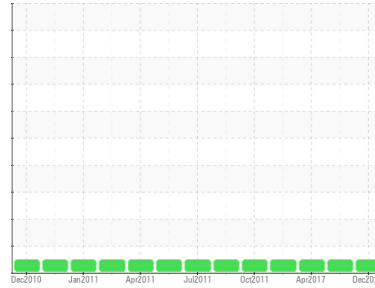




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
11052 - OLD 708

Component
Diesel Engine

Fluid
CHEVRON URSA SUPER PLUS EC 15W40 (10 QTS)

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		GFL0062667	GFLI-H39311	GFLI-B59160
Sample Date	Client Info		06 Dec 2022	09 Feb 2018	17 Apr 2017
Machine Age	mls	Client Info	0	381170	2445
Oil Age	mls	Client Info	0	450	450
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	0.5	0.5
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	35	18	19
Chromium	ppm	ASTM D5185m >20	1	2	2
Nickel	ppm	ASTM D5185m >4	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >20	10	2	1
Lead	ppm	ASTM D5185m >40	<1	4	7
Copper	ppm	ASTM D5185m >330	4	1	2
Tin	ppm	ASTM D5185m >15	<1	0	0
Antimony	ppm	ASTM D5185m	---	0	1
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	25	252	286
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	66	111	99
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	780	458	387
Calcium	ppm	ASTM D5185m	1153	1671	1568
Phosphorus	ppm	ASTM D5185m 1200	954	1007	1029
Zinc	ppm	ASTM D5185m 1300	1087	1175	1245
Sulfur	ppm	ASTM D5185m	3374	---	---
Lithium	ppm	ASTM D5185m	---	0	0

CONTAMINANTS

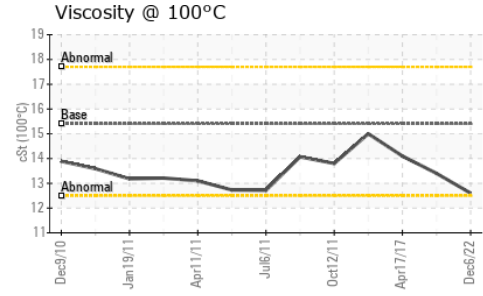
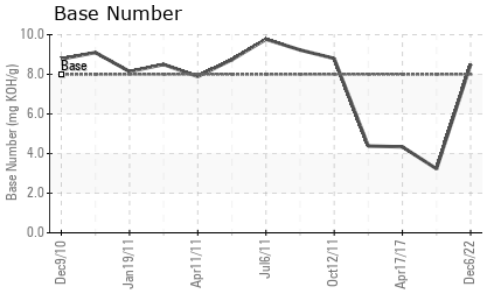
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	5	5
Sodium	ppm	ASTM D5185m	3	4	25
Potassium	ppm	ASTM D5185m >20	17	0	3

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.5	1	0.5
Nitration	Abs/cm	*ASTM D7624 >20	8.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.6	---	---



OIL ANALYSIS REPORT

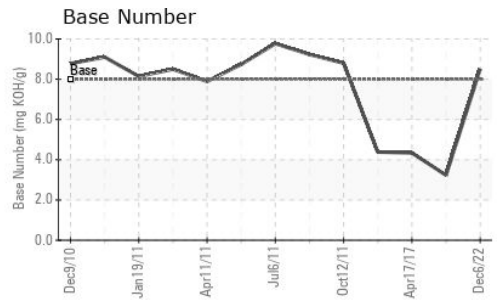
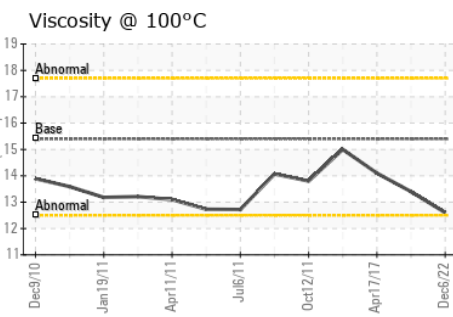
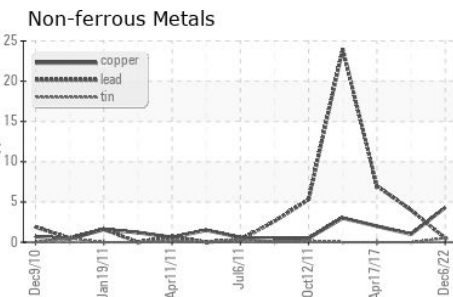
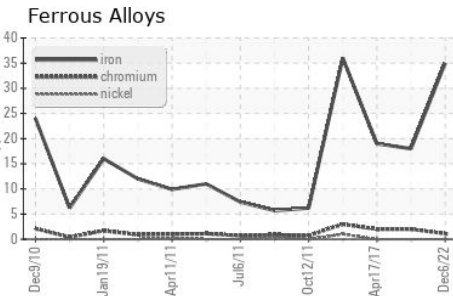


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.2	17	15
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	8.5	3.23	4.34

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	15.4	12.6	13.4	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0062667
Lab Number : **05710866**
Unique Number : 10245441
Test Package : FLEET
Received : 07 Dec 2022
Tested : 08 Dec 2022
Diagnosed : 09 Dec 2022 - Don Baldrige

GFL Environmental - 015 - Columbia
 7800 Farrow Road
 Columbia, SC
 US 29203-3219
 Contact: NOEL MATTHEWS
 nmatthewsjr@gflenv.com
 T: (803)935-0249
 F: (803)935-0244

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)