FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
26611
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W30 (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

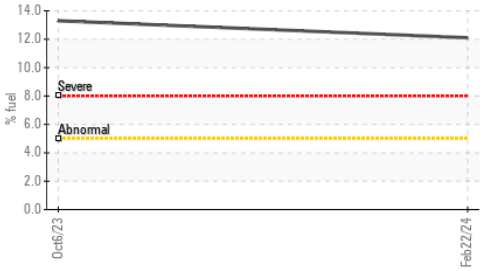
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

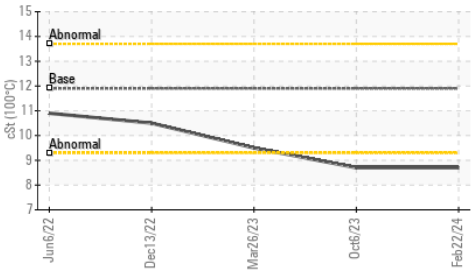
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0119548	PCA0107407	PCA0095194
Sample Date		Client Info		22 Feb 2024	06 Oct 2023	26 Mar 2023
Machine Age	mls	Client Info		594764	575182	0
Oil Age	mls	Client Info		0	38717	40000
Filter Age	mls	Client Info		0	38717	20000
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>100	12	18	26
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		4	2	7
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	0	2	2
Copper	ppm	ASTM D5185m	>330	3	3	5
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	4	4	5
Potassium	ppm	ASTM D5185m	>20	2	4	2
Fuel	%	ASTM D3524	>5	▲ 12.1	▲ 13.3	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.6	9.2	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	19.4	21.8
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	8	11
Boron	ppm	ASTM D5185m	0	11	0	3
Barium	ppm	ASTM D5185m	0	0	12	0
Molybdenum	ppm	ASTM D5185m	64	46	52	51
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1160	803	783	829
Calcium	ppm	ASTM D5185m	820	1020	951	1063
Phosphorus	ppm	ASTM D5185m	1160	915	881	872
Zinc	ppm	ASTM D5185m	1260	1112	1057	1137
Sulfur	ppm	ASTM D5185m	3000	3246	2759	3299
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	15.3	17.4
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	6.3	5.8	5.4
Visc @ 100°C	cSt	ASTM D445	11.9	▲ 8.7	▲ 8.7	9.5

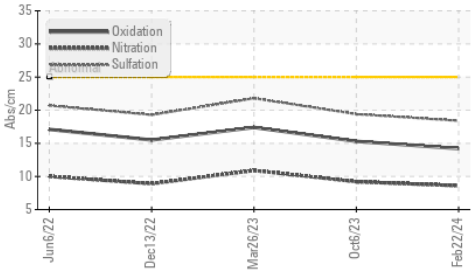
Fuel Dilution



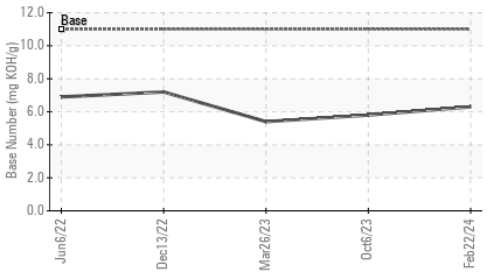
Viscosity @ 100°C



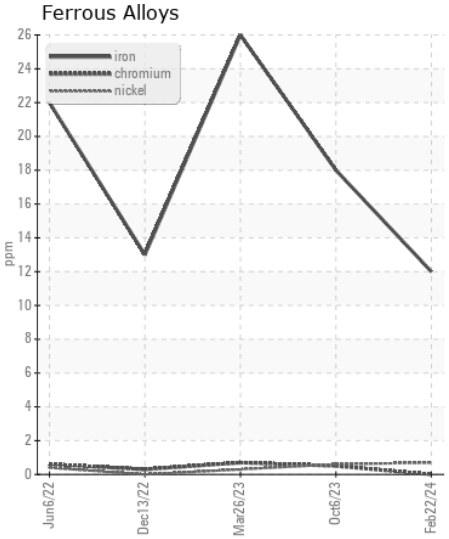
FT-IR (Direct Trend)



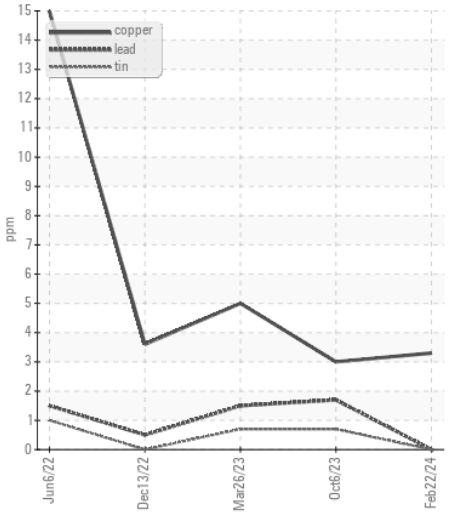
Base Number



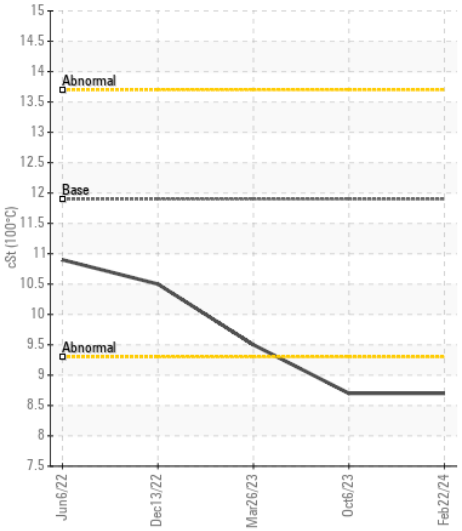
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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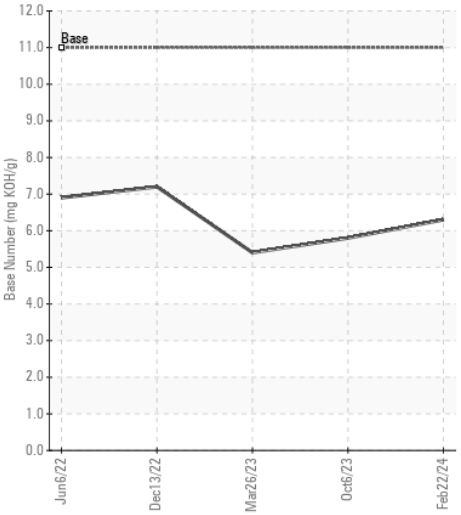

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0119548
Lab Number : 06219429
Unique Number : 11097626
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 25 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 Jun 2024 - Wes Davis

PERDUE FARMS - GEORGETOWN
20621 SAVANAH RD
GEORGETOWN, DE
US 19947
Contact: ROBERT LOCKWOOD
Robert.Lockwood@Perdue.com
T:
F:

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)