



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CHUCK B
Component
Port Genset
Fluid
PETRO CANADA DURON MARINE SAE 40 (4 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0066897	MW0066778	MW0036061
Sample Date		Client Info		03 Apr 2024	15 Feb 2024	29 Nov 2023
Machine Age	hrs	Client Info		4043	3506	2748
Oil Age	hrs	Client Info		537	758	556
Filter Age	hrs	Client Info		537	758	556
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	>50	6	12	6
Chromium	ppm	ASTM D5185m	>4	0	<1	0
Nickel	ppm	ASTM D5185m	>2	0	<1	0
Titanium	ppm	ASTM D5185m		4	2	2
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	1	2	<1
Lead	ppm	ASTM D5185m	>17	0	3	0
Copper	ppm	ASTM D5185m	>70	2	1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	<1	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.

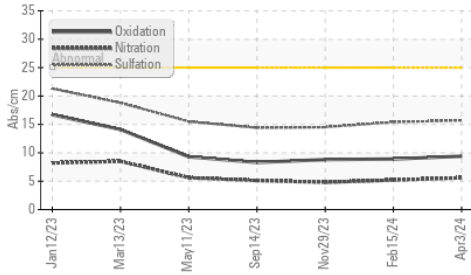
Silicon	ppm	ASTM D5185m	>25	11	12	6
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.6	5.2	4.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.7	15.4	14.5
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

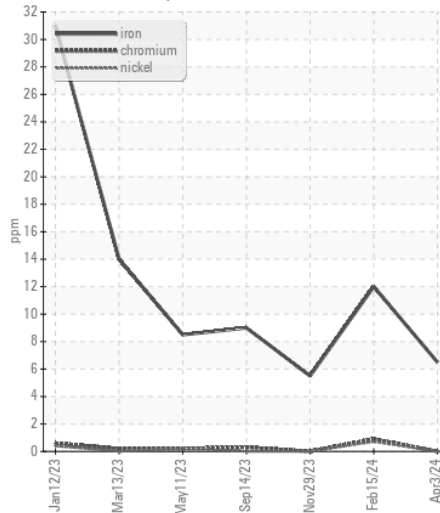
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	1	3
Boron	ppm	ASTM D5185m	1.0	24	6	10
Barium	ppm	ASTM D5185m	1.0	0	34	0
Molybdenum	ppm	ASTM D5185m	1.0	10	4	3
Manganese	ppm	ASTM D5185m	1	<1	<1	<1
Magnesium	ppm	ASTM D5185m	15	867	913	903
Calcium	ppm	ASTM D5185m	2540	1278	1075	1120
Phosphorus	ppm	ASTM D5185m	1000	1052	1011	1099
Zinc	ppm	ASTM D5185m	1110	1230	1318	1299
Sulfur	ppm	ASTM D5185m	3700	3708	3277	3178
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.4	8.9	8.8
Base Number (BN)	mg KOH/g	ASTM D2896	7.9	7.2	6.5	5.7
Visc @ 100°C	cSt	ASTM D445	14.6	13.6	13.5	13.7

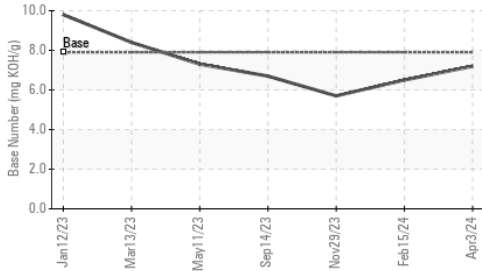
FT-IR (Direct Trend)



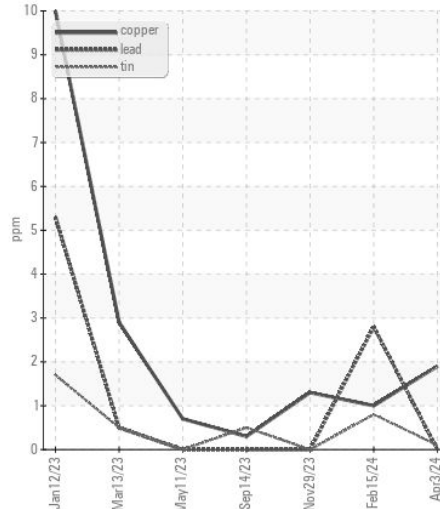
Ferrous Alloys



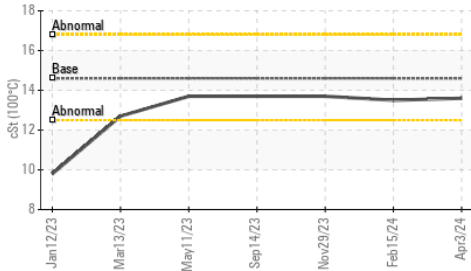
Base Number



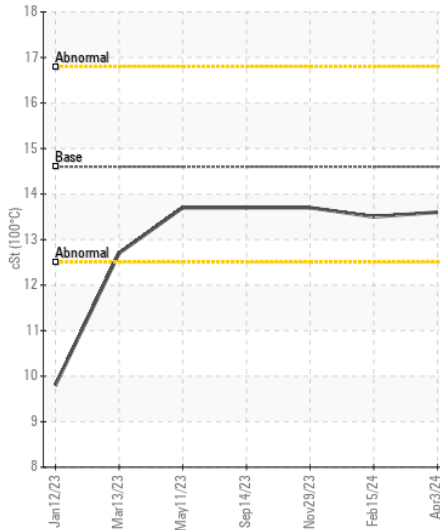
Non-ferrous Metals



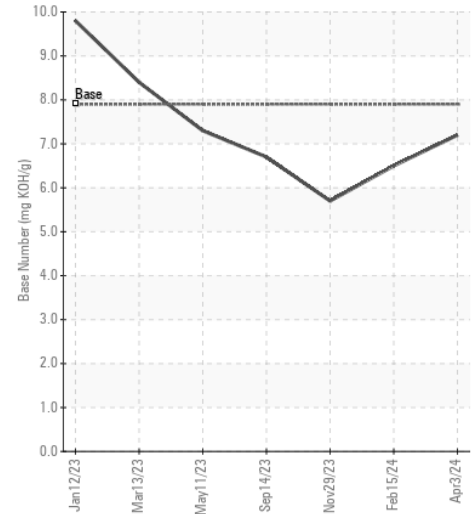
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0066897
Lab Number : 06146491
Unique Number : 10976569
Test Package : MAR 2

Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 12 Apr 2024 - Wes Davis

AMERICAN RIVER TRANSPORTATION
 1495 EAST ILLINOIS RT 71
 OTTAWA, IL
 US 61350

Contact: Jackson Hayes
 jackson.hayes@adm.com

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)

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