OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	ABNORMAL

Area
BARTO
Machine Id
7035 [BARTO]
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

WEAR

All component wear rates are normal.

CONTAMINATION

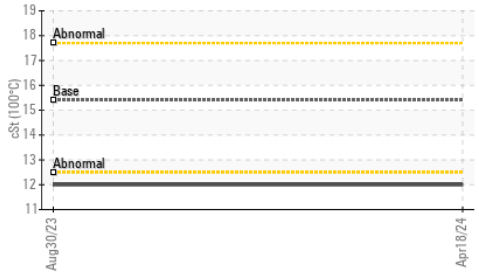
Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

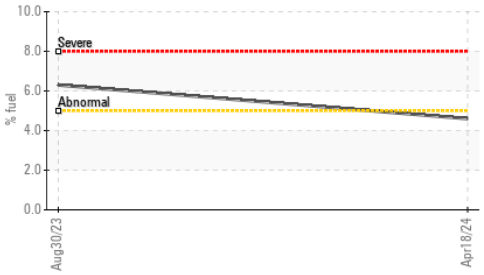
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0006516	SBP0005096	---
Sample Date		Client Info		18 Apr 2024	30 Aug 2023	---
Machine Age	mls	Client Info		646323	622393	---
Oil Age	mls	Client Info		23930	25198	---
Filter Age	mls	Client Info		23930	25198	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---
Iron	ppm	ASTM D5185m	>80	23	32	---
Chromium	ppm	ASTM D5185m	>5	1	2	---
Nickel	ppm	ASTM D5185m	>2	<1	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>30	2	2	---
Lead	ppm	ASTM D5185m	>30	3	15	---
Copper	ppm	ASTM D5185m	>150	1	<1	---
Tin	ppm	ASTM D5185m	>5	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>20	3	4	---
Potassium	ppm	ASTM D5185m	>20	3	3	---
Fuel	%	ASTM D3524	>5	▲ 4.6	▲ 6.3	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.9	2.1	---
Nitration	Abs/cm	*ASTM D7624	>20	9.3	9.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	23.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		7	3	---
Boron	ppm	ASTM D5185m	0	3	2	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	54	54	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	896	915	---
Calcium	ppm	ASTM D5185m	1070	1017	1175	---
Phosphorus	ppm	ASTM D5185m	1150	980	969	---
Zinc	ppm	ASTM D5185m	1270	1170	1210	---
Sulfur	ppm	ASTM D5185m	2060	3203	3283	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	19.2	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.6	6.5	---
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 12.0	▲ 12.0	---

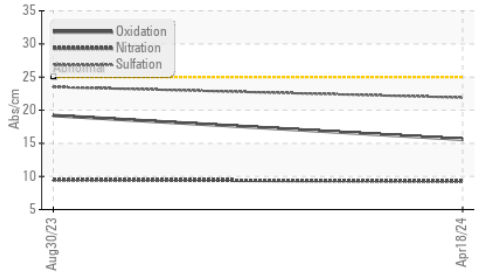
Viscosity @ 100°C



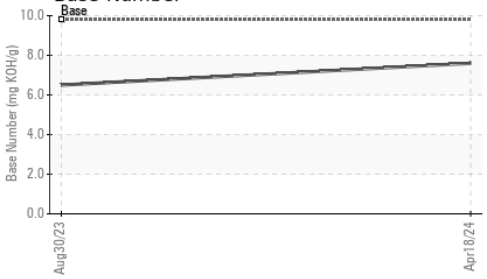
Fuel Dilution



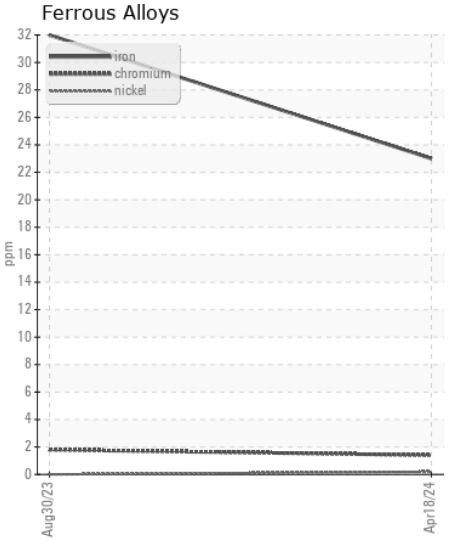
FT-IR (Direct Trend)



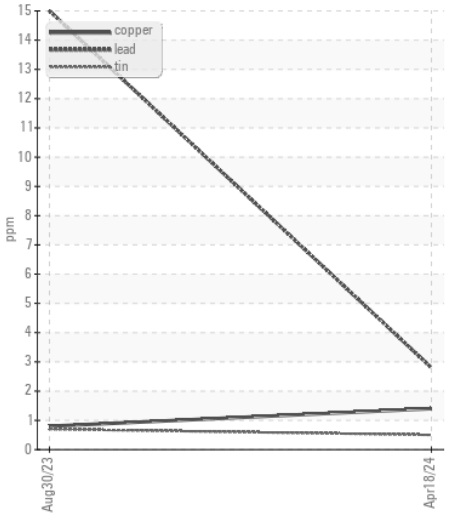
Base Number



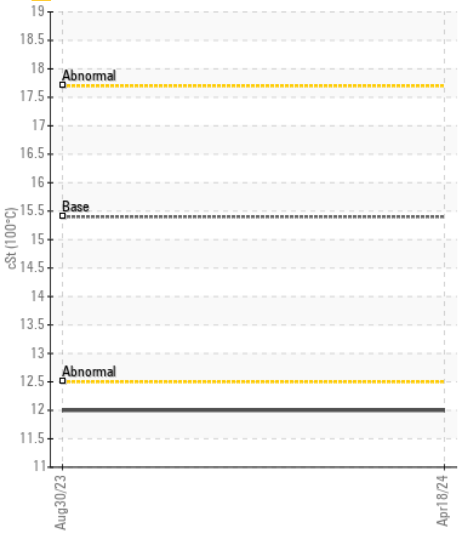
Ferrous Alloys



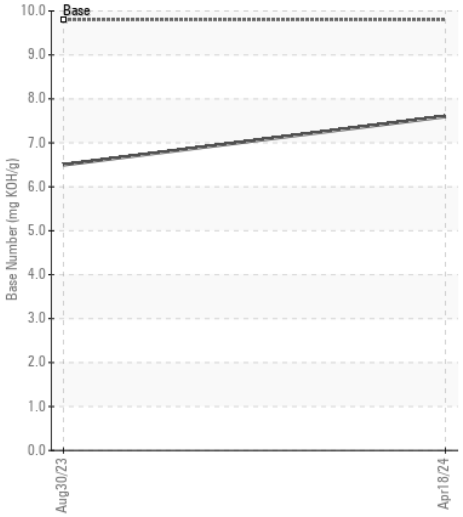
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0006516
Lab Number : 06212891
Unique Number : 11085755
Test Package : FLEET (Additional Tests: PercentFuel)

Received : 17 Jun 2024
Tested : 20 Jun 2024
Diagnosed : 20 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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