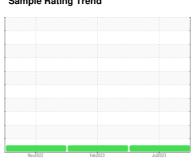


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **222072-200**

Component

Diesel Engine

CHEVRON 15W40 (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

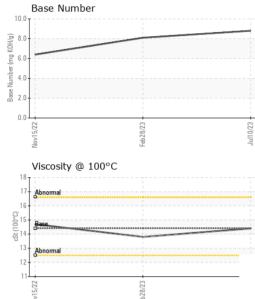
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

	Nov2022 F-60:2023 Jul2023					
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0066058	GFL0066106	GFL0055730
Sample Date		Client Info		10 Jul 2023	28 Feb 2023	15 Nov 2022
Machine Age	hrs	Client Info		0	0	500
Oil Age	hrs	Client Info		0	0	500
Oil Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	19	38	36
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	<1	2	3
Lead	ppm	ASTM D5185m	>30	<1	0	<1
Copper	ppm	ASTM D5185m	>150	<1	1	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		10	13	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		60	62	10
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		994	809	48
Calcium	ppm	ASTM D5185m		1150	1431	2606
Phosphorus	ppm	ASTM D5185m		1033	998	962
Zinc	ppm	ASTM D5185m		1255	1230	1232
Sulfur	ppm	ASTM D5185m		3794	3448	4140
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	6	5
Sodium	ppm	ASTM D5185m	>50	2	2	3
	ppiii	AO IIVI DO IOOIII	/00	_		O
Potassium	ppm	ASTM D5185m	>20	3	3	1
Potassium INFRA-RED						
		ASTM D5185m	>20	3	3	1
INFRA-RED	ppm	ASTM D5185m method	>20 limit/base	3 current	3 history1	1 history2
INFRA-RED Soot %	ppm %	ASTM D5185m method *ASTM D7844	>20 limit/base >3	3 current 0.1	3 history1 0.2	1 history2 0.2
INFRA-RED Soot % Nitration	% Abs/cm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20	3 current 0.1 5.2	3 history1 0.2 8.8	1 history2 0.2 9.4
INFRA-RED Soot % Nitration Sulfation	% Abs/cm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20 >30 limit/base	3 current 0.1 5.2 17.4	3 history1 0.2 8.8 20.1	1 history2 0.2 9.4 24.0
INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	% Abs/cm Abs/.1mm	ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	>20 limit/base >3 >20 >30 limit/base	3	3 history1 0.2 8.8 20.1 history1	1 history2 0.2 9.4 24.0 history2



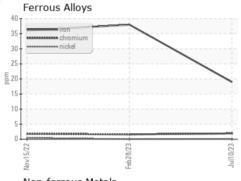
OIL ANALYSIS REPORT

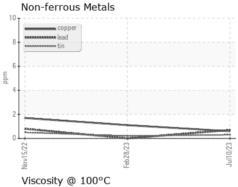


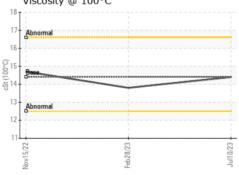
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Free Water	scalar	*Visual		NEG	NEG	NEG

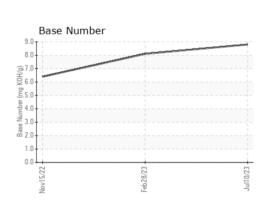
L LOID FUOL		memou			HISTORY	HISTOLA
Visc @ 100°C	cSt	ASTM D445	14.4	14.4	13.8	14.7

GRAPHS













Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10606941 Test Package : FLEET

: GFL0066058 : 05926994

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Aug 2023 Diagnosed : 17 Aug 2023

Diagnostician : Wes Davis

GFL Environmental - 904 - Chippewa Falls HC

11888 & 11863 30th Avenue Chippewa Falls, WI US 54729

Contact: Andy Kane

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)

T: (715)202-3420