OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
BARTO
Machine Id
7088 [BARTO]
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

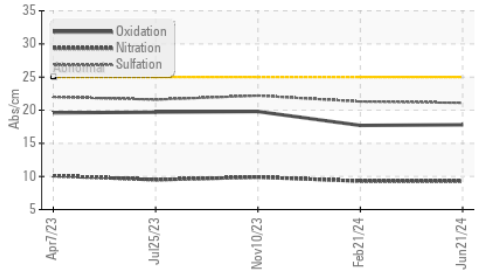
There is no indication of any contamination in the oil.

FLUID CONDITION

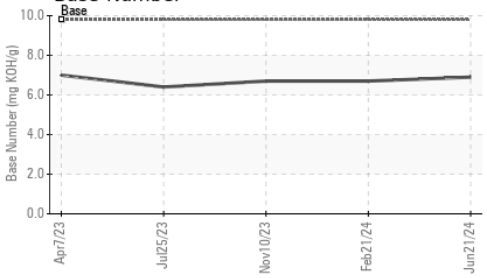
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0007718	SBP0006658	SBP0005875
Sample Date		Client Info		21 Jun 2024	21 Feb 2024	10 Nov 2023
Machine Age	mls	Client Info		219222	182579	140732
Oil Age	mls	Client Info		36643	41847	37162
Filter Age	mls	Client Info		36643	41847	37162
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>80	25	24	31
Chromium	ppm	ASTM D5185m	>5	2	3	4
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	7	13	17
Lead	ppm	ASTM D5185m	>30	0	1	0
Copper	ppm	ASTM D5185m	>150	7	12	21
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	7	10	8
Potassium	ppm	ASTM D5185m	>20	10	24	36
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	0.6	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.3	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	21.3	22.2
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		2	4	<1
Boron	ppm	ASTM D5185m	0	0	0	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	61	64	62
Manganese	ppm	ASTM D5185m	0	<1	<1	1
Magnesium	ppm	ASTM D5185m	1010	1019	1045	956
Calcium	ppm	ASTM D5185m	1070	1240	1219	1090
Phosphorus	ppm	ASTM D5185m	1150	1027	1066	856
Zinc	ppm	ASTM D5185m	1270	1356	1363	1233
Sulfur	ppm	ASTM D5185m	2060	2948	2504	2457
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	17.7	19.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.9	6.7	6.7
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.0	14.1

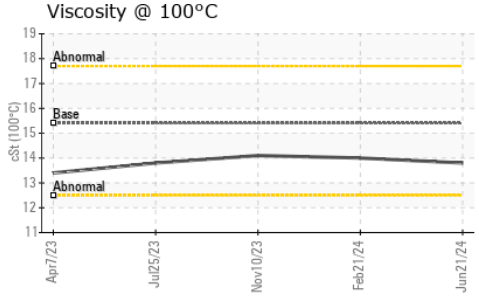
FT-IR (Direct Trend)



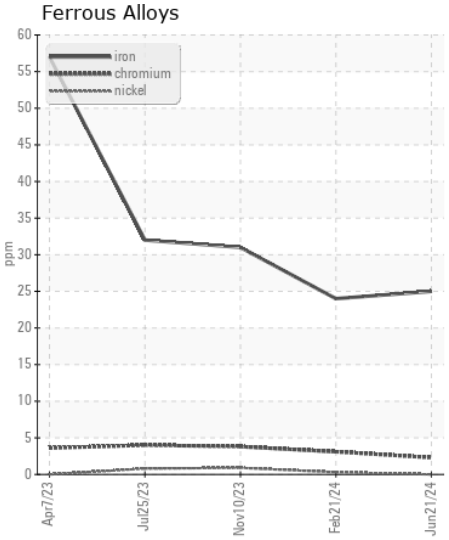
Base Number



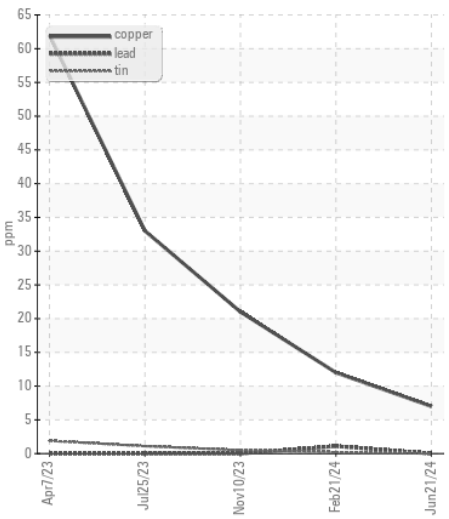
Viscosity @ 100°C



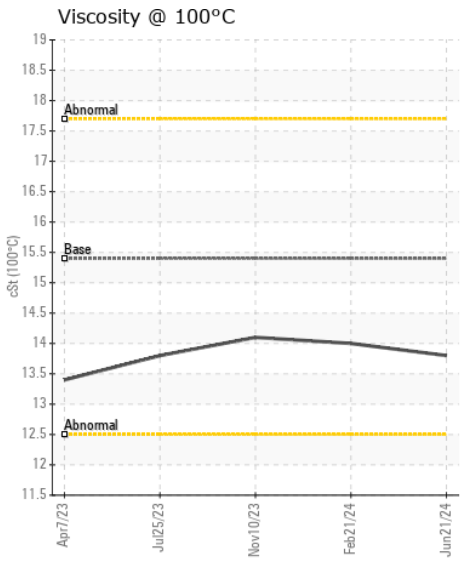
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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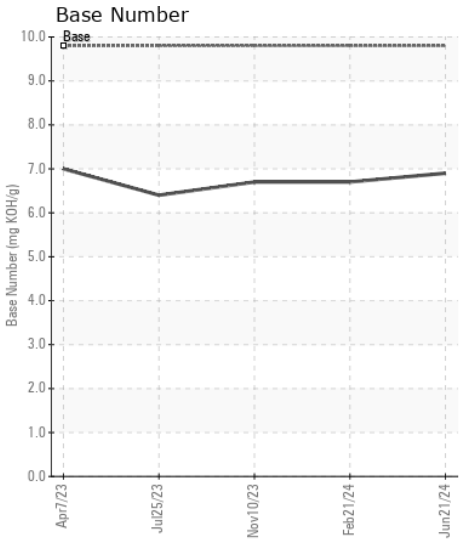

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0007718
Lab Number : 06219172
Unique Number : 11097369
Test Package : FLEET

Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Wes Davis

SCHMIDT TRANSPORTATION - BARTO
108 E Bay Road
Plattsmouth, NE
US 68048
Contact: Service Manager

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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