



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
BARTO
 Machine Id
7074 [BARTO]
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0005061	SBP0004407	SBP0003904
Sample Date		Client Info		26 Jan 2024	05 Jun 2023	28 Feb 2023
Machine Age	mls	Client Info		286870	245009	207390
Oil Age	mls	Client Info		41861	37619	36102
Filter Age	mls	Client Info		41861	37619	36102
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	19	16	20
Chromium	ppm	ASTM D5185m	>5	2	1	2
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	8	6	8
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	12	16	21
Tin	ppm	ASTM D5185m	>5	2	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

CONTAMINATION

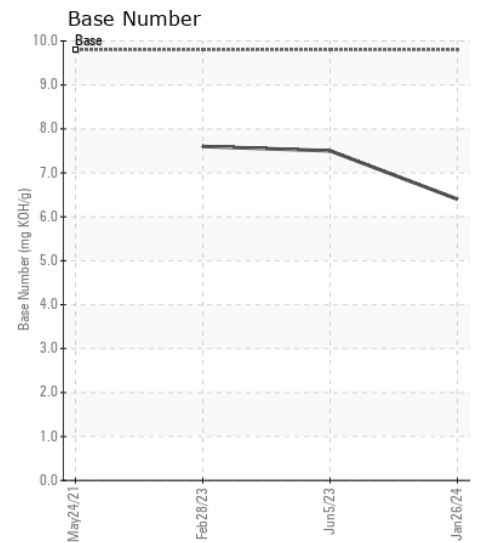
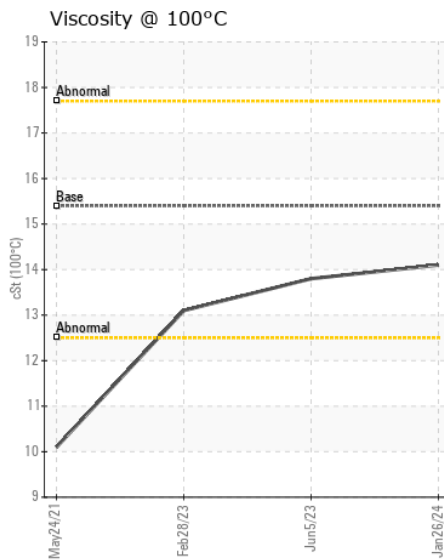
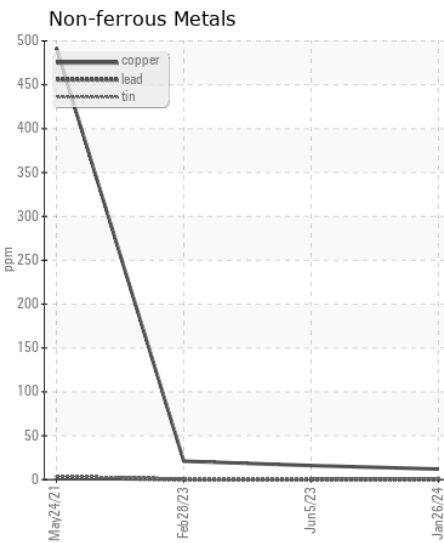
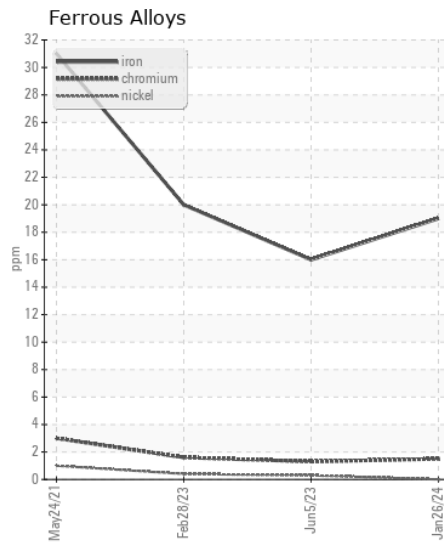
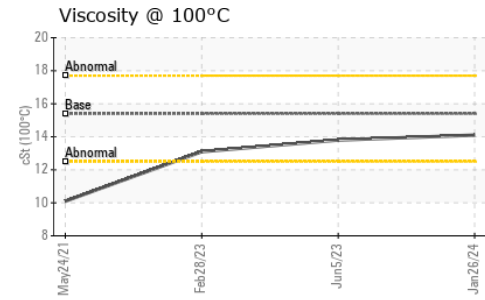
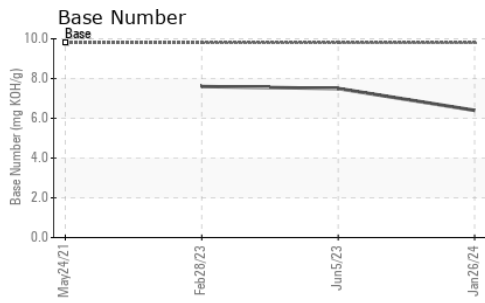
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	4	7
Potassium	ppm	ASTM D5185m	>20	6	7	9
Chlorine	ppm	ASTM D5185m		---	---	---
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	0.7	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.1	8.6	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	21.3	21.3
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	>0.2	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		3	<1	3
Boron	ppm	ASTM D5185m	0	0	2	12
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	62	59	50
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	1001	844	544
Calcium	ppm	ASTM D5185m	1070	1129	1241	1931
Phosphorus	ppm	ASTM D5185m	1150	1018	961	941
Zinc	ppm	ASTM D5185m	1270	1310	1238	1174
Sulfur	ppm	ASTM D5185m	2060	2587	2825	3315
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	16.9	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.4	7.5	7.6
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	13.8	13.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0005061
Lab Number : 06084171
Unique Number : 10871616
Test Package : FLEET

Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 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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F: