WEAR CONTAMINATION FLUID CONDITION

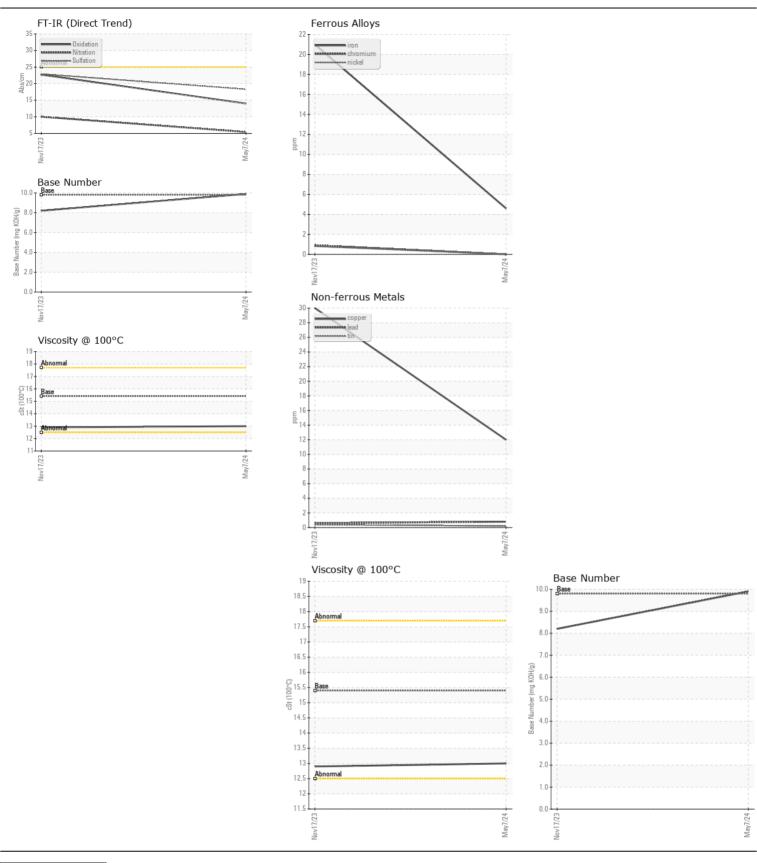
NORMAL NORMAL



Machine Id
711050
Component
Diesel Engine
Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0117562	GFL0101589	
Resample at the next service interval to monitor.	Sample Date		Client Info		07 May 2024	17 Nov 2023	
	Machine Age	hrs	Client Info		4766	4030	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Not Changd	Changed	
	Filter Changed		Client Info		Not Changd	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>120	5	21	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	0	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>5	0	<1	
	Titanium	ppm	ASTM D5185m	>2	0	<1	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m	>20	2	4	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m		12	30	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTABINATION	Ciliaan		ASTM D5185m	05	•	_	
CONTAMINATION	Silicon	ppm			3 2	6 7	
There is no indication of any contamination in the oil.	Potassium Fuel	ppm	ASTM D5185m WC Method			<1.0	
·	Water		WC Method		<1.0 NEG	NEG	
	Glycol		WC Method	>0.2	NEG	NEG	
	Soot %	%	*ASTM D7844	- 1	0.1	0.5	
	Nitration	Abs/cm	*ASTM D7624	>20	5.4	10.0	
	Sulfation	Abs/.1mm	*ASTM D7024		18.3	22.9	
	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		*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		9	52	
	Barium	ppm	ASTM D5185m		0	9	
	Molybdenum	ppm	ASTM D5185m		56	45	
	Manganese	ppm	ASTM D5185m		<1	1	
	Magnesium	ppm	ASTM D5185m		894	446	
	Calcium	ppm	ASTM D5185m		1027	1652	
	Phosphorus	ppm	ASTM D5185m		1026	735	
	Zinc	ppm	ASTM D5185m		1197	924	
	Sulfur	ppm	ASTM D5185m		3635	2562	
	Oxidation	Abs/.1mm	*ASTM D7414		14.0	22.7	
	Base Number (BN)				9.9	8.2	
	Visc @ 100°C	cSt	ASTM D445	15.4	13.0	12.9	







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Lab Number : 06175197 Unique Number : 11021250

: GFL0117562 Test Package : FLEET

Received : 10 May 2024 **Tested** : 11 May 2024 Diagnosed

: 11 May 2024 - Wes Davis

GFL Environmental - 415 - Michigan East 6200 Elmridge Sterling Heights, MI US 48313 Contact: Frank Wolak fwolak@gflenv.com T: (586)825-9514

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)