FLEET LUBE 360 OIL DIAGNOSTICS

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(BD31110)
Machine Id
913072
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (36 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

Valve wear is indicated. All other component wear rates are normal.

CONTAMINATION

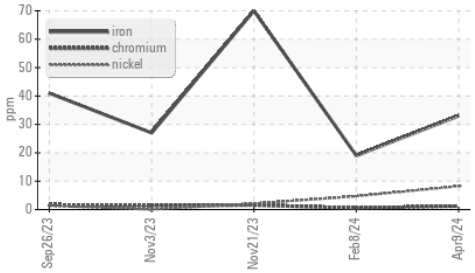
There is no indication of any contamination in the oil.

FLUID CONDITION

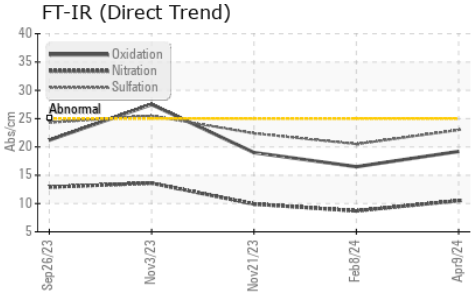
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0114325	GFL0110111	GFL0059306
Sample Date		Client Info		09 Apr 2024	08 Feb 2024	21 Nov 2023
Machine Age	hrs	Client Info		3980	3523	3030
Oil Age	hrs	Client Info		2883	3376	147
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	33	19	70
Chromium	ppm	ASTM D5185m	>20	1	<1	2
Nickel	ppm	ASTM D5185m	>5	▲ 8	5	2
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	2	4
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	13	13	10
Tin	ppm	ASTM D5185m	>15	1	<1	<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	>25	6	8	4
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	1.2	0.7	1
Nitration	Abs/cm	*ASTM D7624	>20	10.5	8.7	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.0	20.5	22.4
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	3	7
Boron	ppm	ASTM D5185m	0	0	21	1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	60	60	57
Manganese	ppm	ASTM D5185m	0	1	1	1
Magnesium	ppm	ASTM D5185m	1010	969	898	845
Calcium	ppm	ASTM D5185m	1070	1127	1044	1019
Phosphorus	ppm	ASTM D5185m	1150	959	981	870
Zinc	ppm	ASTM D5185m	1270	1244	1176	1080
Sulfur	ppm	ASTM D5185m	2060	2768	2541	1964
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	16.5	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	4.4	6.2	5.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.6	13.5	13.5

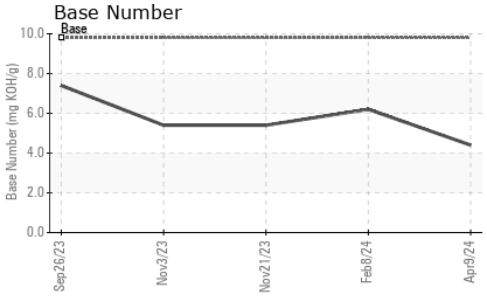
Ferrous Alloys



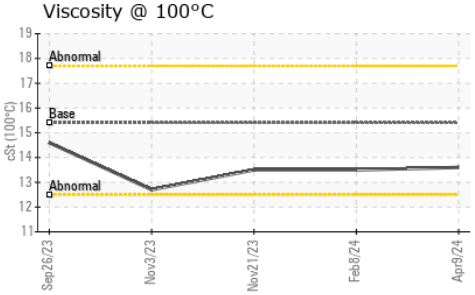
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



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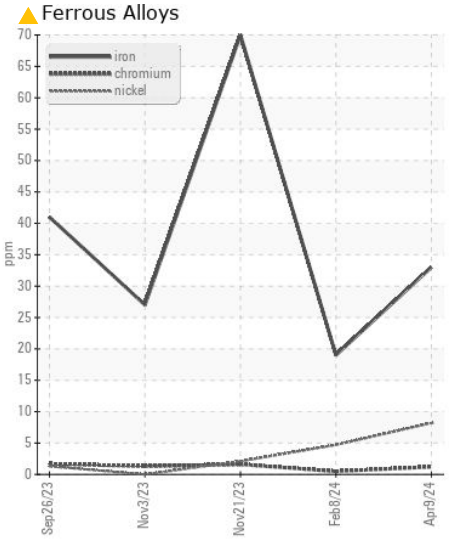
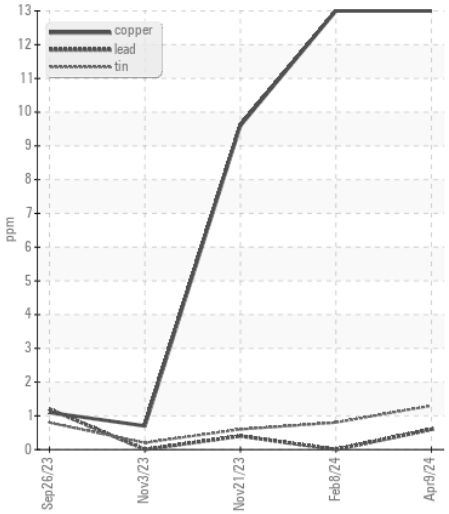
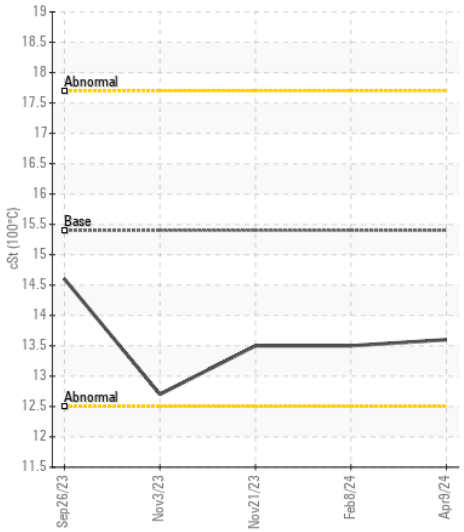


Non-ferrous Metals



Viscosity @ 100°C



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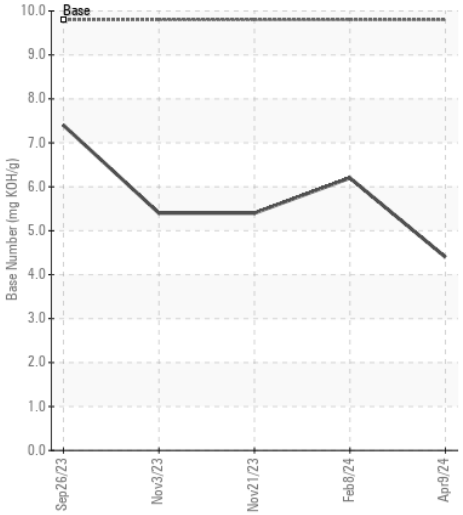

Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: GFL0114325	**Received**	: 11 Apr 2024
Lab Number	: 06145624	**Tested**	: 12 Apr 2024
Unique Number	: 10970432	**Diagnosed**	: 14 Apr 2024 - Don Baldridge
Test Package	: FLEET		

GFL Environmental - 468 - Dearborn
3051 Schaefer Rd
Dearborn, MI
US 48126
Contact:
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)