

# **OIL ANALYSIS REPORT**

Sample Rating Trend

00000 000





Area (YA113968) Machine Id 3443C

Component Natural Gas Engine

PETRO CANADA DURON GEO LD 15W40 (28 QTS)

### DIAGNOSIS Recommendation

Resample at the next service interval to monitor.

Fluid

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

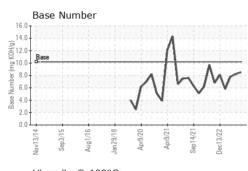
### Fluid Condition

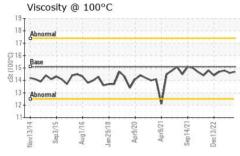
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	<b>/IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0112935	GFL0098119	GFL0069399
Sample Date		Client Info		21 Mar 2024	10 Nov 2023	17 Jul 2023
Machine Age	hrs	Client Info		14818	14818	14818
Oil Age	hrs	Client Info		346	388	425
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	8	8
Chromium	ppm	ASTM D5185m	>4	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>9	2	2	3
Lead	ppm	ASTM D5185m	>30	<1	<1	<1
Copper	ppm	ASTM D5185m	>35	<1	1	<1
Tin	ppm	ASTM D5185m	>4	<1	<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	48	32	25
Barium	ppm	ASTM D5185m	5	0	<1	2
Molybdenum	ppm	ASTM D5185m	50	50	52	49
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	560	569	577	581
Calcium	ppm	ASTM D5185m	1510	1546	1485	1623
Phosphorus	ppm	ASTM D5185m	780	776	798	757
Zinc	ppm	ASTM D5185m	870	957	934	954
Sulfur	nnm		0040		0001	0000
	ppm	ASTM D5185m	2040	2456	2391	2836
CONTAMINAN		method	limit/base	2456 current	2391 history1	2030 history2
CONTAMINAN <sup>®</sup> Silicon Sodium	TS	method	limit/base	current	history1	history2
Silicon	TS ppm	method ASTM D5185m	limit/base >+100	current 8	history1 8	history2 6
Silicon Sodium	TS ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >+100	current 8 2	history1 8 0	history2 6 4
Silicon Sodium Potassium	TS ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100 >20	current 8 2 2	history1 8 0 2	history2 6 4 6
Silicon Sodium Potassium INFRA-RED	TS ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base >+100 >20 limit/base	current 8 2 2 current	history1 8 0 2 history1	history2 6 4 6 history2
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 8 2 2 current 0	history1 8 0 2 history1 0	history2 6 4 6 history2 0
Silicon Sodium Potassium INFRA-RED Soot % Nitration	Ppm ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	limit/base >+100 >20 limit/base	current 8 2 2 current 0 6.6	history1 8 0 2 history1 0 7.0	history2 6 4 6 history2 0 8.2
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	Ppm ppm ppm ppm % Abs/cm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7624	limit/base >+100 >20 limit/base >20 >30 limit/base	current   8   2   2   current   0   6.6   19.1	history1 8 0 2 history1 0 7.0 19.1	history2 6 4 6 history2 0 8.2 19.4



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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	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	>0.1	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	14.7	14.6	14.8
GRAPHS						

Ferrous Alloys

Non-ferrous Metals

350

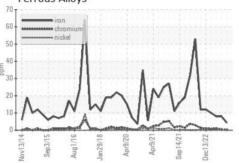
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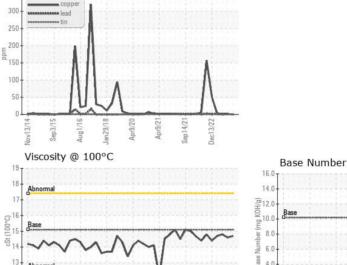
Nov13/14

Sep3/15

Aug 1/16

an 29/18

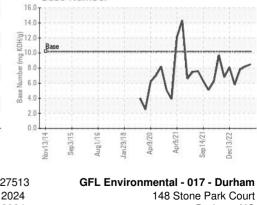




Sep14/21.

Dec13/22

Apr9/21



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : GFL0112935 Received : 22 Mar 2024 Lab Number : 06126214 Tested : 24 Mar 2024 Durham, NC Unique Number : 10940365 Diagnosed : 24 Mar 2024 - Wes Davis US 27703 Test Package : FLEET Contact: Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. bill.waring@wearcheck.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)596-1363 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)598-1852



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Submitted By: Ren - William Russel