WEAR CONTAMINATION FLUID CONDITION

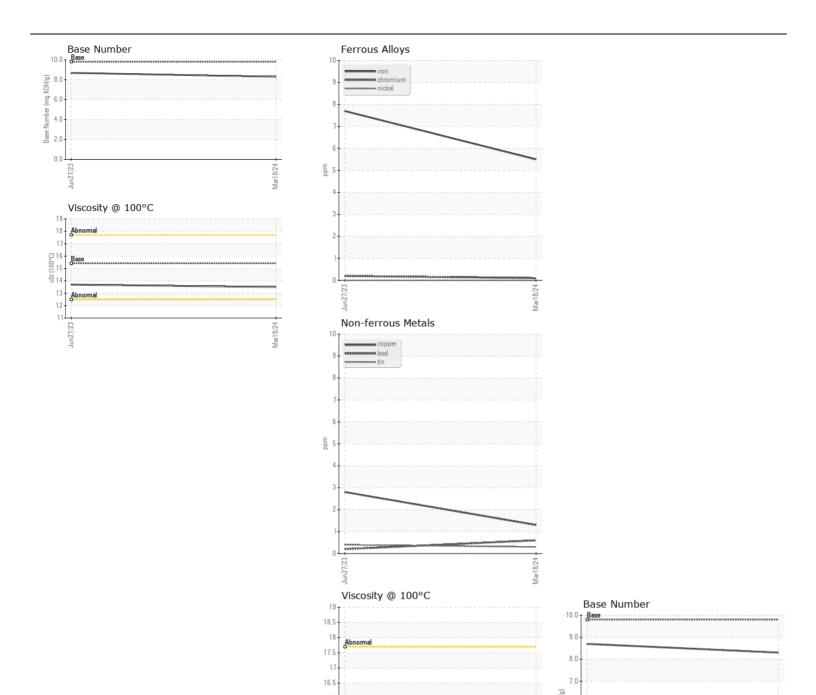
NORMAL NORMAL



Machine Id 11002M Component Diesel Engine Fluid

PETRO CANADA DURON SHP 15W40 (9 GAL)

PETRO CANADA DURON SIIP	134440 (3 G	^ <u>-</u> /					
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		GFL0104527	GFL0041807	
Resample at the next service interval to monitor.	Sample Date		Client Info		18 Mar 2024	27 Jun 2023	
	Machine Age	hrs	Client Info		0	0	
	Oil Age	hrs	Client Info		600	600	
	Filter Age	hrs	Client Info		600	600	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	-	6	8	
	Chromium	ppm	ASTM D5185m	>20	<1	<1	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	>2	<1	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m		1	3	
	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	
CONTAMINATION	0:1:		AOTM DEADE	05		4	
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	4	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		2	3	
	Fuel		WC Method	>3.0	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	0/	WC Method	4	NEG	NEG	
	Soot %	%	*ASTM D7844		0.1	0.3	
	Nitration	Abs/cm	*ASTM D7624	>20	6.3	8.5	
	Sulfation	Abs/.1mm	*ASTM D7415		17.6	19.2	
	Silt Debris	scalar	*Visual	NONE	NONE	NONE	
		scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE NORML	NONE NORML	
	Appearance Odor	scalar	*Visual *Visual	NORML NORML		NORML	
	Emulsified Water			>0.2	NORML NEG	NEG	
		scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	3	
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	0	5	2	
	Barium	ppm	ASTM D5185m	0	0	0	
	Molybdenum	ppm	ASTM D5185m	60	60	62	
	Manganese	ppm	ASTM D5185m	0	0	<1	
	Magnesium	ppm	ASTM D5185m		934	1010	
	Calcium	ppm	ASTM D5185m	1070	1102	1108	
	Phosphorus	ppm	ASTM D5185m	1150	1094	1075	
	Zinc	ppm	ASTM D5185m	1270	1246	1343	
	Sulfur	ppm	ASTM D5185m	2060	3198	3789	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	14.4	
	Base Number (BN)		ASTM D2896		8.3	8.7	
	Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.7	
	=						







Laboratory Sample No.

: GFL0104527 Lab Number : 06125473 Unique Number : 10939624 Test Package : FLEET

cSt (100°C)

13 12.5

11.5

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 21 Mar 2024 **Tested** : 22 Mar 2024

Diagnosed : 22 Mar 2024 - Wes Davis

GFL Environmental - 461 - Smith Hauling 3239 W. M 28 Brimley, MI

US 49715 Contact: Jim Smith jim.smith@gflenv.com T: (906)635-3380

* - 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)

Report Id: GFL461 [WUSCAR] 06125473 (Generated: 03/23/2024 14:18:31) Rev: 1