



Machine Id
INTERNATIONAL 125060-SWV6517
 Component
Diesel Engine
 Fluid
MOBIL DELVAC ELITE 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0111261	GFL0111351	GFL0095486
Sample Date		Client Info		04 Apr 2024	25 Jan 2024	27 Dec 2023
Machine Age	hrs	Client Info		20945	20395	20193
Oil Age	hrs	Client Info		550	500	500
Filter Age	hrs	Client Info		0	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Aluminum ppm levels are marginal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	38	9	26
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 15	5	9
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	2
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

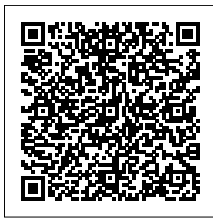
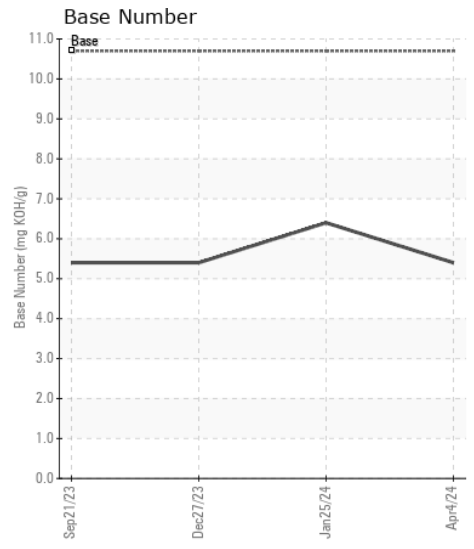
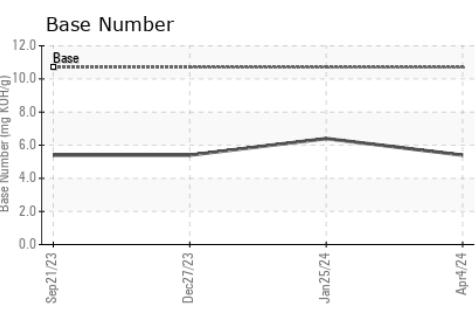
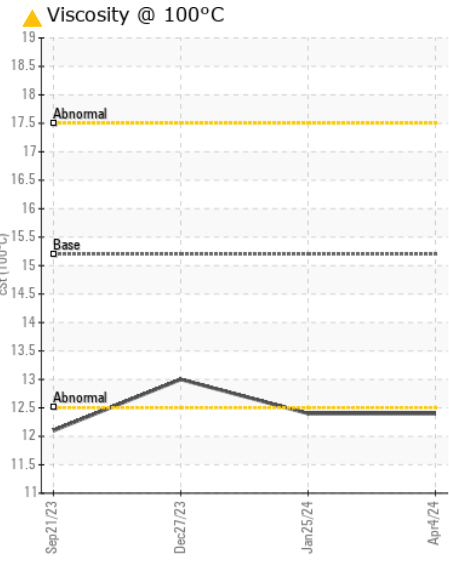
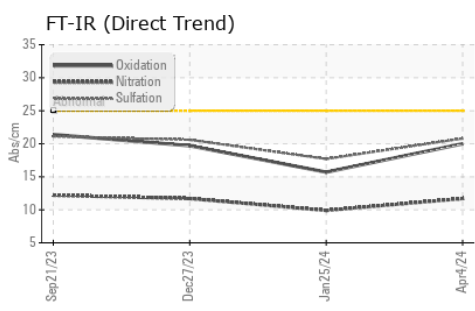
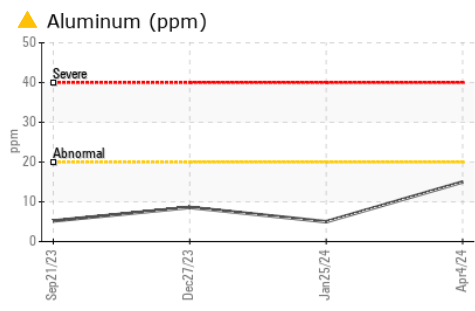
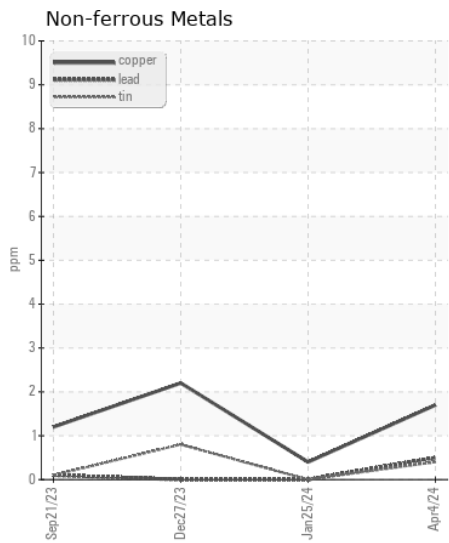
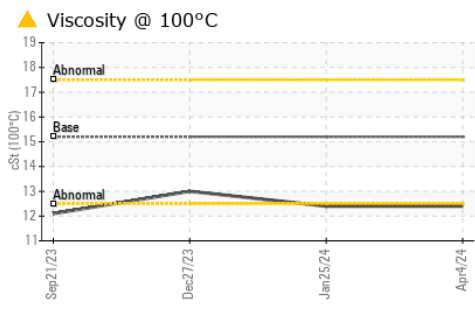
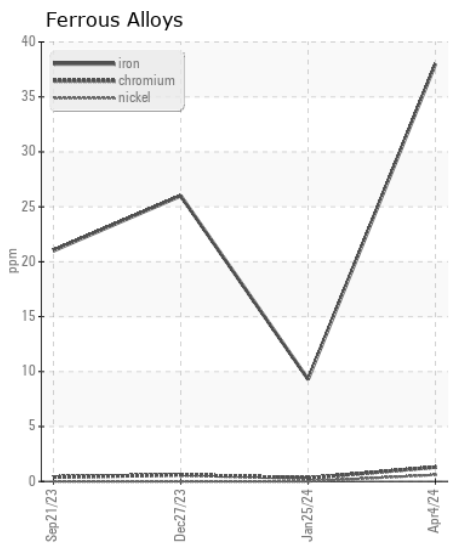
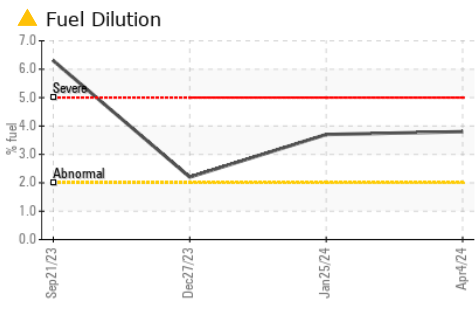
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	8	5	8
Potassium	ppm	ASTM D5185m	>20	14	1	6
Fuel	%	ASTM D3524	>2.0	▲ 3.8	▲ 3.7	▲ 2.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	11.7	9.9	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	17.7	20.6
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

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m		51	105	49
Barium	ppm	ASTM D5185m		0	1	10
Molybdenum	ppm	ASTM D5185m		139	117	115
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		685	608	656
Calcium	ppm	ASTM D5185m		1280	1111	1216
Phosphorus	ppm	ASTM D5185m		722	662	701
Zinc	ppm	ASTM D5185m		856	752	777
Sulfur	ppm	ASTM D5185m		3186	2839	3012
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	15.7	19.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	5.4	6.4	5.4
Visc @ 100°C	cSt	ASTM D445	15.2	▲ 12.4	▲ 12.4	13.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0111261 **Received** : 15 Apr 2024
Lab Number : 06148324 **Tested** : 17 Apr 2024
Unique Number : 10978402 **Diagnosed** : 17 Apr 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
 Contact: MICHAEL KAY
 mkay@gflenv.com
 T: (336)660-9331
 F:

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)