WEAR CONTAMINATION FLUID CONDITION

NORMAL SEVERE ABNORMAL

Machine Id

**GILLIG 1101** 

Component  Diesel Engine  Fluid							
{not provided} (28 QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.	Sample Number		Client Info		LP0001885		
	Sample Date		Client Info		25 Jun 2024		
	Machine Age	mls	Client Info		31300		
	Oil Age	mls	Client Info		31300		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR  Metal levels are typical for a components first oil change.	Iron	ppm	ASTM D5185m	>75	34		
	Chromium	ppm	ASTM D5185m		1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>15	3		
	Lead	ppm	ASTM D5185m	>25	0		
	Copper	ppm	ASTM D5185m	>100	11		
	Tin	ppm	ASTM D5185m	>4	0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTANUNATION	0.11.		AOTM DEGOE		40		
CONTAMINATION	Silicon	ppm	ASTM D5185m		12		
Test for glycol is positive. There is a high amount of fuel present in the oil. There is a high concentration of glycol present in the oil. Tests confirm the presence of fuel in the oil.	Potassium	ppm	ASTM D5185m		<u>^</u> 292		
	Fuel Water	%	ASTM D3524 WC Method		▲ 6.9 NEG		
	Glycol	%	*ASTM D2982	>0.2	NEG ▲ 0.10		
	Soot %	%	*ASTM D7844	<b>~</b> 6	1.1		
	Nitration	Abs/cm	*ASTM D7624	>20	11.7		
	Sulfation	Abs/.1mm	*ASTM D7415		24.6		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		97		
I LOID CONDITION	Boron	ppm	ASTM D5185m		9		
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		51		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		50		
	Calcium	ppm	ASTM D5185m		2095		
	Phosphorus	ppm	ASTM D5185m		810		
	Zinc	ppm	ASTM D5185m		1011		
	Sulfur	ppm	ASTM D5185m	_	3223		

Oxidation

Visc @ 100°C cSt

Abs/.1mm \*ASTM D7414 >25

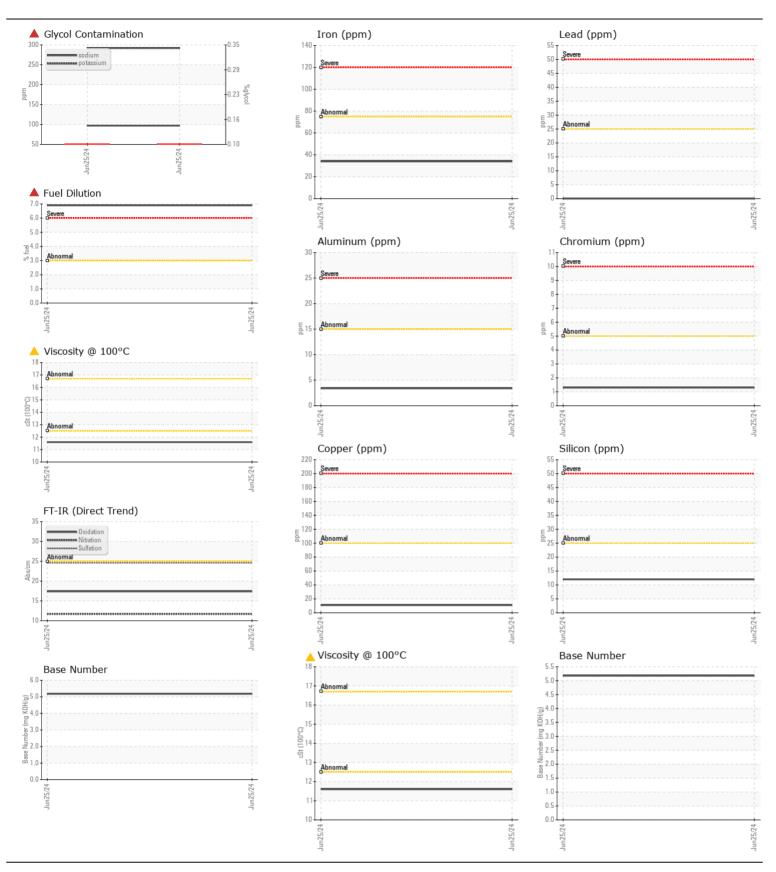
ASTM D445

Base Number (BN) mg KOH/g ASTM D2896

17.4

5.18

11.6





Certificate L2367

Laboratory

Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : LP0001885 Lab Number : 06230904

Unique Number : 11114397

Received **Tested** Diagnosed

Test Package: MOB 2 (Additional Tests: FuelDilution, Glycol, PercentFuel)

: 11 Jul 2024 : 11 Jul 2024 - Wes Davis

: 08 Jul 2024

**GREATER PORTLAND TRANSIT DISTRICT** 114 VALLEY STREET PORTLAND, ME US 04102-3039

Contact: JOHN JACQUES jjacques@gpmetro.org T:

To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: