

## Machine Id 232 Component Diesel Engine Fluid {not provided} (--- GAL)

RECOMMENDATION	Test Sample Number	UOM	Method Client Info	Limit/Abn	Current KL0013724	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		27 Feb 2024		
	Machine Age	mls	Client Info		0		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ATTENTION		
	· · · · · · · · · · · · · · · · · · ·						
WEAR	Iron	ppm	ASTM D5185m	>100	19		
	Chromium	ppm	ASTM D5185m	>20	<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	maa	ASTM D5185m	>3	0		
	Aluminum	maa	ASTM D5185m	>20	5		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	mag	ASTM D5185m	>330	2		
	Tin	ppm	ASTM D5185m	>15			
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Vellow Metal	scalar	*Visual	NONE	NONE		
		Jouran	Violali				
CONTAMINATION	Silicon	nom	ASTM D5185m	>25	6		
	Potassium	nom	ASTM D5185m	>20	<1		
There is a moderate amount of particulates present in the oil.	Fuel	- ndd	WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method	/ 0.1	NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	9.8		
	Sulfation	Ahe/ 1mm	*ASTM D7415	>30	20.9		
	Particles \4um	/ 10/0/	ASTM D7647	200	11457		
	Particles >6µm		ASTM D7647	>5000	62/2		
	Particles >0µm		ASTM D7647	>640	1062		
	Particles >14µm		ASTM D7647	>160	259		
	Particles >2 1µm		ASTM D7647	>100	55		
	Particles >71um		ASTM D7647	>10	6		
			ISO 4406 (c)	>10/16	0 20/17		
	Silt	scalar	*\/ieual	NONE	NONE		
	Debrie	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Vieual	NONE	NONE		
	Appoprance	coalar	*Vicual		NORM		
	Appearance	scalar	*Vioual	NORIVIL	NORML		
	Emulaified Water	scalar	*Visual		NEC		
		Scalar	VISUAI	>0.2	NEG		
FLUID CONDITION	Sodium	nnm	<b>∆</b> STM D5185m		-1		
	Boron	nnm	ASTM D5185m		46		-
The oil viscosity is normal. This plus the additive levels does not	Barium	ppm	ASTM D5185m		40		
indicate the addition of a different brand, or type of oil. The RN rocult	Molyhdenum	nnm	ASTM D5185m		81		
indicates the addition of a different ordina, of type of oil. The DN result	Manganase	ppm	ASTM D5185m		-1		
	manganose	PPIII			<u></u>		

Magnesium

Phosphorus

Calcium

Zinc

Sulfur

Oxidation

ppm

ppm

ppm

Acid Number (AN) mg KOH/g ASTM D8045

Base Number (BN) mg KOH/g ASTM D2896

Visc @ 100°C cSt ASTM D445

Abs/.1mm

ASTM D5185m

ASTM D5185m

ASTM D5185m

\*ASTM D7414 >25

ppm ASTM D5185m

ppm ASTM D5185m

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indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

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68 2526

1006

1441

3913

18.9

1.38

6.99

15.0





Contact/Location: Service Manager - FEVMID