FLEET LUBE 360™ OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
912005
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

The nickel level is abnormal. All other component wear rates are normal.

CONTAMINATION

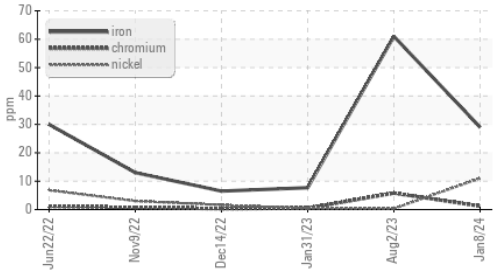
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

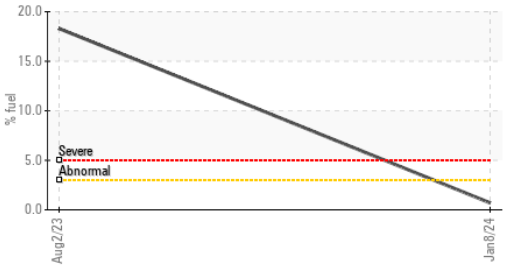
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0106662	GFL0086219	GFL0072873
Sample Date		Client Info		08 Jan 2024	02 Aug 2023	31 Jan 2023
Machine Age	hrs	Client Info		4613	0	3856
Oil Age	hrs	Client Info		600	4349	882
Filter Age	hrs	Client Info		600	0	882
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>120	29	61	8
Chromium	ppm	ASTM D5185m	>20	1	6	<1
Nickel	ppm	ASTM D5185m	>5	▲ 11	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	32	0
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	15	3	2
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
Silicon	ppm	ASTM D5185m	>25	4	7	3
Potassium	ppm	ASTM D5185m	>20	2	111	1
Fuel	%	ASTM D3524	>3.0	0.7	⬢ 18.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.8	1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.8	9.3	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	19.7	19.5
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
Sodium	ppm	ASTM D5185m		6	3	2
Boron	ppm	ASTM D5185m	0	5	3	2
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	60	56	54	59
Manganese	ppm	ASTM D5185m	0	2	1	<1
Magnesium	ppm	ASTM D5185m	1010	879	628	905
Calcium	ppm	ASTM D5185m	1070	964	895	1069
Phosphorus	ppm	ASTM D5185m	1150	976	749	962
Zinc	ppm	ASTM D5185m	1270	1199	931	1189
Sulfur	ppm	ASTM D5185m	2060	2496	2143	2845
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	14.0	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.6	5.5	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	⬢ 7.9	13.9

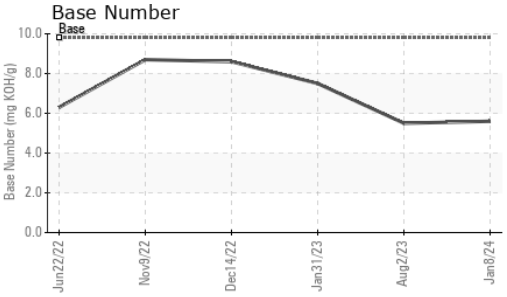
Ferrous Alloys



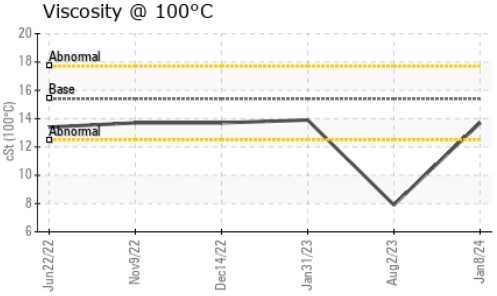
Fuel Dilution



Base Number



Viscosity @ 100°C



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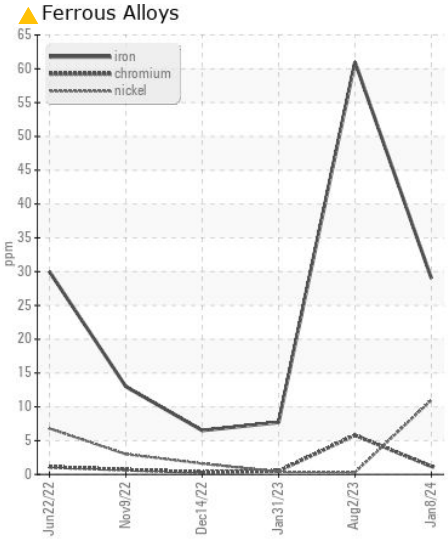
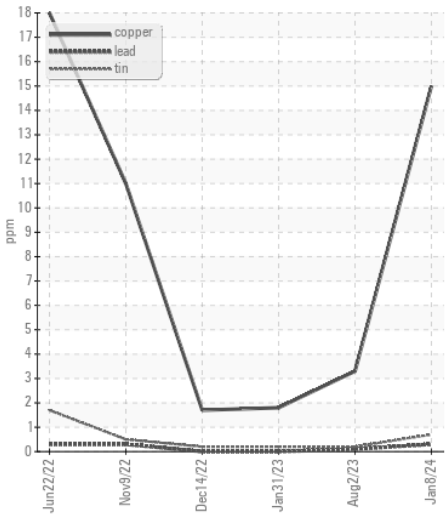
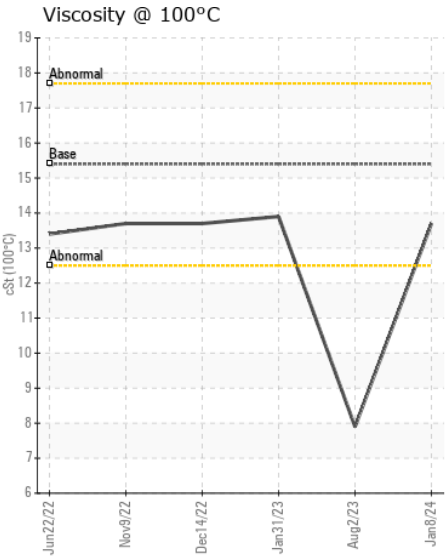


Non-ferrous Metals



Viscosity @ 100°C



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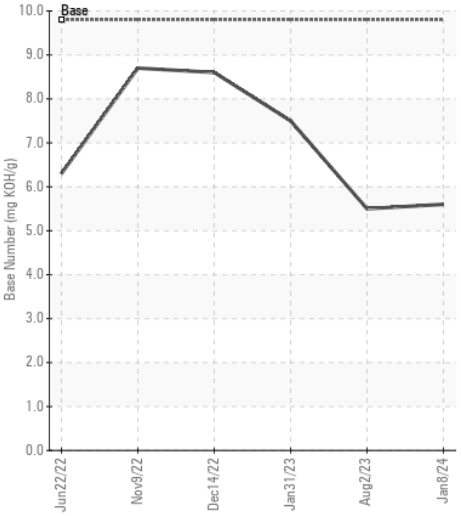

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0106662 **Recieved** : 19 Jan 2024
Lab Number : 06065311 **Diagnosed** : 24 Jan 2024
Unique Number : 10836693 **Diagnostician** : Doug Bogart
Test Package : FLEET (Additional Tests: PercentFuel)

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)

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Report Id: GFL405 [WUSCAR] 06065311 (Generated: 01/26/2024 05:55:58) Rev: 1

Submitted By: John Nahal