OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
724
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

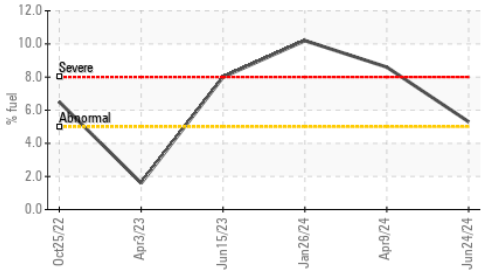
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

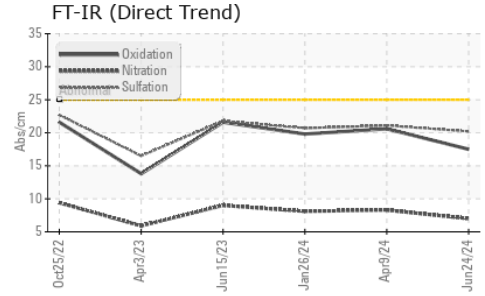
The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0773691	WC0725913	WC0773703
Sample Date		Client Info		24 Jun 2024	09 Apr 2024	26 Jan 2024
Machine Age	hrs	Client Info		250	0	250
Oil Age	hrs	Client Info		0	250	0
Filter Age	hrs	Client Info		0	250	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>100	5	6	1
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	2
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	0	0
Tin	ppm	ASTM D5185m	>15	0	0	0
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	2	3	1
Potassium	ppm	ASTM D5185m	>20	0	1	0
Fuel	%	ASTM D3524	>5	▲ 5.3	▲ 8.6	▲ 10.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.0	8.3	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.1	20.7
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		1	2	0
Boron	ppm	ASTM D5185m	0	0	1	4
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	55	55	52
Manganese	ppm	ASTM D5185m	0	<1	0	0
Magnesium	ppm	ASTM D5185m	1010	968	881	819
Calcium	ppm	ASTM D5185m	1070	1057	942	881
Phosphorus	ppm	ASTM D5185m	1150	1004	980	913
Zinc	ppm	ASTM D5185m	1270	1264	1150	1094
Sulfur	ppm	ASTM D5185m	2060	3598	3340	2712
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	20.6	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	7.5	7.5
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	▲ 11.2	▲ 11.2

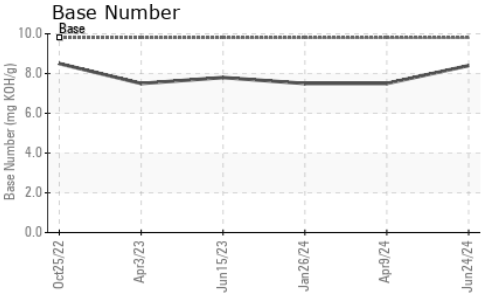
Fuel Dilution



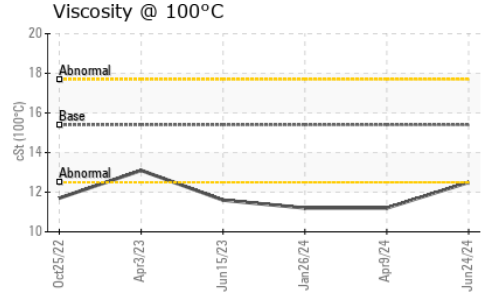
FT-IR (Direct Trend)



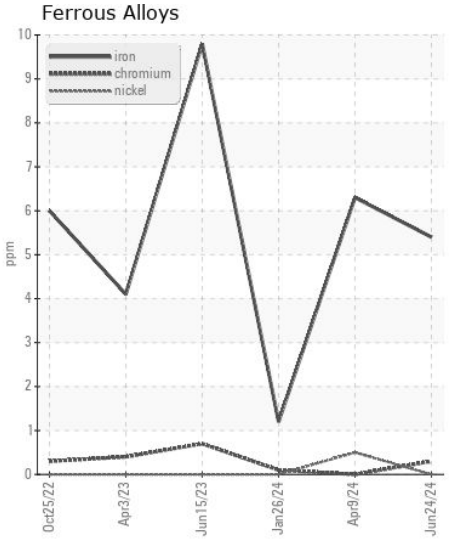
Base Number



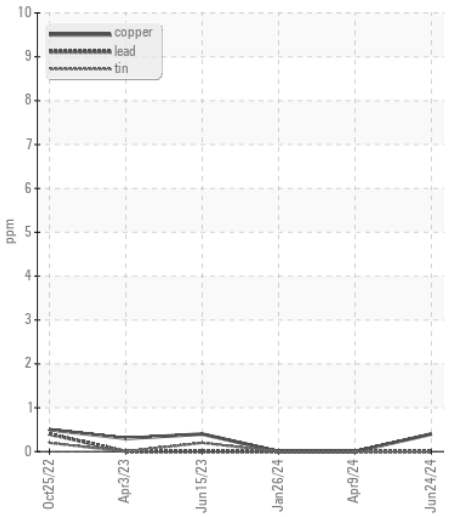
Viscosity @ 100°C



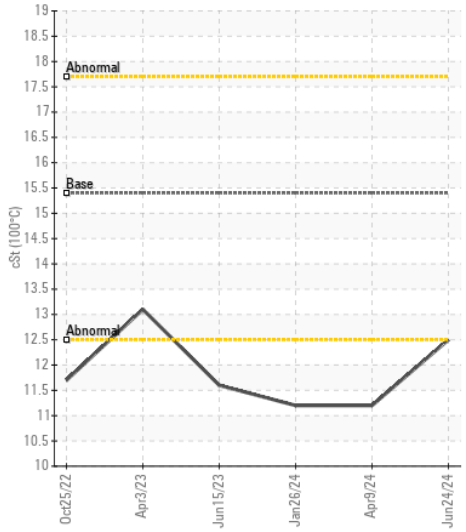
Ferrous Alloys



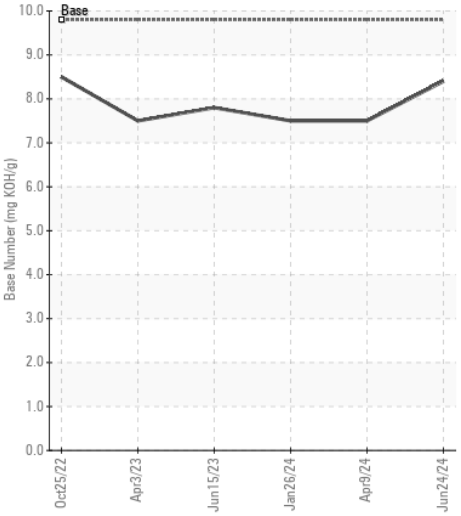
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0773691
Lab Number : 06219120
Unique Number : 11097317
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 24 Jun 2024
Tested : 27 Jun 2024
Diagnosed : 27 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)

AREA TRANSPORTATION AUTHORITY
44 TRANSPORTATION CENTER
JOHNSONBURG, PA
US 15845
Contact: Mike Agosti
magosti@rideata.com
T: (814)965-1265
F: