WEAR CONTAMINATION FLUID CONDITION

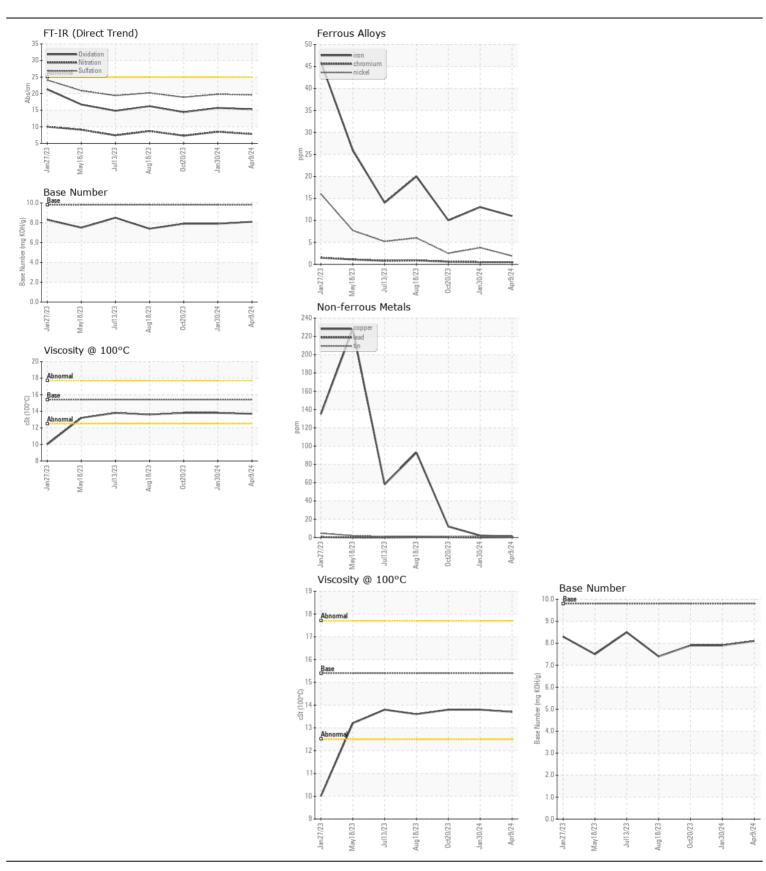
NORMAL NORMAL



Machine Id 913019 Component Diesel Engine

PETRO CANADA DURON SHP 15W40 (11 GAL)

PETRO CANADA DURON SHP	15W40 (11 (GAL)					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0100428	GFL0100425	GFL0038528
	Sample Date		Client Info		09 Apr 2024	30 Jan 2024	20 Oct 2023
	Machine Age	hrs	Client Info		2928	2556	2018
	Oil Age	hrs	Client Info		372	538	370
	Filter Age	hrs	Client Info		372	538	370
	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	11	13	10
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m		2	4	2
	Titanium	ppm	ASTM D5185m	>2	0	0	<1
	Silver	ppm	ASTM D5185m	>2	0	<1	0
	Aluminum	ppm	ASTM D5185m	>20	2	4	4
	Lead	ppm	ASTM D5185m	>40	<1	0	<1
	Copper	ppm	ASTM D5185m	>330	1	2	12
	Tin	ppm	ASTM D5185m	>15	<1	1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	4	4
	Potassium	ppm	ASTM D5185m	>20	20	6	8
There is no indication of any contamination in the oil.	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	>4	0.5	0.6	0.4
	Nitration	Abs/cm	*ASTM D7624	>20	7.8	8.5	7.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.8	18.9
	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	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		10	7	7
	Boron	ppm	ASTM D5185m	0	6	12	10
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0	0	0	0
	Molybdenum	ppm	ASTM D5185m	60	58	63	62
	Manganese	ppm	ASTM D5185m	0	<1	<1	0
	Magnesium	ppm	ASTM D5185m	1010	922	969	884
	Calcium	ppm	ASTM D5185m	1070	1094	1098	1047
	Phosphorus	ppm	ASTM D5185m	1150	989	1044	973
	Zinc	ppm	ASTM D5185m		1150	1280	1153
	Sulfur	ppm	ASTM D5185m	2060	3313	2979	3319
	Oxidation	Abs/.1mm	*ASTM D7414		15.3	15.7	14.4
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.1	7.9	7.9
	Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.8	13.8







Certificate L2367

Laboratory

Sample No.

Lab Number : 06150941 Unique Number : 10981019 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : GFL0100428 : 16 Apr 2024 **Tested**

: 17 Apr 2024 Diagnosed

: 17 Apr 2024 - Wes Davis

GFL Environmental - 900 - Antigo HC 1715 Deleglise St. Antigo, WI

US 54409 Contact: Kirk Koss

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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)