

WEAR ABNORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id Demo2 Component Diesel Engine Fluid {not provided} (--- GAL) RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

CONTAMINATION	
---------------	--

WEAR

Valve wear is indicated.

There is no indication of any contamination in the oil.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0064661		
Sample Date		Client Info		19 Jan 2023		
Machine Age	hrs	Client Info		1634		
Oil Age	hrs	Client Info		1634		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185m	>100	42		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	2 3		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	4		
Lead	ppm	ASTM D5185m	>40	- <1		
Copper	ppm	ASTM D5185m	>330	24		
Tin	ppm	ASTM D5185m	>15	24		
Vanadium		ASTM D5185m	210	0		
White Metal	ppm scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	8		
Potassium	ppm	ASTM D5185m	>20	8		
Fuel	PPIII	WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	20.2	NEG		
Soot %	%	*ASTM D7844	>3	0.6		
Nitration	Abs/cm	*ASTM D7644	>20	11.4		
Sulfation	Abs/.1mm	*ASTM D7024	>30	23.5		
Silt			NONE	Z3.5 NONE		
Debris	scalar	*Visual	NONE	NONE		
	scalar	*Visual	-	-		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Sodium	nnm	ASTM D5185m		6		
Boron	ppm	ASTM D5185m		18		
	ppm	ASTM D5185m		10		
Barium Molybdenum	ppm	ASTM D5185m		84		
	ppm					
Manganese	ppm	ASTM D5185m		1		
Magnesium	ppm	ASTM D5185m		64 2060		
Calcium	ppm	ASTM D5185m		2069		
Phosphorus	ppm	ASTM D5185m		903		
Zinc	ppm	ASTM D5185m		1165		
Sulfur	ppm	ASTM D5185m		2795		
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.1		
Base Number (BN)	mg KOH/g	ASTM D2896		4.9		
Visc @ 100°C	cSt	ASTM D445		13.0)	



