OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
98053 393
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The aluminum level has decreased, but is still abnormal. All other component wear rates are normal.

CONTAMINATION

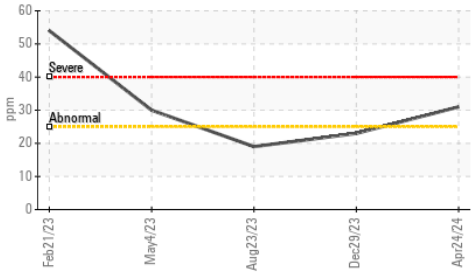
There is no indication of any contamination in the oil.

FLUID CONDITION

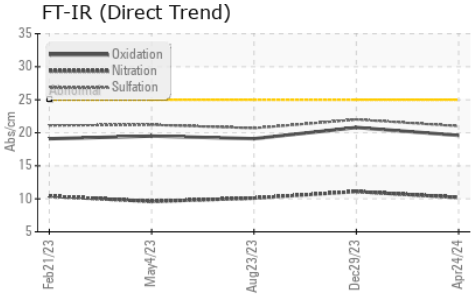
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0005884	SBP0005538	SBP0004657
Sample Date		Client Info		24 Apr 2024	29 Dec 2023	23 Aug 2023
Machine Age	mls	Client Info		267765	261648	254100
Oil Age	mls	Client Info		6117	7548	6303
Filter Age	mls	Client Info		6117	7548	6303
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	40	49	36
Chromium	ppm	ASTM D5185m	>20	<1	1	1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	▲ 31	23	19
Lead	ppm	ASTM D5185m	>40	0	2	<1
Copper	ppm	ASTM D5185m	>330	1	<1	1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
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	5	5	4
Potassium	ppm	ASTM D5185m	>20	3	6	6
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	0.5	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.2	11.1	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	22.0	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		5	3	3
Boron	ppm	ASTM D5185m	65	34	29	34
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	65	60	60	62
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1160	1123	1178	1137
Calcium	ppm	ASTM D5185m	820	867	839	836
Phosphorus	ppm	ASTM D5185m	1160	1016	1048	1077
Zinc	ppm	ASTM D5185m	1260	1235	1329	1377
Sulfur	ppm	ASTM D5185m	3000	3770	3456	3594
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	20.8	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	8.6	8.2	8.4
Visc @ 100°C	cSt	ASTM D445	14.3	14.1	14.0	14.1

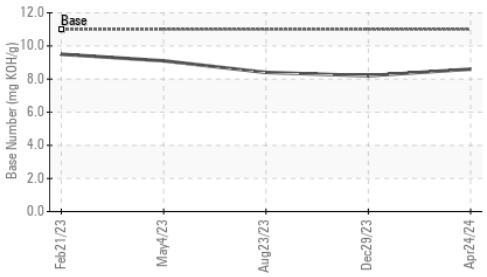
Aluminum (ppm)



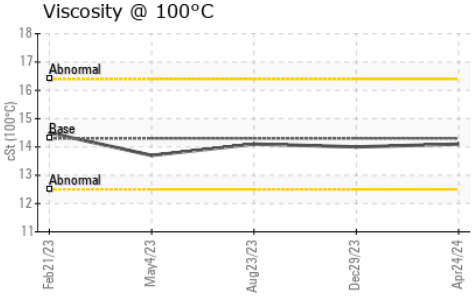
FT-IR (Direct Trend)



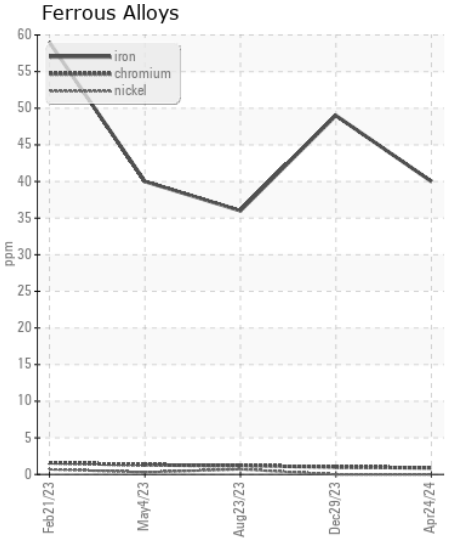
Base Number



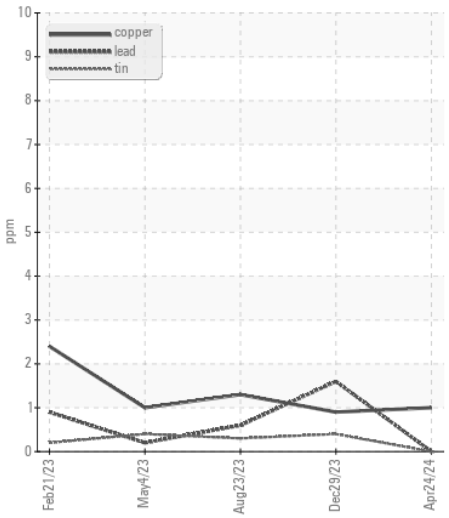
Viscosity @ 100°C



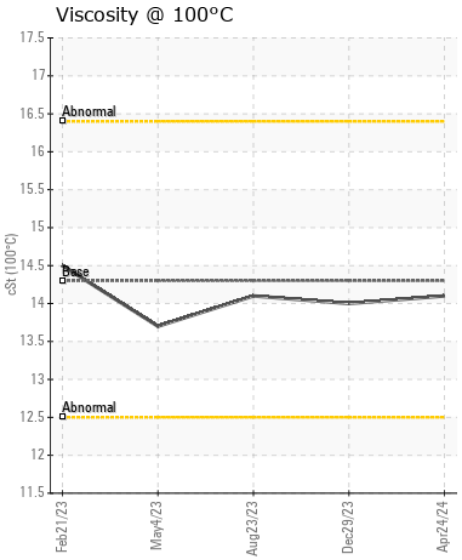
Ferrous Alloys



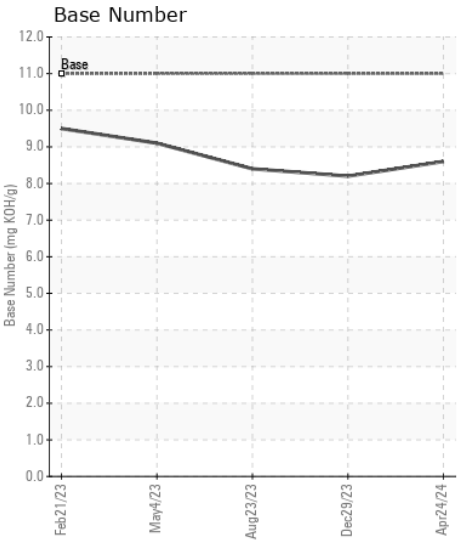
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005884
Lab Number : 06178328
Unique Number : 11029654
Test Package : FLEET

Received : 14 May 2024
Tested : 14 May 2024
Diagnosed : 16 May 2024 - Sean Felton

Sapp Bros. Fleet - North Platte Location
,
US
Contact: Service Manager
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)