



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
834005
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (32 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0121934	GFL0106773	GFL0092003
Sample Date		Client Info		13 May 2024	04 Mar 2024	14 Dec 2023
Machine Age	hrs	Client Info		2418	1844	1229
Oil Age	hrs	Client Info		1844	1229	600
Filter Age	hrs	Client Info		1844	1229	600
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	11	11	9
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	9	10	9
Lead	ppm	ASTM D5185m	>30	<1	<1	1
Copper	ppm	ASTM D5185m	>35	1	<1	1
Tin	ppm	ASTM D5185m	>4	<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

CONTAMINATION

There is no indication of any contamination in the oil.

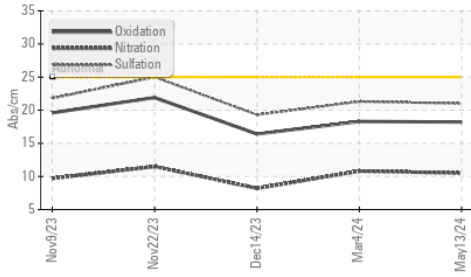
Silicon	ppm	ASTM D5185m	>+100	5	4	5
Potassium	ppm	ASTM D5185m	>20	30	35	30
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.8	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	21.3	19.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

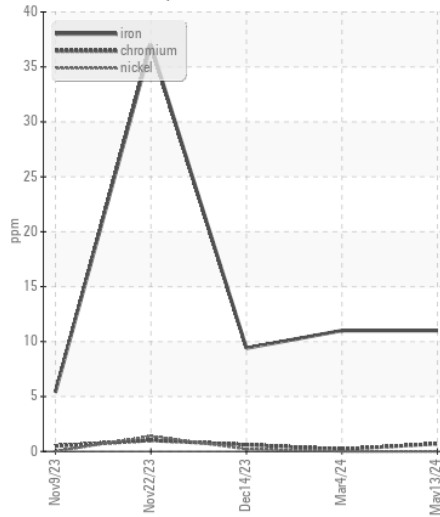
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		7	6	5
Boron	ppm	ASTM D5185m	0	3	9	28
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	58	45	51
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	597	465	543
Calcium	ppm	ASTM D5185m	1070	1863	1377	1514
Phosphorus	ppm	ASTM D5185m	1150	765	583	726
Zinc	ppm	ASTM D5185m	1270	1030	830	945
Sulfur	ppm	ASTM D5185m	2060	2830	1929	2417
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.2	18.3	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.0	4.5	7.4
Visc @ 100°C	cSt	ASTM D445	15.4	15.1	14.8	14.6

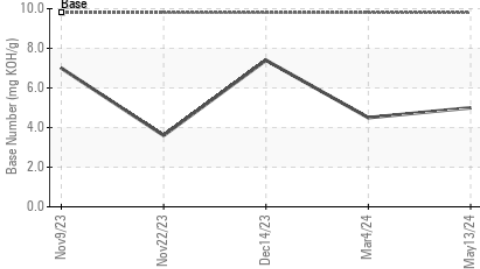
FT-IR (Direct Trend)



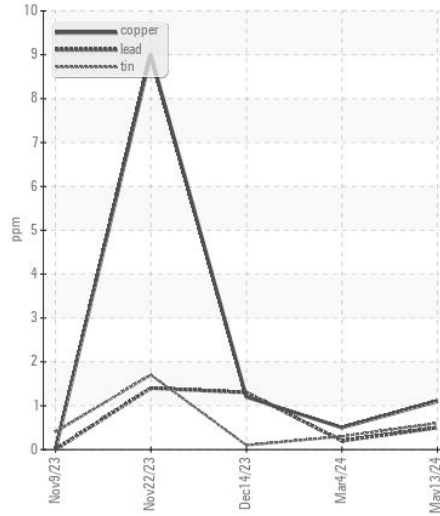
Ferrous Alloys



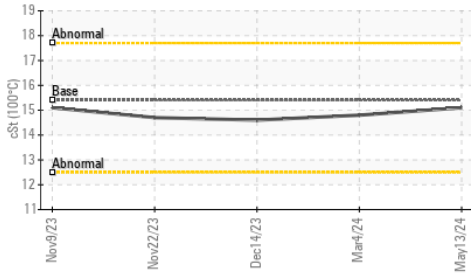
Base Number



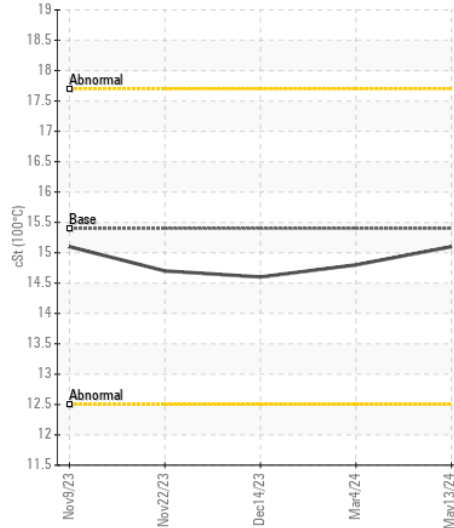
Non-ferrous Metals



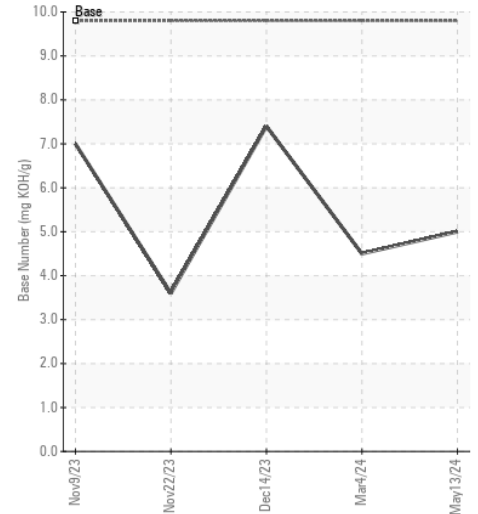
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0121934
Lab Number : 06188814
Unique Number : 11045566
Test Package : FLEET

Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 28 May 2024 - Don Baldrige

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Apolinar Zacarias
 pzacariascano@gflenv.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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