



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1755
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON UHP 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HRE0000550	WC0887612	WC0860429
Sample Date		Client Info		11 Jun 2024	04 Mar 2024	24 Oct 2023
Machine Age	mls	Client Info		101859	97702	93652
Oil Age	mls	Client Info		0	6000	0
Filter Age	mls	Client Info		0	6000	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	14	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	5
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	0	<1	1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

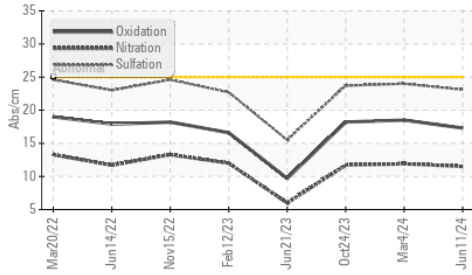
Silicon	ppm	ASTM D5185m	>25	16	23	20
Potassium	ppm	ASTM D5185m	>20	0	2	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.5	11.9	11.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	24.0	23.7
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

FLUID CONDITION

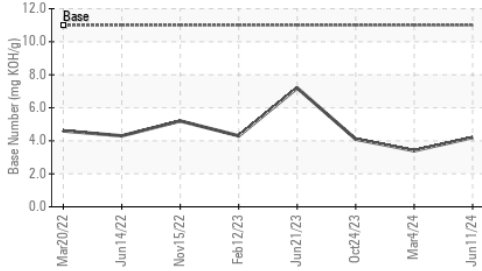
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m	0	16	20	26
Barium	ppm	ASTM D5185m	0	0	0	4
Molybdenum	ppm	ASTM D5185m	64	217	208	205
Manganese	ppm	ASTM D5185m	0	10	3	<1
Magnesium	ppm	ASTM D5185m	1160	665	565	619
Calcium	ppm	ASTM D5185m	820	1387	1093	1084
Phosphorus	ppm	ASTM D5185m	1160	590	546	564
Zinc	ppm	ASTM D5185m	1260	747	695	698
Sulfur	ppm	ASTM D5185m	3000	3122	2449	2212
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	18.5	18.2
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	4.2	3.4	4.1
Visc @ 100°C	cSt	ASTM D445	11.9	10.6	10.9	11.3

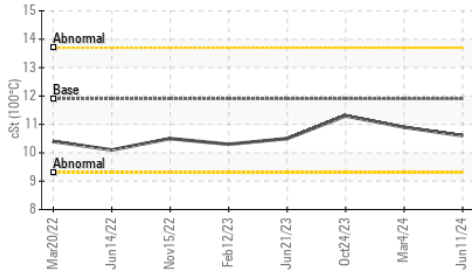
FT-IR (Direct Trend)



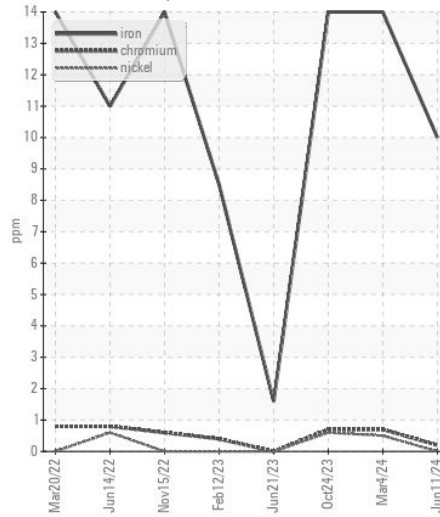
Base Number



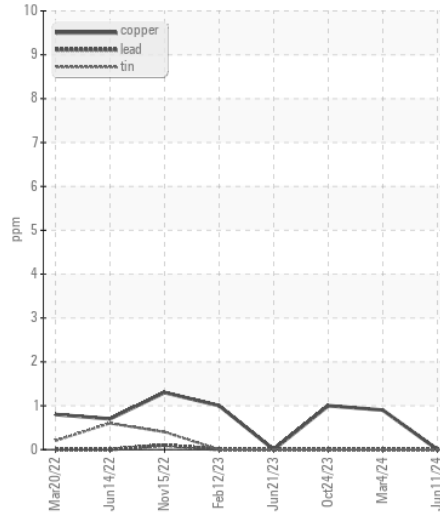
Viscosity @ 100°C



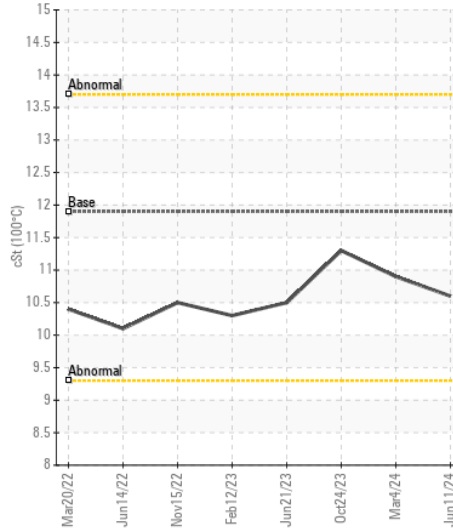
Ferrous Alloys



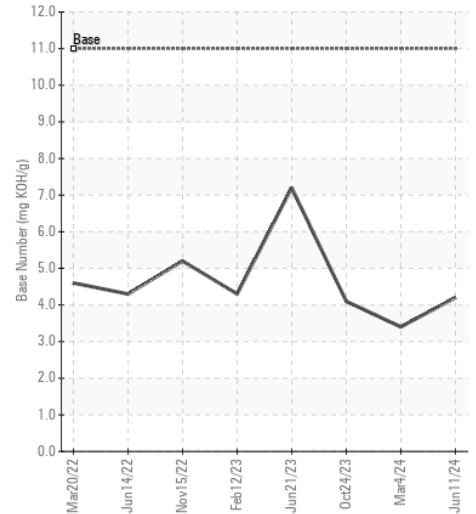
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : HRE0000550
 Lab Number : 06213226
 Unique Number : 11086090
 Test Package : FLEET
 Received : 18 Jun 2024
 Tested : 19 Jun 2024
 Diagnosed : 20 Jun 2024 - Don Baldrige

TOWN OF CHAPEL HILL
 6900 MILLHOUSE RD
 CHAPEL HILL, NC
 US 27516

Contact: Lisa DePasqua
 ldepasqua@townofchapelhill.org
 T: (919)696-4941

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)

F: