



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
WL0097-1321
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

RECOMMENDATION

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0096264	GFL0104662	GFL0096256
Sample Date		Client Info		21 Jun 2024	07 Mar 2024	19 Oct 2023
Machine Age	hrs	Client Info		13023	10132	11386
Oil Age	hrs	Client Info		11386	0	0
Filter Age	hrs	Client Info		11386	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

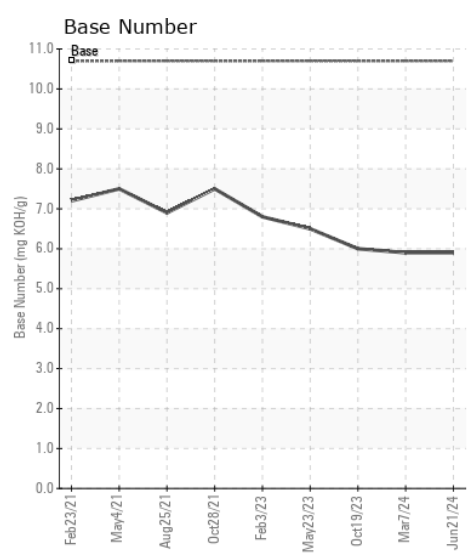
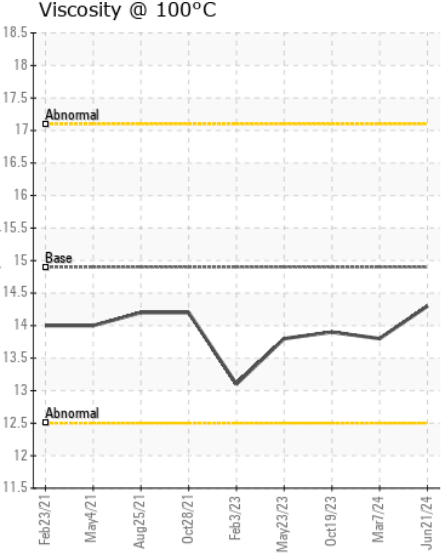
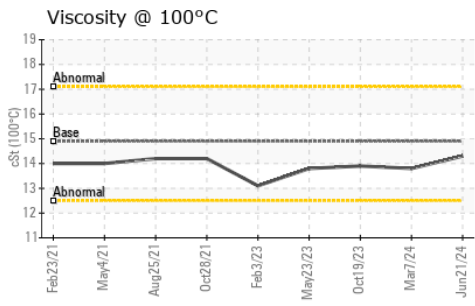
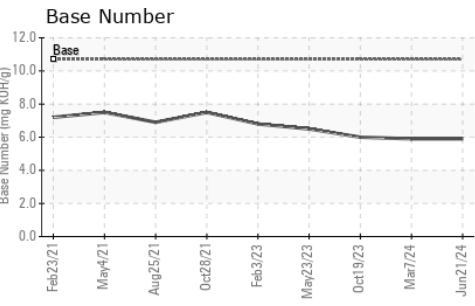
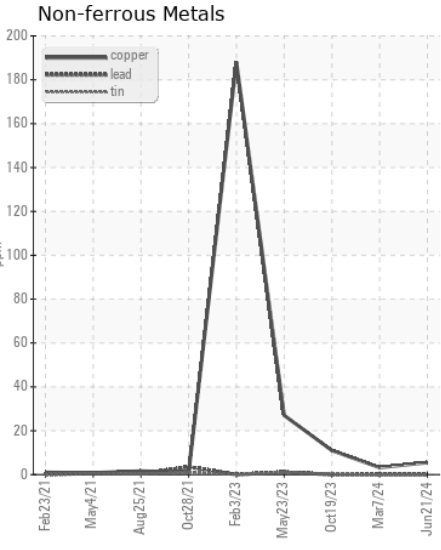
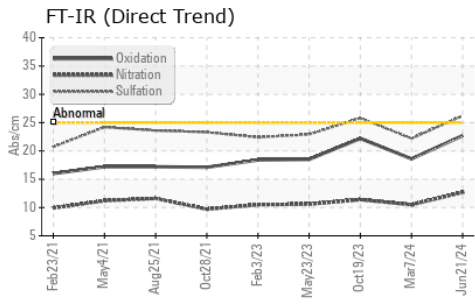
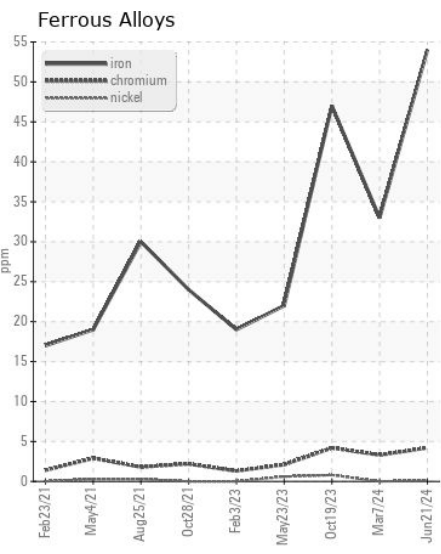
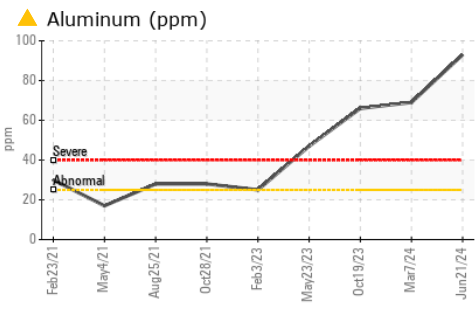
Iron	ppm	ASTM D5185m	>100	54	33	47
Chromium	ppm	ASTM D5185m	>20	4	3	4
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	9	10	5
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	▲ 93	▲ 69	▲ 66
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	6	3	11
Tin	ppm	ASTM D5185m	>15	0	0	<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	8	7	10
Potassium	ppm	ASTM D5185m	>20	12	8	16
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.6	1
Nitration	Abs/cm	*ASTM D7624	>20	12.7	10.5	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.2	22.2	25.8
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		29	21	41
Boron	ppm	ASTM D5185m		65	75	52
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		57	56	93
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		621	691	631
Calcium	ppm	ASTM D5185m		1436	1508	1415
Phosphorus	ppm	ASTM D5185m	760	633	668	649
Zinc	ppm	ASTM D5185m	830	903	799	778
Sulfur	ppm	ASTM D5185m	2770	2704	3225	3192
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.7	18.6	22.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	5.9	5.9	6.0
Visc @ 100°C	cSt	ASTM D445	14.9	14.3	13.8	13.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0096264
Lab Number : 06221063
Unique Number : 11099260
Test Package : FLEET
Received : 26 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Don Baldrige

GFL Environmental - 624 - Elmira Hauling
 10164 M-32
 Elmira, MI
 US 49730
 Contact: ANDY GROBASKI
 andyg@americanwaste.org
 T: (989)370-2941
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Certificate L2367
 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)