WEAR CONTAMINATION FLUID CONDITION

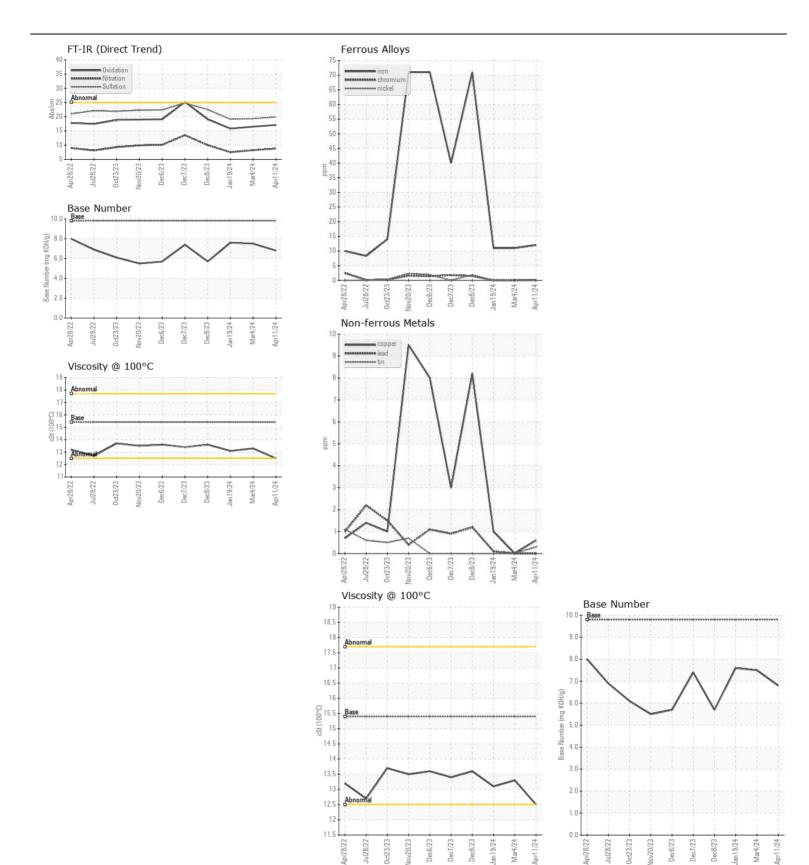
NORMAL NORMAL



Machine Id
358M
Component
Diesel Engine
Fluid

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

PETRO CANADA DURON SHP 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
HESSIMIENDATION	Sample Number		Client Info		GFL0104464	,	GFL0109981
Resample at the next service interval to monitor.	Sample Date		Client Info		11 Apr 2024	04 Mar 2024	19 Jan 2024
	Machine Age	hrs	Client Info		20999	20958	20804
	Oil Age	hrs	Client Info		600	600	600
	Filter Age	hrs	Client Info		600	600	600
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	<120	12	11	11
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	0	0
	Nickel	ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		4	4	4
	Lead	ppm	ASTM D5185m		0	0	<1
	Copper	ppm	ASTM D5185m		<1	0	1
	Tin	ppm	ASTM D5185m		<1	0	0
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		6	7	7
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		0	<1	0
	Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.4	0.4	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.2	7.5
	Sulfation	Abs/.1mm	*ASTM D7415		19.9	19.3	19.1
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE NORML	NONE NORML	NONE NORML	NONE NORML
	Appearance Odor	scalar scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
	Lindollod Water		• • • • • • • • • • • • • • • • • • •			1420	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		13	9	10
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		3	<1	2
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		59	53	53
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m		959	874	867
	Calcium	ppm	ASTM D5185m		1077	953	1047
	Phosphorus	ppm	ASTM D5185m		1048	958	819
	Zinc	ppm	ASTM D5185m		1261	1143	1072
	Sulfur	ppm Abo/1mm	ASTM D5185m		3251	2561	2560
	Oxidation	Abs/.1mm	*ASTM D7414 ASTM D2896		17.1	16.5	15.8 7.6
	Base Number (BN) Visc @ 100°C	cSt	ASTM D2896 ASTM D445		6.8 12.5	7.5 13.3	13.1
	VISC @ 100-C	UOL	MOTIVI D445	15.4	12.5	13.3	13.1







Certificate L2367

Laboratory Sample No.

Lab Number : 06150094 Unique Number : 10980172

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : GFL0104464

Test Package : FLEET

Received : 16 Apr 2024 **Tested** : 17 Apr 2024 Diagnosed

: 17 Apr 2024 - Wes Davis

GFL Environmental - 410 - Michigan West 39000 Van Born Rd Wayne, MI

US 48184 Contact: Belal Dgheish bdgheish@gflenv.com

T: (734)714-2340

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)