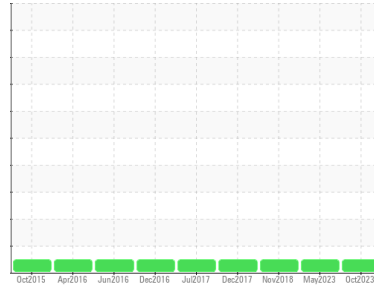




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
11147

Component
Diesel Engine

Fluid
CHEVRON DELO 400 SDE SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0094915	GFL0070037	GFLI-204635
Sample Date	Client Info		11 Oct 2023	10 May 2023	19 Nov 2018
Machine Age	mls	Client Info	126286	0	70289
Oil Age	mls	Client Info	70289	0	12488
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	0.5
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	7	36	56
Chromium	ppm	ASTM D5185m	>20	2	0	1
Nickel	ppm	ASTM D5185m	>4	<1	0	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	5	5
Lead	ppm	ASTM D5185m	>40	<1	2	8
Copper	ppm	ASTM D5185m	>330	<1	2	2
Tin	ppm	ASTM D5185m	>15	0	<1	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		1	21	194
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		58	65	118
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		907	988	591
Calcium	ppm	ASTM D5185m		1043	1315	1590
Phosphorus	ppm	ASTM D5185m	760	1038	1098	759
Zinc	ppm	ASTM D5185m	800	1195	1344	866
Sulfur	ppm	ASTM D5185m	3000	3408	3743	---
Lithium	ppm	ASTM D5185m		---	---	0

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	9	9
Sodium	ppm	ASTM D5185m		2	1	2
Potassium	ppm	ASTM D5185m	>20	1	6	3

INFRA-RED

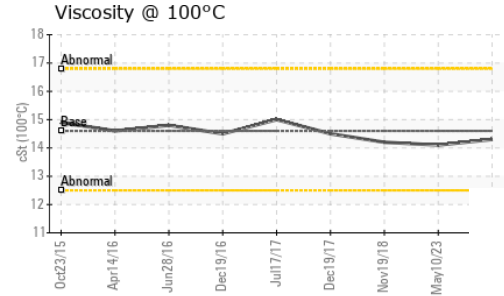
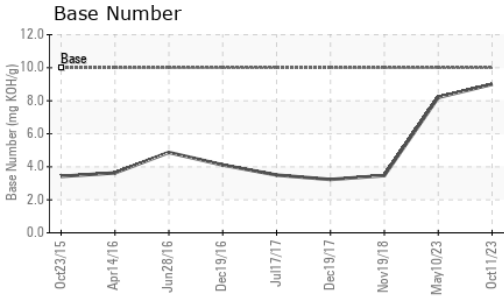
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.2	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	5.2	11.3	11
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	20.1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.6	18.3	16
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.0	8.2	3.47



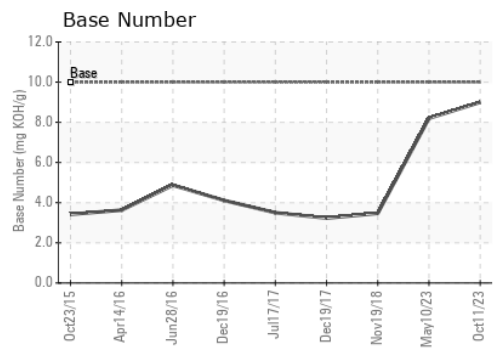
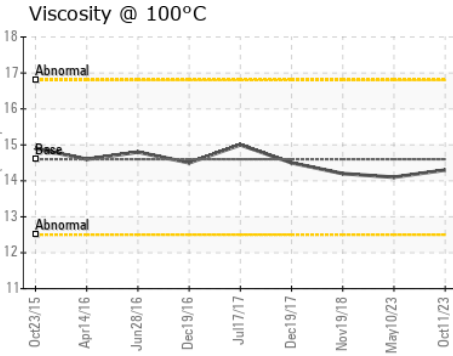
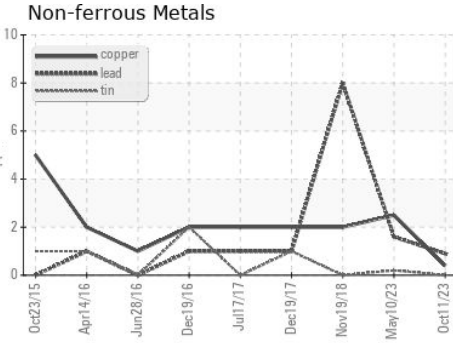
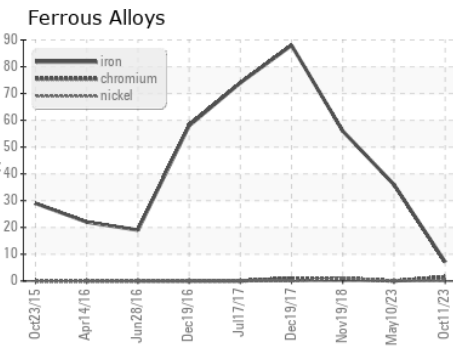
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
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	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.6	14.3	14.1	14.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0094915 **Received** : 17 Oct 2023
Lab Number : **05981833** **Diagnosed** : 19 Oct 2023
Unique Number : 10699128 **Diagnostician** : Don Baldrige
Test Package : FLEET

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 US 37042
 Contact: ROBERT THIBAUT
 robert.thibault@gflenv.com
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 F: (931)572-9674

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)