FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Area
(MM1341)
Machine Id
2536
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

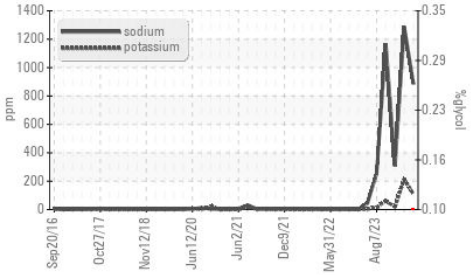
Test for glycol is positive. There is a high concentration of glycol present in the oil.

FLUID CONDITION

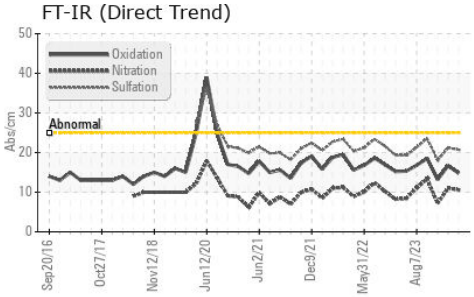
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0124214	PCA0113462	PCA0101776
Sample Date		Client Info		12 Jul 2024	15 Mar 2024	09 Jan 2024
Machine Age	hrs	Client Info		25441	24861	24499
Oil Age	hrs	Client Info		580	362	600
Filter Age	hrs	Client Info		580	362	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>165	36	55	8
Chromium	ppm	ASTM D5185m	>5	2	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	9	5	2
Lead	ppm	ASTM D5185m	>150	1	1	1
Copper	ppm	ASTM D5185m	>90	9	12	4
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>35	29	▲ 36	10
Potassium	ppm	ASTM D5185m	>20	▲ 107	▲ 215	19
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.10	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.5	0.5	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.6	11.0	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.7	21.2	18.1
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		● 885	▲ 1287	▲ 309
Boron	ppm	ASTM D5185m	0	25	27	20
Barium	ppm	ASTM D5185m	0	<1	<1	0
Molybdenum	ppm	ASTM D5185m	60	102	151	72
Manganese	ppm	ASTM D5185m	0	0	0	<1
Magnesium	ppm	ASTM D5185m	1010	690	1124	693
Calcium	ppm	ASTM D5185m	1070	1413	2297	1253
Phosphorus	ppm	ASTM D5185m	1150	908	1661	957
Zinc	ppm	ASTM D5185m	1270	1173	1952	1181
Sulfur	ppm	ASTM D5185m	2060	3061	5656	3176
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	16.7	13.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.8	8.6	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.0	12.9	13.2

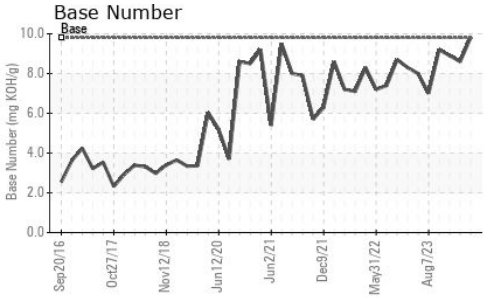
Glycol Contamination



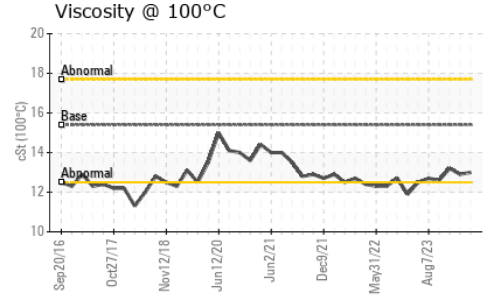
FT-IR (Direct Trend)



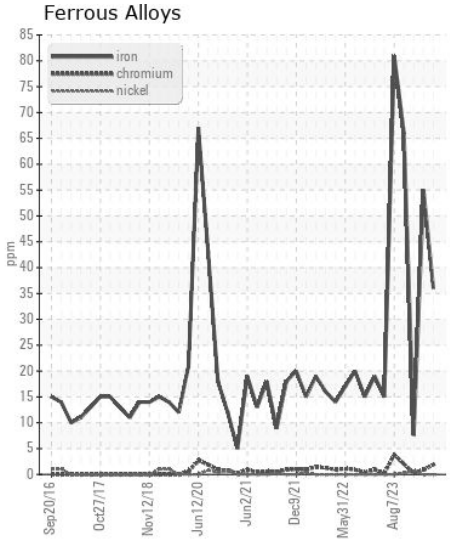
Base Number



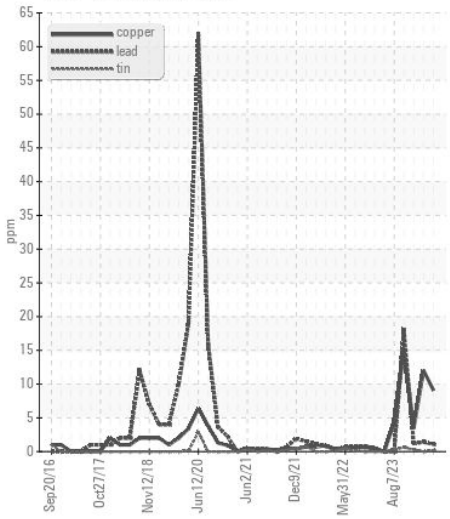
Viscosity @ 100°C



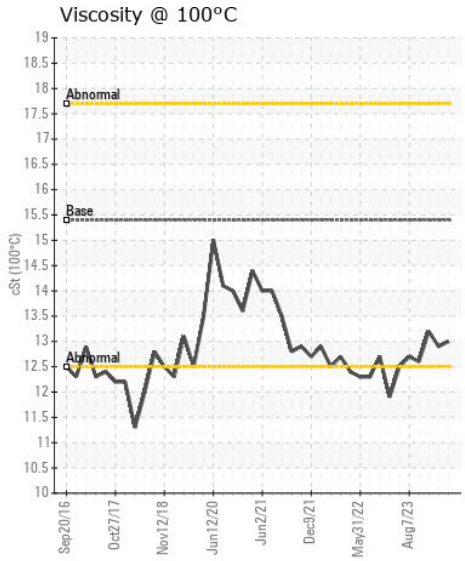
Ferrous Alloys



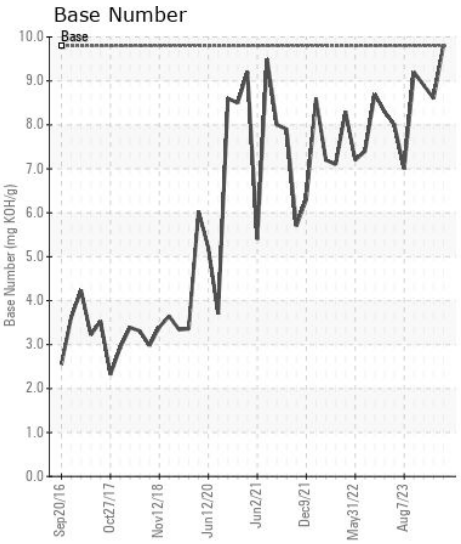
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124214
Lab Number : 06235555
Unique Number : 11124389
Test Package : FLEET (Additional Tests: Glycol)

Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 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)

GFL Environmental - 002 - Vance-Granville
241 Vanco Mill Rd
Henderson, NC
US 27537
Contact: Cameron King
cameron.king@gflenv.com
T: (252)438-5333
F: (252)431-1635