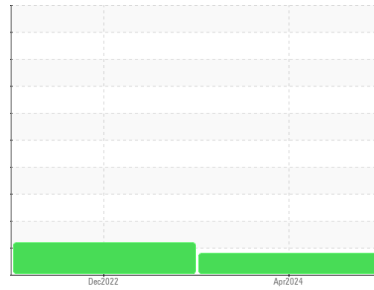




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
BARTO
 Machine Id
6330 [BARTO]
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

▲ 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			SBP0006517	SBP0002483	---
Sample Date	Client Info			30 Apr 2024	07 Dec 2022	---
Machine Age	mls	Client Info		685614	662911	---
Oil Age	mls	Client Info		22707	26120	---
Oil Changed	Client Info			Changed	Not Changd	---
Sample Status				MARGINAL	ABNORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	---	
Glycol	WC Method		NEG	NEG	---	

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	45	72	---
Chromium	ppm	ASTM D5185m	>5	2	3	---
Nickel	ppm	ASTM D5185m	>2	0	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	4	---
Copper	ppm	ASTM D5185m	>150	2	2	---
Tin	ppm	ASTM D5185m	>5	2	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	6	9	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	58	39	---
Manganese	ppm	ASTM D5185m	0	1	<1	---
Magnesium	ppm	ASTM D5185m	1010	930	820	---
Calcium	ppm	ASTM D5185m	1070	1157	1681	---
Phosphorus	ppm	ASTM D5185m	1150	1078	940	---
Zinc	ppm	ASTM D5185m	1270	1229	1183	---
Sulfur	ppm	ASTM D5185m	2060	3438	3653	---

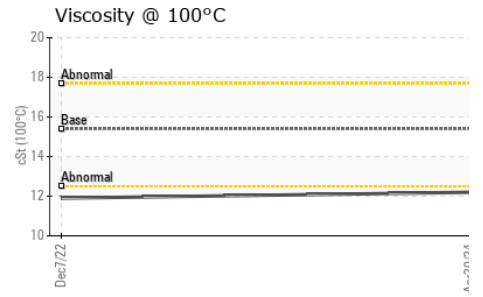
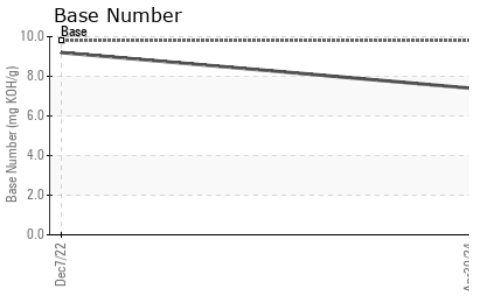
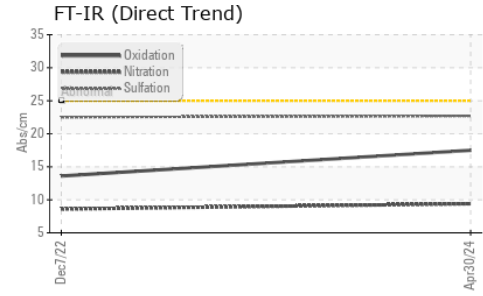
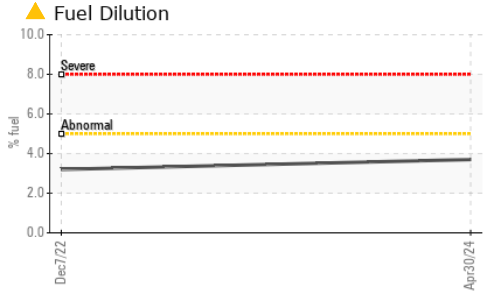
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	6	---
Sodium	ppm	ASTM D5185m		8	0	---
Potassium	ppm	ASTM D5185m	>20	3	0	---
Fuel	%	ASTM D3524	>5	▲ 3.7	▲ 3.2	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1.7	1.8	---
Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.5	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	13.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.4	9.2	---



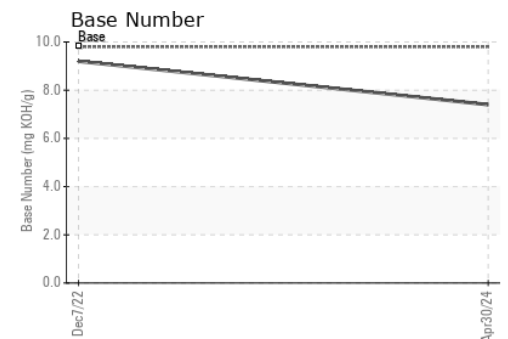
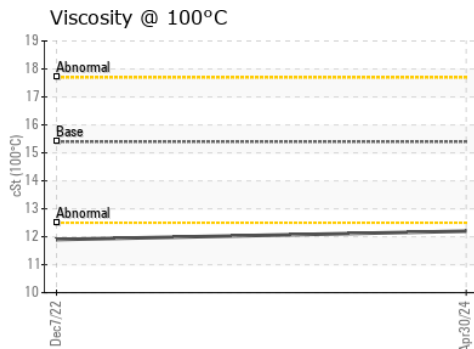
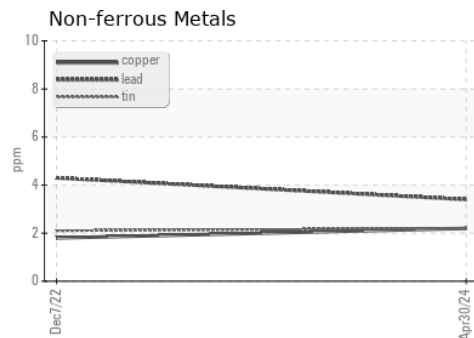
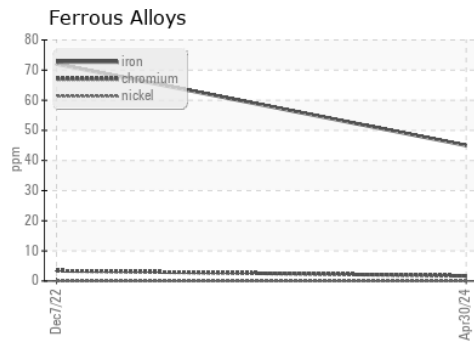
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.2	▲ 11.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0006517 **Received** : 17 Jun 2024
Lab Number : 06212890 **Tested** : 20 Jun 2024
Unique Number : 11085754 **Diagnosed** : 20 Jun 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

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)