



OIL ANALYSIS REPORT

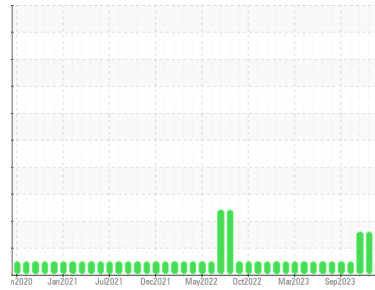
Area
(YA133453) [B Service]

Machine Id
3689C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (38 QTS)

Sample Rating Trend



NORMAL



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	GFL0124486	GFL0124484	GFL0111058
Sample Date	Client Info	15 Jul 2024	08 Jul 2024	06 Mar 2024
Machine Age	hrs	20950	20929	19762
Oil Age	hrs	700	1167	1145
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >50	13	37	45
Chromium	ppm ASTM D5185m >4	2	▲ 7	▲ 8
Nickel	ppm ASTM D5185m >2	<1	2	2
Titanium	ppm ASTM D5185m	<1	<1	0
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >9	4	▲ 12	▲ 16
Lead	ppm ASTM D5185m >30	0	2	<1
Copper	ppm ASTM D5185m >35	6	2	<1
Tin	ppm ASTM D5185m >4	0	1	1
Vanadium	ppm ASTM D5185m	0	<1	<1
Cadmium	ppm ASTM D5185m	0	<1	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 50	39	3	5
Barium	ppm ASTM D5185m 5	0	0	0
Molybdenum	ppm ASTM D5185m 50	49	60	54
Manganese	ppm ASTM D5185m 0	2	1	2
Magnesium	ppm ASTM D5185m 560	566	600	566
Calcium	ppm ASTM D5185m 1510	1549	1760	1556
Phosphorus	ppm ASTM D5185m 780	851	777	783
Zinc	ppm ASTM D5185m 870	964	1018	967
Sulfur	ppm ASTM D5185m 2040	2811	2533	2348

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	5	6	8
Sodium	ppm ASTM D5185m	6	7	8
Potassium	ppm ASTM D5185m >20	2	3	3

INFRA-RED

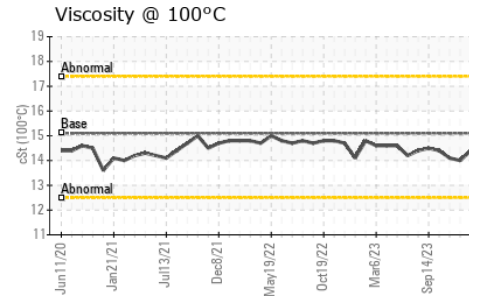
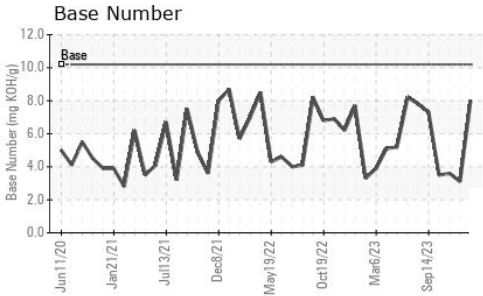
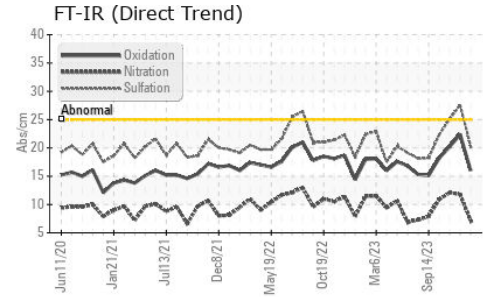
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0.1
Nitration	Abs/cm *ASTM D7624 >20	7.2	11.8	12.1
Sulfation	Abs/.1mm *ASTM D7415 >30	20.4	27.6	25.1

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	16.0	22.4	20.2
Base Number (BN)	mg KOH/g ASTM D2896 10.2	8.0	3.1	3.6



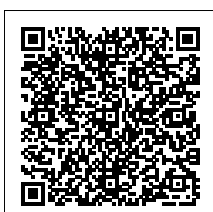
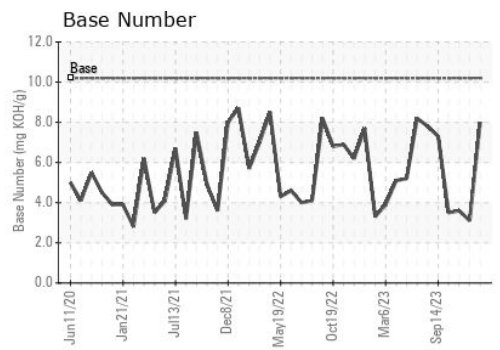
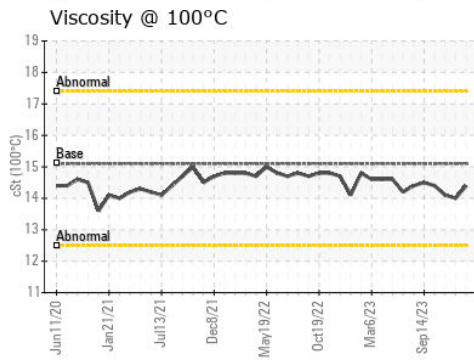
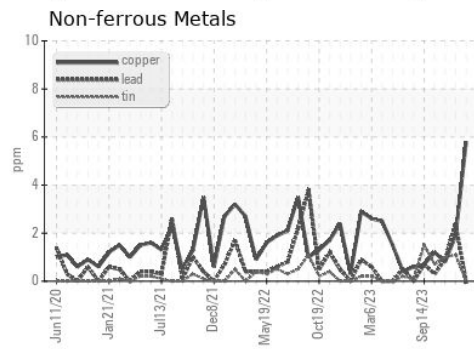
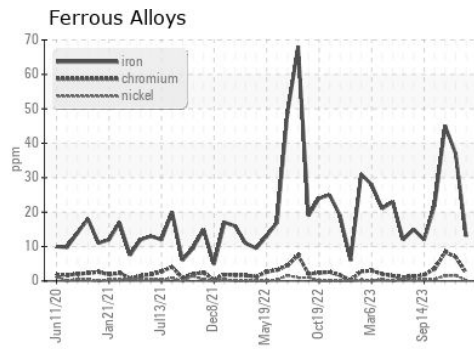
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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124486 **Received** : 17 Jul 2024
Lab Number : 06238783 **Tested** : 17 Jul 2024
Unique Number : 11127617 **Diagnosed** : 17 Jul 2024 - Wes Davis
Test Package : FLEET

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 US 28401
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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)