

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id **731120** Component Natural Gas Engine Fluid PETRO CANADA DURON GEO LD 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.

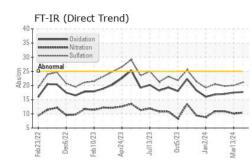
Fluid Condition

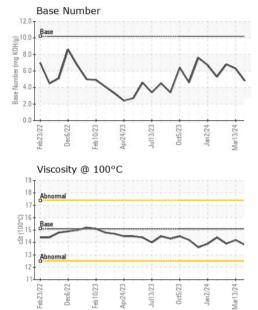
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0114003	GFL0114024	GFL0109849
Sample Date		Client Info		04 Apr 2024	13 Mar 2024	16 Feb 2024
Machine Age	hrs	Client Info		7184	7043	6890
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	6	4	8
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	2
Lead	ppm	ASTM D5185m	>30	2	<1	2
Copper	ppm	ASTM D5185m	>35	8	2	1
Tin	ppm	ASTM D5185m	>4	<1	<1	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	50	10	17	15
Barium	ppm	ASTM D5185m	5	0	0	<1
Molybdenum	ppm	ASTM D5185m	50	51	45	40
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	560	583	528	403
Calcium	ppm	ASTM D5185m	1510	1688	1491	1142
Phosphorus	ppm	ASTM D5185m	780	824	731	593
Zinc Sulfur	ppm	ASTM D5185m	870	1022	866	719
Sullui	ppm	ASTM D5185m	2040	3080	2353	1922
		ASTM D5185m method	2040 limit/base	3080 current	2353 history1	1922 history2
CONTAMINAN	TS	method	limit/base	current	history1	history2
CONTAMINAN Silicon	TS ppm	method ASTM D5185m	limit/base >+100	current 7	history1 6	history2 4
CONTAMINAN Silicon Sodium	TS ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >+100	current 7 3	history1 6 5	history2 4 0
CONTAMINAN Silicon Sodium Potassium	TS ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100 >20	current 7 3 0	history1 6 5 0	history2 4 0 2
CONTAMINAN Silicon Sodium Potassium INFRA-RED	TS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >+100 >20 limit/base	current 7 3 0 current	history1 6 5 0 history1	history2 4 0 2 history2
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	TS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	limit/base >+100 >20 limit/base	current 7 3 0 current 0	history1 6 5 0 history1 0	history2 4 0 2 history2 0.1
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	TS ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >+100 >20 limit/base >20	current 7 3 0 current 0 10.4	history1 6 5 0 history1 0 10.1	history2 4 0 2 history2 0.1 10.9
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	TS ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >+100 >20 limit/base >20 >30	current 7 3 0 current 0 10.4 21.1	history1 6 5 0 history1 0 10.1 20.0	history2 4 0 2 history2 0.1 10.9 19.8
CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	TS ppm ppm ppm % Abs/cm Abs/cm Abs/10N	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624 *ASTM D7415	limit/base >+100 >20 limit/base >20 >30 limit/base	Current 7 3 0 current 0 10.4 21.1 current	history1 6 5 0 history1 0 10.1 20.0 history1	history2 4 0 2 history2 0.1 10.9 19.8 history2



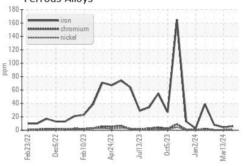
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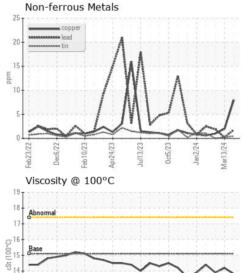


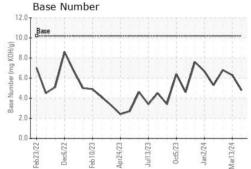


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.8	14.2	13.9
GRAPHS						

Ferrous Alloys







Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 GFL Environmental - 836 - Kansas City Hauling Sample No. : GFL0114003 Received : 08 Apr 2024 7801 East Truman Road Lab Number : 06140842 Tested : 08 Apr 2024 Kansas City, MO Unique Number : 10965650 Diagnosed : 08 Apr 2024 - Wes Davis US 64126 Test Package : FLEET Contact: Loyce Stewart Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. loyce.stewart@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

pr24/23

Jul13/23

0ct5/23

Jan2/24

Mar13/24 -

Report Id: GFL836 [WUSCAR] 06140842 (Generated: 04/08/2024 17:44:52) Rev: 1

13 Abno

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Feb23/22

Dec6/22

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Contact/Location: GFL823,834,836,837,840 - Loyce Stewart - GFL836