WEAR CONTAMINATION FLUID CONDITION

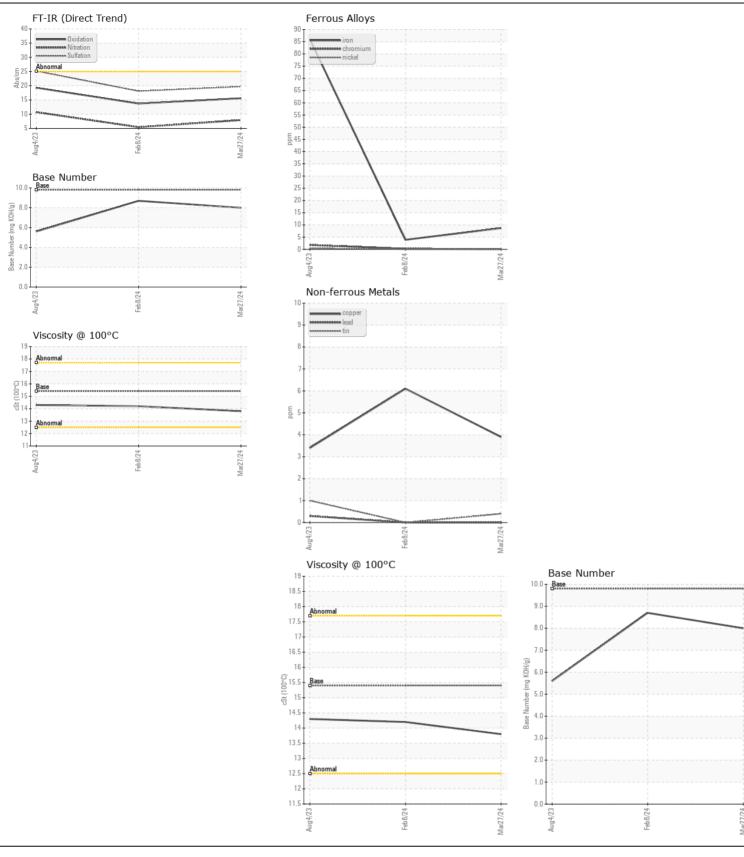
NORMAL NORMAL



Machine Id 920115 Component Diesel Engine

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

PETRO CANADA DURON SHP 15W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TEOCHMEND/(TION	Sample Number		Client Info		GFL0084799	GFL0084764	GFL0084841
Resample at the next service interval to monitor.	Sample Date		Client Info		27 Mar 2024	08 Feb 2024	04 Aug 2023
	Machine Age	hrs	Client Info		8227	7867	6406
	Oil Age	hrs	Client Info		6406	6406	200
	Filter Age	hrs	Client Info		0	0	200
	Oil Changed		Client Info		Changed	N/A	Changed
	Filter Changed		Client Info		Changed	N/A	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAD			AOTA D5405	400			00
WEAR  All component wear rates are normal.	Iron	ppm	ASTM D5185m		9	4	86
	Chromium	ppm	ASTM D5185m		<1	<1	2
	Nickel	ppm	ASTM D5185m		0	0	<1
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m		1	1	3
	Lead	ppm		>40	0	0	<1
	Copper	ppm	ASTM D5185m		4	6	3
	Tin	ppm	ASTM D5185m	>15	<1	0	1
	Vanadium	ppm	ASTM D5185m	NONE	0	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	3	6
	Potassium	ppm	ASTM D5185m	>20	<1	2	4
There is no indication of any contamination in the oil.	Fuel		WC Method	>3.0	<1.0	0.4	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>4	0.6	0.2	2.7
	Nitration	Abs/cm	*ASTM D7624	>20	7.9	5.4	10.7
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	18.1	25.2
	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		2	0	12
	Boron	ppm	ASTM D5185m	0	2	3	2
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	8	0
	Molybdenum	ppm	ASTM D5185m	60	57	59	55
	Manganese	ppm	ASTM D5185m	0	0	0	1
	Magnesium	ppm	ASTM D5185m	1010	922	891	994
	Calcium	ppm	ASTM D5185m		1033	955	1173
	Phosphorus	ppm	ASTM D5185m	1150	965	868	938
	Zinc	ppm	ASTM D5185m	1270	1169	1134	1279
	Sulfur	ppm	ASTM D5185m	2060	3010	2831	2807
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	13.7	19.3
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.0	8.7	5.6
	Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.2	14.3





Certificate L2367

Laboratory Sample No.

Lab Number : 06151439 Unique Number: 10981517

Test Package : FLEET

: GFL0084799

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 17 Apr 2024 **Tested** : 18 Apr 2024

Diagnosed : 18 Apr 2024 - Wes Davis

GFL Environmental - 959A - Urbana HC

4808 cunningham Rd Urbana, IL US 61802

Contact: Kristine Tryon Ktryon@gflenv.com

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)

T:

F: