WEAR CONTAMINATION FLUID CONDITION

NORMAL
ABNORMAL
ABNORMAL

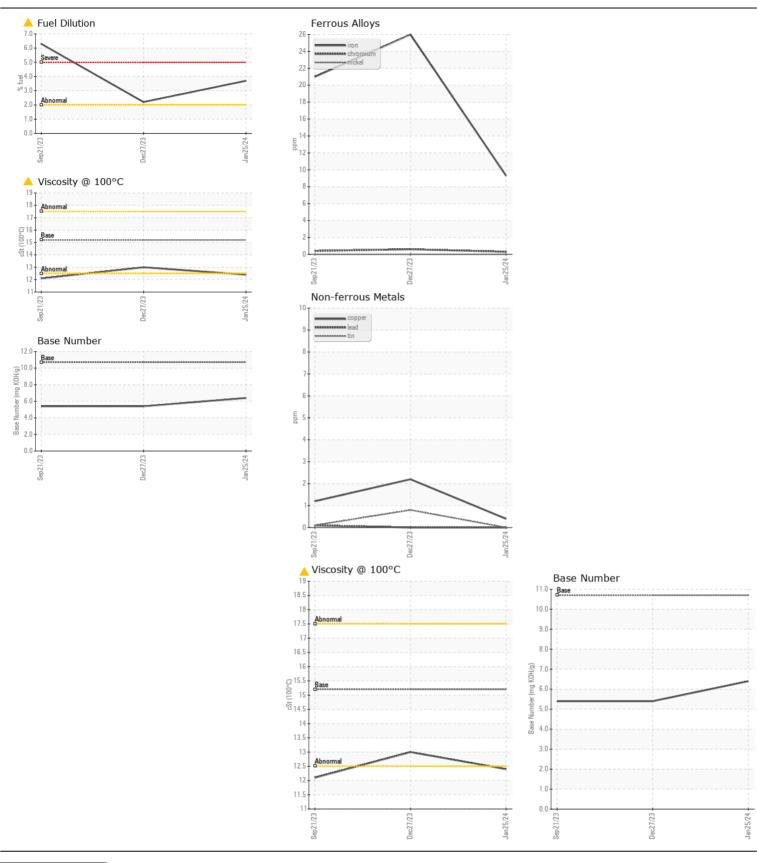
Machine Ic

INTERNATIONAL 125060-SWV6517

Component

Diesel Engine

Diesel Engine MOBIL DELVAC ELITE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TEOCIVIIVIENDATION	Sample Number	OOW	Client Info	LIIIIIUAUII	GFL0111351	-	GFL0077250
The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.	Sample Date		Client Info		25 Jan 2024	27 Dec 2023	21 Sep 2023
	Machine Age	hrs	Client Info		20395	20193	19656
	Oil Age	hrs	Client Info		500	500	500
	Filter Age	hrs	Client Info		500	500	500
	Oil Changed	0	Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				ABNORMAL	ABNORMAL	-
WEAR	Iron	ppm	ASTM D5185m	>100	9	26	21
WEAR	Chromium	ppm	ASTM D5185m		<1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m	7 7	<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		5	9	5
	Lead	ppm	ASTM D5185m		0	0	<1
	Copper	ppm	ASTM D5185m		<1	2	1
	Tin	ppm	ASTM D5185m		0	- <1	<1
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	8	5
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Potassium	ppm	ASTM D5185m	>20	1	6	3
	Fuel	%	ASTM D3524	>2.0	4 3.7	<u> </u>	6.3
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.4	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	9.9	11.7	12.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	20.6	21.1
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	2
	Boron	ppm	ASTM D5185m		105	49	33
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		1	10	0
	Molybdenum	ppm	ASTM D5185m		117	115	108
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		608	656	617
	Calcium	ppm	ASTM D5185m		1111	1216	1186
	Phosphorus	ppm	ASTM D5185m		662	701	676
	Zinc	ppm	ASTM D5185m		752	777	818
	Sulfur	ppm	ASTM D5185m		2839	3012	2965
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	19.7	21.4
	Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.4	5.4	5.4
	Visc @ 100°C	cSt	ASTM D445	15.2	12.4	13.0	<u>12.1</u>







Laboratory Sample No.

: GFL0111351 Lab Number : 06099800

Unique Number : 10898030

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 26 Feb 2024 **Tested** : 27 Feb 2024

Diagnosed : 27 Feb 2024 - Wes Davis Test Package: FLEET (Additional Tests: PercentFuel)

GFL Environmental - 981 - Port Arthur Hauling 1000 S Business Park Dr Port Arthur, TX US 77640

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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)