

# **OIL ANALYSIS REPORT**

## Sample Rating Trend









(ELL926)
11275
Component
Diesel Engine

PETRO CANADA DURON SHP 15W40 (11 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

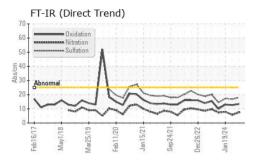
### **Fluid Condition**

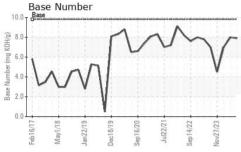
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

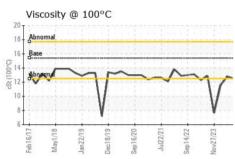
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0122649	GFL0103432	GFL0074649
Sample Date		Client Info		29 May 2024	25 Mar 2024	19 Jan 2024
	hrs	Client Info		15815	15355	15083
	hrs	Client Info		452	580	285
Oil Changed	1110	Client Info		Changed	Changed	Not Changd
Sample Status		Ollont IIIIo		NORMAL	NORMAL	ABNORMAL
CONTAMINATIO	NC	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	2.9
Water		WC Method		NEG	NEG	NEG
Glycol		WC Method	70.L	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	>130	15	19	20
	ppm	ASTM D5185m		<1	1	<1
	ppm	ASTM D5185m	>4	0	1	0
	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	5	5
Lead	ppm	ASTM D5185m	>20	0	<1	0
Copper	ppm	ASTM D5185m	>125	<1	1	<1
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	8	3
Barium	ppm	ASTM D5185m	0	0	<1	0
Molybdenum	ppm	ASTM D5185m	60	60	63	45
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	850	817	724
Calcium	ppm	ASTM D5185m	1070	1065	1065	902
Phosphorus	ppm	ASTM D5185m	1150	990	1036	785
	ppm	ASTM D5185m	1270	1142	1116	945
Sulfur	ppm	ASTM D5185m	2060	3267	2974	2213
Sulfur CONTAMINANT	ppm	ASTM D5185m method			2974 history1	2213 history2
CONTAMINANT	ppm	method	2060	3267		
CONTAMINANT Silicon	ppm S	method	2060 limit/base	3267 current	history1	history2
CONTAMINANT Silicon Sodium	ppm S ppm	method ASTM D5185m	2060 limit/base	3267 current 2	history1	history2
CONTAMINANT Silicon Sodium	ppm S ppm ppm	method ASTM D5185m ASTM D5185m	2060 limit/base >25	3267 current 2 2	history1 6 2	history2 3 2
CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm S ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	2060 limit/base >25 >20	3267	history1 6 2 5	history2 3 2 3
CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844	2060 limit/base >25 >20 limit/base >6	3267	history1 6 2 5 history1 0.2	history2 3 2 3 history2 0.5
CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm	method  ASTM D5185m ASTM D5185m ASTM D5185m method	2060 limit/base >25 >20 limit/base	3267	history1 6 2 5 history1	history2 3 2 3 history2
CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624	2060  limit/base >25 >20  limit/base >6 >20	3267	history1  6 2 5 history1  0.2 5.8	history2 3 2 3 history2 0.5 7.9
CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm Abs/.1mm ATION	method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	2060 limit/base >25 >20 limit/base >6 >20 >30 limit/base	3267	history1  6 2 5 history1  0.2 5.8 16.8 history1	history2 3 2 3 history2 0.5 7.9 17.3 history2
CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Oxidation	ppm ppm ppm ppm Abs/.1mm	method ASTM D5185m ASTM D5185m ASTM D5185m method *ASTM D7844 *ASTM D7624 *ASTM D7415	2060 limit/base >25 >20 limit/base >6 >20 >30	3267	history1 6 2 5 history1 0.2 5.8 16.8	history2 3 2 3 history2 0.5 7.9 17.3



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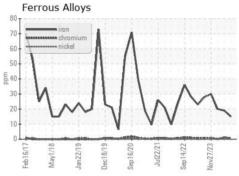


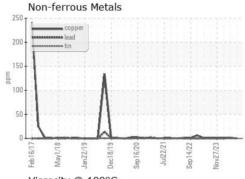


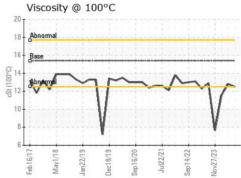
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

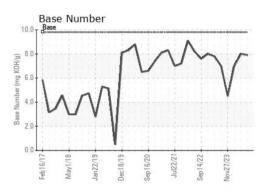
FLUID PROPI	ERTIES	method				history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	12.8	<u> </u>

### **GRAPHS**













Certificate 12367

Laboratory Sample No.

Lab Number : 06197286

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0122649

Unique Number : 11059409

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Test Package : FLEET

Received : 03 Jun 2024 **Tested** : 03 Jun 2024

Diagnosed : 03 Jun 2024 - Wes Davis

2699 Cochran Industrial Blvd

Douglasville, GA US 30127-1332 Contact: Darrell Welch darrell.welch@gflenv.com T: (800)207-6618

GFL Environmental - 095 - Atlanta West

\* - 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)

Submitted By: Darrell Welch