4 CAT0044CP4B00689

Tank Diesel Fuel

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

DIAGNOSIS

A Recommendation

We advise that you follow the water drain-off procedure for this component.

Corrosion

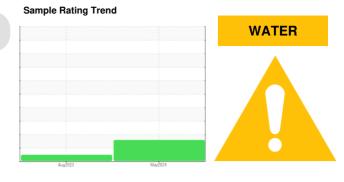
All metal levels are normal indicating no corrosion in the system.

Contaminants

Free water present. There is no bacteria or fungus (yeast and/or mold) present in the sample.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation.

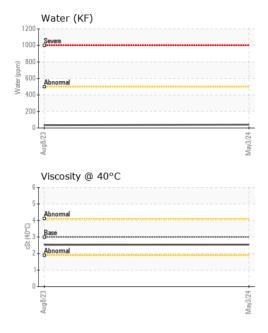


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		DC0035913	DC0012417	
Sample Date		Client Info		03 May 2024	08 Aug 2023	
Machine Age	hrs	Client Info		613	584	
Sample Status				ABNORMAL	NORMAL	
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
ASTM Color	scalar	*ASTM D1500		L4.5	L4.0	
Visc @ 40°C	cSt	ASTM D445	3.0	2.54	2.53	
SULFUR CONTEN	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	8	0	
Sulfur (UVF)	ppm	ASTM D5453		20	25	
IGNITION QUALIT	ſY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	35.3	35.5	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1	0	
Sodium	ppm	ASTM D5185m	<0.1	<1	0	
Potassium	ppm	ASTM D5185m	<0.1	0	<1	
Water	%	ASTM D6304	< 0.05	0.004	0.003	
ppm Water	ppm	ASTM D6304	<500	41	34.2	
% Gasoline	%	*In-House	<0.50	0.0	0.0	
% Biodiesel	%	*In-House	<20.0	0.0	0.0	
MICROBIAL		method	limit/base	current	history1	history2
MICROBIAL Bacteria	CFU/ml	method WC-Method	limit/base	current 0	history1	history2
	CFU/ml CFU/ml					
Bacteria		WC-Method	>=100000	0		
Bacteria Yeast	CFU/ml	WC-Method WC-Method	>=100000 >=100000	0 0		
Bacteria Yeast Mold	CFU/ml	WC-Method WC-Method WC-Method	>=100000 >=100000 MODER	0 0 		
Bacteria Yeast Mold HEAVY METALS	CFU/ml Colonies	WC-Method WC-Method WC-Method method	>=100000 >=100000 MODER limit/base	0 0 current	 history1	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum	CFU/ml Colonies ppm	WC-Method WC-Method WC-Method ASTM D5185m	>=100000 >=100000 MODER limit/base <0.1	0 0 current 0	 history1 <1	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel	CFU/mI Colonies ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER limit/base <0.1 <0.1	0 0 current 0 0	 history1 <1 0	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead	CFU/ml Colonies ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER limit/base <0.1 <0.1 <0.1	0 0 current 0 0 0	 history1 <1 0 0	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead Vanadium	CFU/ml Colonies ppm ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER limit/base <0.1 <0.1 <0.1 <0.1 <0.1	0 0 current 0 0 0 0 0	 history1 <1 0 0 0 0	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead Vanadium Iron	CFU/ml Colonies ppm ppm ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER limit/base <0.1 <0.1 <0.1 <0.1 <0.1	0 0 current 0 0 0 0 0 0	 history1 <1 0 0 0 0 0 0	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead Vanadium Iron Calcium	CFU/ml Colonies ppm ppm ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER imit/base <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	0 0 current 0 0 0 0 0 0 0 2 0 0 0 2 1	 history1 <1 0 0 0 0 0 0 7	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead Vanadium Iron Calcium Magnesium	CFU/ml Colonies ppm ppm ppm ppm ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER imit/base <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	 history1 <1 0 0 0 0 0 0 7 6	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead Vanadium Iron Calcium Magnesium Phosphorus	CFU/ml Colonies ppm ppm ppm ppm ppm ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.	0 0 0 0 0 0 0 0 0 0 0 0 2 1 0 0 0 0 0	 history1 <1 0 0 0 0 0 0 7 6 6 6	 history2
Bacteria Yeast Mold HEAVY METALS Aluminum Nickel Lead Vanadium Iron Calcium Magnesium Phosphorus Zinc	CFU/ml Colonies ppm ppm ppm ppm ppm ppm ppm ppm	WC-Method WC-Method WC-Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>=100000 >=100000 MODER limit/base<0.1	0 0 0 0 0 0 0 0 0 0 2 1 0 0 0 0 0 0 0 0 0 0	 history1 <1 0 0 0 0 0 0 7 6 6 6 6 6	 history2

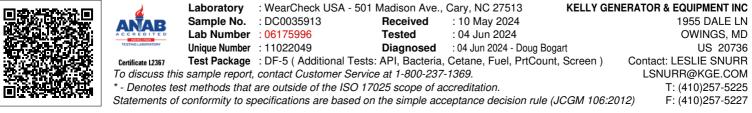


FUEL REPORT

GRAPHS



Pensky-Martens Flash Point (°C)



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Contact/Location: LESLIE SNURR - KELOWI