FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2227123
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

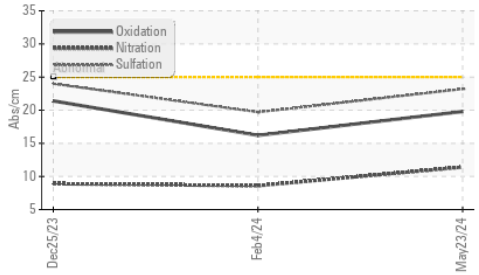
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

FLUID CONDITION

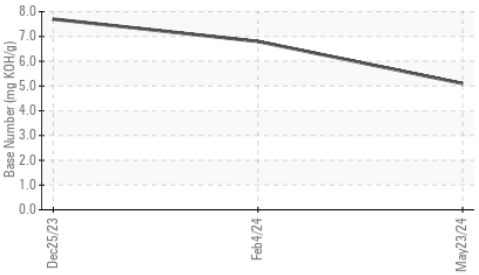
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0124271	PCA0114817	PCA0099544
Sample Date		Client Info		23 May 2024	04 Feb 2024	25 Dec 2023
Machine Age	mls	Client Info		0	39604	20000
Oil Age	mls	Client Info		20000	19604	20000
Filter Age	mls	Client Info		20000	19604	20000
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	29	21	35
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>4	2	4	2
Titanium	ppm	ASTM D5185m		22	17	<1
Silver	ppm	ASTM D5185m	>3	0	7	17
Aluminum	ppm	ASTM D5185m	>20	19	23	33
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	231	349	193
Tin	ppm	ASTM D5185m	>15	<1	2	4
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	17	▲ 57
Potassium	ppm	ASTM D5185m	>20	44	57	85
Fuel		WC Method	>5	<1.0	<1.0	0.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.4	8.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	19.7	24.0
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		5	0	4
Boron	ppm	ASTM D5185m	2	0	32	228
Barium	ppm	ASTM D5185m	0	0	14	0
Molybdenum	ppm	ASTM D5185m	50	45	60	108
Manganese	ppm	ASTM D5185m	0	1	2	4
Magnesium	ppm	ASTM D5185m	950	762	745	639
Calcium	ppm	ASTM D5185m	1050	1336	1266	1406
Phosphorus	ppm	ASTM D5185m	995	973	980	696
Zinc	ppm	ASTM D5185m	1180	1155	1084	817
Sulfur	ppm	ASTM D5185m	2600	2655	3370	2317
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.8	16.2	21.4
Base Number (BN)	mg KOH/g	ASTM D2896		5.1	6.8	7.7
Visc @ 100°C	cSt	ASTM D445	12.00	10.6	10.2	9.2

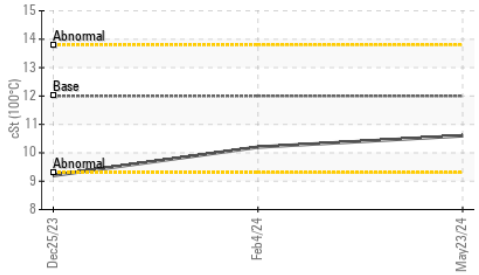
FT-IR (Direct Trend)



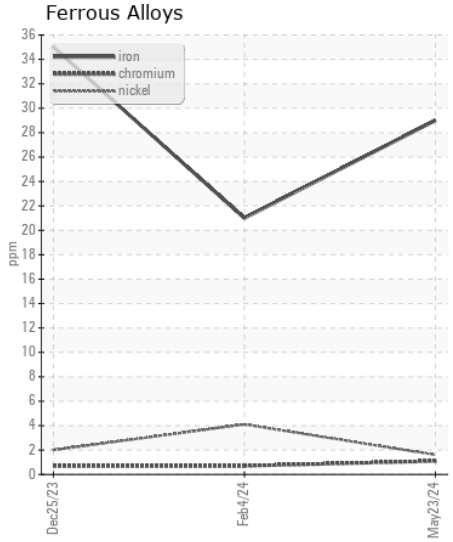
Base Number



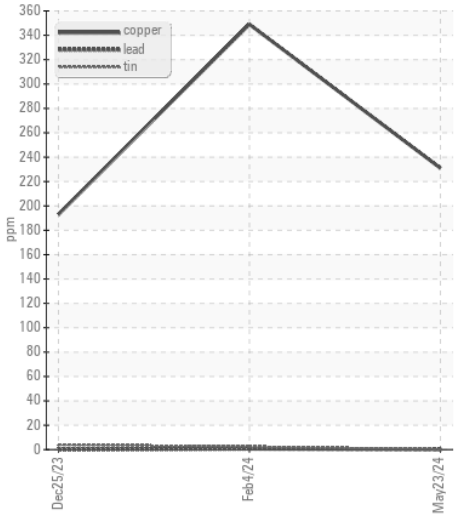
Viscosity @ 100°C



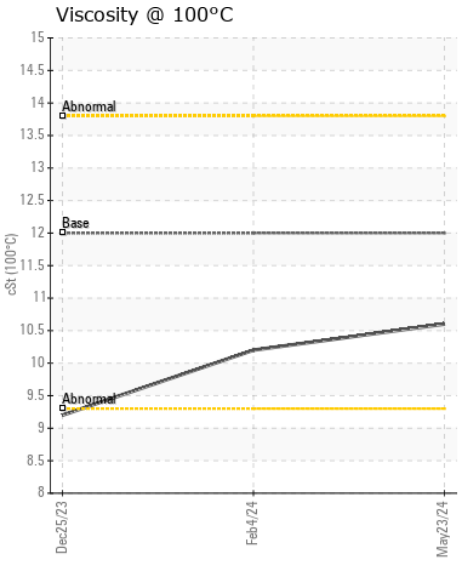
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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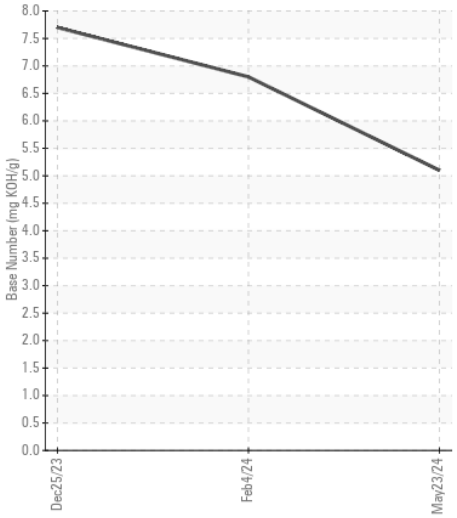

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124271
Lab Number : 06197278
Unique Number : 11059401
Test Package : FLEET

Received : 03 Jun 2024
Tested : 03 Jun 2024
Diagnosed : 03 Jun 2024 - Wes Davis

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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